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Infinite Potentials

The Journal of Rogerian Nursing Science

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Correction

The name of the author of the Controversies column in the 1995 issue was spelled incorrectly. Our apologies to Vidette Todaro-Franceschi.

SUBSCRIPTION INFORMATION

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Guidelines For Authors

1. Content must reflect some aspect of Rogers' Science of Unitary Human Beings (research, theoretical issues, etc.).
2. The manuscript must not be submitted elsewhere for consideration.
3. Manuscripts will not be returned.
4. Authors will follow the format of the *Publication Manual of the American Psychological Association* (4th. Ed.). References - see page 251. Although the APA manual states that the first line of each reference should be indented five to seven spaces as you would a paragraph, it also states that the typesetter will arrange the reference list in hanging indent format for publication. Since *Visions* is desk top published, we prefer that you submit the reference list with hanging indents.
5. Once the manuscript has been accepted for publication, authors must submit a hard copy plus a copy prepared on a 3 1/2 inch disk in WordPerfect 5.1, prepared on an IBM or IBM compatible computer.
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Columns:

1. There are five potential columns - Controversies, Imagination, Emerging Scholars, Book Review, and Health Patterning Modalities - that will appear as submissions are received and accepted
2. Selections for columns are editorial decisions. Only 2 copies need to be submitted. Upon acceptance the author/authors must submit both a hard copy and a disk. No honorarium is paid to authors of columns.

REVIEW PANEL

Infinite Potentials

Thanks to the efforts of Fran Biley, the Society of Rogerian Scholars' Region 9 coordinator (International Region), Rogerian nursing science has a site on the world-wide web, and the potential for communication is infinite.

The address is www.mailbase.ac.uk which accesses a screen that welcomes you to mailbase. At that point select the discussion list k - o, and then select nurse - rogers.

Becoming a member of the list brings some interesting information to your email address. It is also worthwhile to access and read the archives.

Editorial

The present issue features an interesting mix of articles which we hope you enjoy. Please let us, and the authors, know what you think of the content; share any ah-ha's, critiques, etc., of the work! In this issue we introduce a new Book Review Column for which Pat Christensen has accepted responsibility. A future new column is Health Patterning Modalities for which Joanne Griffin will be responsible. Howard Butcher has taken charge of the Imagination Column.

So far, submissions for the Emerging Scholars, Imagination, and Controversies columns have come primarily from students at New York University. Surely there are students in other universities who are writing on Rogerian topics? We know there are faculty in other universities who teach Rogerian nursing science--please encourage your students to submit papers for the columns! Remember, column submissions are reviewed by the editors only; therefore, two copies are sufficient. No honorarium is paid for columns.

We have noticed a problem with citations from *Martha E. Rogers: Her Life and Her Work*, edited by Malinski and Barrett (1994). That book represents a compilation of Rogers' seminal works, originally published anywhere from 1970 to 1992. When citing this book, be sure to follow the APA format for an edited work. From a scholarly perspective, it is equally important to acknowledge the original publication of the work by Rogers. Otherwise, something that she wrote in 1970 and did not use again can appear with a 1994 publication date. This contributes to inaccuracy and confusion as people try to understand and work with Rogerian nursing science. It also appears that a primary source written by Rogers herself is a secondary source when Malinski and Barrett are cited as the authors. Following the format for an edited work will distinguish between those chapters representing Rogers' writings and those written by the editors and other contributors.

As many of you know, Martha E. Rogers was inducted into the ANA Hall of Fame on June, 15, 1996. Members of her family were there, along with colleagues and friends. This is a well-deserved honor for our teacher, mentor, and friend who contributed so much to professional nursing!

ISSUES OF (IN)COMPATIBILITY BETWEEN THE WORLD-VIEW AND RESEARCH RULES OF THE SCIENCE OF UNITARY HUMAN BEINGS: AN INVITATION TO DIALOGUE

Jacqueline Fawcett, RN;PhD;FAAN

ABSTRACT

This paper offers an invitation to dialogue about the degree to which the research rules associated with the Science of Unitary Human Beings are compatible with the worldview that is reflected by the content of the Science of Unitary Human Beings, that is, the simultaneous action worldview.

Scientific knowledge, in the form of conceptual models and theories, is developed by means of creative intellectual leaps and innovative empirical research. Each conceptual model and theory rests on certain philosophical claims that constitute a particular worldview. Furthermore, each conceptual model and theory is developed by following certain rules for research that are, or should be, compatible with the underlying worldview. The purpose of this paper is to issue an invitation to dialogue about the degree to which the research rules associated with the Science of Unitary Human Beings are compatible with the worldview that is reflected in the content of the Science of Unitary Human Beings.

Overview of the Science of Unitary Human Beings

The Science of Unitary Human Beings is concerned with "people and their worlds in a pandimensional universe" (Rogers, 1992, p. 29). More specifically, the Science of Unitary Human Beings is concerned with "the study of unitary, irreducible human beings and their respective environments" (p. 108). Elaborating, Rogers (1992) stated:

> *The uniqueness of nursing, like that of other sciences, lies in the phenomenon central to its focus. For nurses, that focus consists of a long-established concern with people and the world they live in. It is the natural forerunner of an organized, abstract system encompassing people and their environments. The irreducible nature of individuals is different from the sum of their parts. Furthermore, the integrality of people and their environments coordinates with a pandimensional universe of open systems, points to a new paradigm, and initiates the identity of nursing as a science. (p. 28)*

WorldView

Rogers (1992) claimed that a new worldview, "compatible with the most progressive knowledge available . . . has become a necessary prelude to studying human health and to determining modalities for

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its promotion both on this planet and in outer space" (p. 27-28). The Science of Unitary Human Beings is rooted in this new worldview, which has been labeled the simultaneous action worldview (Fawcett, 1993, 1995).

Characteristics of the Simultaneous Action WorldView

Fawcett (1993, 1995) offered the simultaneous action worldview as a parsimonious integration of the elements of the organismic (Reese & Overton, 1970), simultaneity (Parse, 1987), change (Hall, 1981), and unitary-transformative (Newman, 1992) worldviews. The metaphor for the simultaneous action worldview is the unitary human being, who is regarded as a holistic, self-organized field. The human being is more than and different from the sum of parts and is recognized through pattern manifestations. The person-environment interchange is a mutual, rhythmical process. Changes in pattern manifestations occur continuously albeit unpredictably as the human being evolves. Although the pattern manifestations are sometimes organized and sometimes disorganized, change is ultimately in the direction of increasing complexity. Knowledge development emphasizes personal becoming through recognition of pattern manifestations. The phenomena of interest are, therefore, the person's inner experiences, feelings, values, thoughts, and choices.

Simultaneous Action and the Science of Unitary Human Beings

In keeping with the simultaneous action worldview, the Science of Unitary Human Beings clearly reflects a holistic view of the person and environment. Indeed, Rogers (1990) maintained, "My own work focuses on developing a holistic world view by proposing a science of unitary, irreducible beings that is coordinate with a world view that includes outer space. . . . A holistically oriented space-age paradigm is the substance of nursing's science of unitary, irreducible human beings" (pp. 106-107). In fact, the person and the environment are clearly conceptualized as irreducible, indivisible wholes within a pandimensional universe.

Although the Science of Unitary Human Beings reflects a holistic view of the world, Rogers (1992) usually avoided using the term holistic because of its ambiguous and varied meanings. She pointed out, "The use of the term unitary human beings is not to be confused with current popular usage of the term holistic, generally signifying a summation of parts, whether few or many. The unitary nature of environment is equally irreducible. The concept of field provides a means of perceiving people and their respective environments as irreducible wholes" (p. 29).

Also in keeping with the simultaneous action worldview, the human energy field is regarded as an active organism who is integral with the environmental energy field. Rogers (1992) stated, "People's capacity to participate knowingly in the process of change is postulated" (p. 28).

Moreover, human and environmental energy fields change continuously. Change is, therefore, regarded as natural and desirable. In fact, "Change just is" (Rogers, Doyle, Racolin, & Walsh, 1990, p. 377). Furthermore, change is creative and innovative, always in the direction of increasing diversity. In particular, "Change is continuous, relative, and innovative. The increasing diversity of field patterning characterizes this process of change. Individual differences serve only to point up the significance of this relative diversity" (Rogers, 1992, p. 31).

Further support for classifying the Science of Unitary Human Beings within the simultaneous action worldview comes from Rogers' (1970) explicit rejection of reductionism, with its focus on parts. She stated, "Reductionism, representative of an atomistic worldview in which complex things are built

up of simple elements, is contrary to a perception of wholeness" (p. 87). She also stated that her conceptual system "is humanistic, not mechanistic. Moreover, this is an optimistic model though not a utopian one" (Rogers, 1987b, p. 141). Rogers (1986) also explicitly rejected mechanistic causality, stating, "In a universe of open systems, causality is not an option. Acausality had come in with quantum theory.... Causality is invalid" (p. 5). Furthermore, Rogers (1970) rejected a mechanistic view of the person as reacting to environmental stimuli. She commented, "The all-too-common perception of man[sic] predominantly subjected to multiple negative environmental influences with pathological outcomes denies man's unity with nature and his evolutionary becoming" (p. 85).

Rules for Research

Rules for empirical research associated with any conceptual model specify the phenomena that are to be studied; the distinctive nature of the problems to be studied and the purposes to be fulfilled by the research; the subjects who are to provide the data and the settings in which data are to be gathered; the research designs, instruments, and procedures that are to be employed; the methods to be employed in reducing and analyzing the data; and the nature of contributions that the research will make to the advancement of knowledge (Laudan, 1981; Schlotfeldt, 1975). Although these rules emphasize empirical research, empiricism is not equivalent to logical positivism. In fact, Kahn and Fawcett (1995) argued that empiricism takes many forms, including postpositivistic approaches that account for the social and historical context of the research.

Fawcett (1995) has extrapolated research rules associated with the Science of Unitary Human Beings from the literature, conversations with Martha Rogers, and her interpretation of the evolution of Rogerian Science. Rogers repeatedly emphasized the importance of conducting Science of Unitary Human Beings-based empirical research. For example, she noted, "Science is never finished. It is always open ended" (Rogers, Doyle, Racolin, & Walsh, 1990, p. 380). Rogers (1987a) also noted, "The future of research in nursing is based on a commitment to nursing as a science in its own right. The science of nursing is identified as the science of unitary human beings" (p. 123). Clearly, Rogers believed that empirical research, among other forms of inquiry, is crucial for the continued refinement of the Science of Unitary Human Beings.

According to the Science of Unitary Human Beings, the phenomena to be studied are unitary human beings and their environments. "The study of nursing as a science," Rogers (1990) maintained, "is the study of the phenomena central to nursing: unitary, irreducible, human beings and their environments. It is not the study of other fields or theories deriving from other fields. . . . The study of nurses and what they do is not the study of nursing anymore than the study of biologists and what they do is the study of biology" (p. 111).

The problems to be studied within the context of the Science of Unitary Human Beings are the manifestations of human and environmental field patterns. Pattern profiles, which are clusters of related pattern manifestations (Phillips, 1989, 1991), are of special interest. The purpose of Science of Unitary Human Beings-based research is to develop theoretical knowledge about "unitary, irreducible, indivisible human and environmental fields: people and their world" (Rogers, 1992, p. 29).

Given Rogers' emphasis on nursing as a service to all people, wherever they may be, virtually any setting and any person or group would be appropriate for study, with the proviso that both person or group and environment are taken into account. [It is recognized that the proviso may reflect an artificial separation of human and environ-

mental energy fields. The proviso seems necessary, however, until valid and reliable methods of capturing the unitary nature of human and environmental energy fields are developed.] Both basic and applied research are needed to continue to develop nursing knowledge. Basic research, according to Rogers (1992), "provides new knowledge" (p. 28). In particular, "the focus and goal of basic research in nursing science . . . [is] pattern seeing" (Reeder, 1984, p. 22), or identification and description of pattern manifestations. In contrast, applied research "tests the new knowledge already available" in practical situations (Rogers, 1992, p. 28). Rogers (1987) maintained that "Applied research should replace the use of the phrase 'clinical research.' According to dictionaries the term clinical means 'investigation of a disease in the living subject by observation as distinguished from controlled study, something done at the bedside.' These definitions are inappropriate and inadequate for the scope and purposes of nursing" (p. 122).

Rogers (1992) advocated the use of a variety of qualitative and quantitative research methods, including philosophic and descriptive approaches. Reeder (1986) maintained that Husserlian phenomenology is an appropriate approach to Science of Unitary Human Beings-based basic research. Cowling (1986) added existentialism, ecological thinking, dialectical thinking, and historical inquiries, as well as methods that focus on the uniqueness of each person, such as imagery, direct questioning, personal structural analysis, and the Q-sort to the list of appropriate methodologies. Furthermore, case studies and longitudinal research designs that focus on the identification of and changes in human and environmental field pattern manifestations are more appropriate than cross-sectional designs, given Rogers' emphasis on the uniqueness of the unitary human being (Fawcett, 1994).

Cowling (1986) pointed out that although descriptive and correlational designs are consistent with the Science of Unitary Human Beings, strict experimental designs are of "questionable value," given the fact that "the unitary system is a noncausal model of reality" (p. 73). Cowling's (1986) recommendation of correlational designs is supported by Rogers' statements that "There is no causality, but there are relationships" (Rogers, Doyle, Racolin, & Walsh, 1990, p. 380) and "Association does not mean causality" (Rogers, 1992, p. 30).

Rogers (1987a) pointed out that "there are incongruities and contradictions between holistic directions in nursing and the forms of inquiry used by nurses. . . . There is a critical need for new tools of measurement appropriate to new paradigms" (p. 122). In fact, some instruments have been directly derived from the Science of Unitary Human Beings (Barrett, 1986; Carboni, 1992; Ference, 1986; Johnston, 1993; Leddy, 1995; Paletta, 1990; Wright, 1991).

Data analysis techniques must take the unitary nature of human beings and the integrality of the human and environmental energy fields into account. Cowling (1986) indicated that "multivariate analysis procedures, particularly canonical correlation, can be useful methods for generating a constellation of variables representing human field pattern properties" (p. 73).

The emphasis in the Rogerian conceptual system on the integrality of human and environmental energy fields indicates that research conducted within the context of the Science of Unitary Human Beings will enhance understanding of the continuous mutual process of human and environmental energy fields and manifestations of changes in energy field patterns. Ultimately, Science of Unitary Human Beings-based research will yield "a body of knowledge specific to nursing" (Rogers, 1992, p. 29).

Areas of Incompatibility and Other Issues

The simultaneous action worldview calls for research rules that will facilitate

identification of continuously changing, unpredictable manifestations of pattern and rhythmical mutual energy field process. Consequently, although the current research rules for the Science of Unitary Human Beings should not be summarily rejected, the extent to which they are logically compatible with the simultaneous action worldview should be questioned.

For example, Reeder (1984) accurately pointed out that ongoing testing of the Science of Unitary Human Beings "cannot be done through the logical empiricist criterion of meaning, testing the hypodeductive system for consistency, and then testing correspondence to the world (mind/body dualism). But rather, the [conceptual] system can be continuously tested through the manifestation of the integral evidence of human and environmental fields and through the relationships between phenomena, which arise from integral evidence" (p. 22).

A problem arises if the search for relationships, within the context of the Science of Unitary Human Beings, follows a quantitative methodology. More specifically, relationships typically are identified by the use of correlational techniques. However, correlational techniques represent a components-of-variance statistical model, which is a reductionist analytic technique based on the mechanistic assumption that the whole is the sum of parts (Ackoff, 1974; Baltes, Reese, & Nesselroade, 1977). As Fawcett and Downs (1986) pointed out, that assumption is logically inconsistent with the simultaneous action worldview assumption that the whole is different from and greater than the sum of parts.

One might argue that few if any researchers expect to account for 100% of the variance in a phenomenon. Nevertheless, the assumption underlying the components-of-variance statistical model implies that if enough could be known about a phenomenon, 100% of the variance could be accounted for. Therefore, a research rule that permits correlational procedures--or other inferential statistics--does not seem logically compatible with the simultaneous action worldview. Indeed, Baltes et al. (1977) pointed out that "Within such world views, the analysis of variance does not make sense, and hence it is not reasonable for their adherents to use designs obtained from the analysis-of-variance model" (p. 22).

Consequently, a question should be raised about the compatibility of any rule specifying quantitative designs or quantitative instruments with the simultaneous action worldview. The question arises because quantitative methodologies, including design, instruments, and associated statistical techniques, are ultimately based on the assumption that the sum of the parts equals the whole.

A seemingly simple solution to the incompatibility issue is to use only qualitative methodologies that are based on the assumption of unitary phenomena. That solution, however, raises other questions. For example, how can the efficacy of Science of Unitary Human Beings-based therapeutic modalities, such as imagery, Therapeutic Touch, and visualization, be determined qualitatively? Furthermore, how can differences in the efficacy of various therapeutic modalities be determined qualitatively? Would case studies be sufficient? Or, are questions of efficacy even relevant?

Moreover, how can pattern manifestations, which are unpredictable, even be described? How can nonrepeating rhythmicities be described? Would individual case studies be sufficiently informative for the development of scientific knowledge that ultimately is to be applied in practice?

Conclusion

It is hoped that the questions raised here will serve as a starting point for dialogue about the (in)compatibility of the current research rules for the Science of Unitary Human Beings and the simultaneous action

worldview. Readers are invited to identify other areas of incompatibility and to propose new research rules--and new research methodologies--for the Science of Unitary Human Beings that will be logically compatible with the simultaneous action worldview.

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Please address all correspondence to:
Dr. Jacqueline Fawcett
720 Middle Turnpike
Storrs, CT 06268
(203) 429-9228
E-Mail: Fawcett@SON.Nursing.UPenn.Edu

PERSONAL EXPERIENCES OF INDIVIDUALS USING MEDITATIONS FROM A METAPHYSICAL SOURCE

Anne Gibson, RN;MS

ABSTRACT

Numerous studies have been conducted exploring the physiological and psychological effects of meditation. However, few describe the personal experiences of meditators, and none portray those who use metaphysical meditations. This research utilized in-depth interviews, the Multidimensional Health Locus of Control Scale, and a questionnaire of biographical data to describe the experiences of individuals who use metaphysical meditations. The purposive sample was composed of 18 individuals known to be involved with metaphysical meditations. Data analyses included content analysis and descriptive statistics. Meditators were found to be individuals who have made conscious decisions to change their lives by choosing to release pain and struggle. Meditators suggested that nurses form a partnership with them in health promotion. Participants have created a new health paradigm and worldview that, if applied, may have considerable impact in nursing practice.

Several different forms of meditation have been described in the literature (Naranjo & Ornstein, 1971). The effects of certain specific types of meditation have been thoroughly studied and results documented (Castillo, 1990; Massion, Teas, Herbert, Wertheimer, & Kabat-Zinn, 1995; Orme-Johnson & Farrow, 1975; Persinger, 1993; Shapiro, 1992;). Although recent sources were not found, demographics of meditators have been described at length (Kory, 1976; Orme-Johnson & Farrow, 1975; Tipton, 1982). However, personal experiences of meditators have not been extensively examined. Also lacking in the research literature are studies specifically describing meditators using meditations from a metaphysical source (metaphysical meditators) and their beliefs about health practices. This study described the personal experiences of individuals who meditate with Lazaris, a purported nonphysical entity whose self-description is a consciousness who has chosen not to take physical form (Concept Synergy, 1991). Lazaris verbally communicates through a human body in a process called channeling (Concept Synergy, 1991). Data were obtained through in-depth interviews, the Multidimensional Health Locus of Control Scale, and a questionnaire of biographical data. This use of both quantitative and qualitative methods, also termed triangulation, served to enhance truth value, which is also known as credibility (Krefting, 1991; Sandelowski 1986). The information was then related to the abstract system of Martha Rogers' (1970, 1992b) Science of Unitary Human Beings.

People meditate in many ways and for many reasons (Naranjo & Ornstein, 1971). Some individuals consider meditation as part of a religious practice, and for others, meditation is an art form such as dance, painting, or music (Naranjo & Ornstein, 1971). Individuals may meditate for health reasons, such as the need to reduce stress, to decrease high blood pressure, and/or facilitate wound healing (Kabat-Zinn et al., 1992; Siegel, 1990; Simonton, Matthews-Simonton, & Creighton, 1978). Most of the research has been quantitative in nature (Kolkmeier, 1989; Miller, Fletcher, & Kabat-Zinn, 1995; Nystul & Garde, 1979; Orme-

Key Words Meditate, metaphysical, Lazaris, Rogers

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Johnson & Farrow, 1975; Zuroff & Schwarz, 1978). Tipton (1982) described some psychological experiences of Zen meditators; however, no publications pertaining to personal experiences of people who utilize metaphysical meditations were found during a comprehensive literature review.

The paucity of information about the experiences of metaphysical meditators may have an effect on nursing practice. Rogers (1992b) wrote that "nursing is the study of unitary, irreducible, indivisible human and environmental fields: people and their world" (p. 29). In order to more thoroughly understand individuals and environmental fields, nurses should become familiar with experiences that affect quality of life and the nurse-patient relationship (Oiler, 1982). Dow (1986) described a symbolic healing model in which the healer reframes the patient's emotions into a belief system or myth. The healer then manipulates the myth (beliefs) and attaches them to transactional symbols to assist transforming the emotions. When both healer (nurse) and patient share similar worldviews, the healer can then isolate part of the patient's world and interpret the problem in terms of the beliefs. This can facilitate a change in the patient's experienced reality (Dow, 1986). For nurses to become effective and more responsive to patients' beliefs, nurses must become aware of the "total systematic structure of lived experiences, the meanings and effects of the experiences, and the cognitive subjective perspective of the individual who has the experiences" (Omery, 1983, p. 50).

Beliefs about health practices in this population also have not been researched. Theoretically, individuals may be more inclined to improve or preserve health if a belief in the efficacy of self-care or of doctors is in their worldview (Lau & Ware, 1981).

The purpose of this study was to describe the personal experiences of individuals who use Lazaris' meditations. These meditations are defined as any processes which are on audiotape or videotape published by Concept Synergy and in the voice of Lazaris. There were no studies about these individuals reported in the literature. Respondents were invited, through interview questions, to respond, or to indicate their personal values, beliefs, and attitudes about growth, health, and the role of the meditation in their lives. Learning participants' values, beliefs and attitudes could increase the body of nursing knowledge, enabling nurses to assist individuals with making informed choices in the life process. Benner (1985) stated that "health and illness are lived experiences and are accessed through perceptions, beliefs, skills, practices and expectations" (p. 1).

The conceptual framework for this study was Rogers' (1970, 1989, 1992b) Science of Unitary Human Beings. This conceptual system describes a human as an irreducible, unified whole possessing individual characteristics identified by energy patterns and waves (Rogers, 1970, 1992b). The resonances (intensification and prolongation of the wave and energy patterns) are ever changing. However, the rhythmical vibrations of the energy and waves remain similar so that the essence of the energy source continues to be recognizable to others. These abstract patterns can be concretely visualized as manifestations of one's personal life experiences (Rogers, 1990). The human energy field is in mutual process with the environment, which is also an energy field, in an irreversible process of change (Rogers, 1992b). Therefore, the life process can appear as a "dance of rhythmical waves vibrating at various frequencies" (Sarter, 1988, p. 61).

According to the Science of Unitary Human Beings, the individual is in a process of evolving towards a higher frequency and continuing diversity of wave patterns (Rogers, 1992b). "This evolution occurs in a nonlinear, nonspatial, nontemporal matrix, a

[pandimensional] reality . . . . The energy fields are infinite and integral with an infinite environment" (Sarter, 1988, p. 68). Individuals possess the ability to participate knowingly in their processes of change (Barrett, 1986). People can change patterns by relinquishing emotions in those patterns and making different choices about how to utilize the released energy (Boguslawski, 1990). Rogers (1990) stated that diversity among individuals has increased, which inherently implies a need for "increased individualization of nursing services" (p. 8). She continued to advocate for developing noninvasive treatment modalities that would promote empowerment. A few examples include meditation, imagery, and relaxation therapies (Rogers, 1990).

The concept of paranormal phenomena, addressed by Rogers (1989), is particularly relevant to this study. She described this concept of the paranormal as an unlimited dimension in which linear time and separation of the human field and environmental fields do not exist. The present is relative to the individual; therefore, energy does not have to travel since it exists simultaneously in the relative present (Rogers, 1989). It can be concluded that everything occurs simultaneously.

Boguslawski (1990) stated that the present for an individual depends on the vibrational frequency; a past experience resonates at a different frequency than that of the present. Everything is an energy field that is identified through different energy patterns (Rogers, 1992a). The opinion that people extend beyond their physical bodies is an intrinsic supposition of Rogers (1989), Boguslawski (1990), and Lazaris (1991). Acceptance of the existence and channeled energy of Lazaris, a nonphysical entity from another dimension, is congruent with this framework. Pandimensional means a "nonlinear domain without spatial or temporal attributes" (Rogers, 1992b, p. 29). Height, depth, length, time and space are familiar terms to describe dimensions in an easily understandable manner. Imagination and wonder could be other descriptions. Rogers' definition refers to perceiving infinite dimensions (Rogers, 1992b).

The assumption that all reality exists concurrently serves to enhance meditation, which occurs outside of time and space (Lazaris, 1985). Experiences from the past can occur in the present when the energy patterns of the meditator are changed through the process of meditating. One's imagination becomes a portal for communicating with those from other dimensions (Lazaris, 1991). Because of the altered vibration and apparent paradox (the past occurring in the present), the individual can release emotions without judgment. "The image becomes a living entity which forms a symbolic environment" (Weisshaupt, 1983,p. 34). This might be interpreted in Rogerian science as the individual in mutual process with an evolving environment as new human and environmental patterns evolve.

The qualitative approach used in this study is in agreement with Rogers' framework. The study of experience as it is lived (Omery, 1983) describes the study of pattern. Experience is a manifestation of pattern while it also creates pattern. The qualitative researcher may examine parts of data but remains aware that the whole is different from and greater than the sum of the parts (Omery, 1983; Rogers, 1992b). A most important assumption of the qualitative method is that "a phenomenon can only be understood in its context . . . which is congruent with the Rogerian principle of integrality" (Swanson, 1990, p. 349).

Method

The question addressed by this study was: What are the personal experiences of individuals who work with the meditations of Lazaris? This research was the result of a dream in which the investigator walked into the kitchen and an old woman with white hair wearing a plaid apron wrote the re-

search question in bread dough and put it in the oven to bake. To explore this question, a descriptive, exploratory design that combined qualitative and quantitative approaches was used. The qualitative approach was chosen in an attempt to understand the phenomenon (personal experiences of people who listen to Lazaris' meditation) from those who lived it. Qualitative data were collected through 18 semi-structured, in-depth interview questions which were audio-taped. Quantitative data, obtained through the Multidimensional Health Locus of Control Scale and a brief questionnaire of biographical data, were used to further describe the meditators. The amount of time required for data collection averaged 90 minutes for each participant.

Interview Questions

Please define "Metaphysical" and "Meditation." What do you believe is the source of Lazaris' meditations?

What were your beliefs related to metaphysics or paranormal events before knowing Lazaris?

What were the circumstances that led to your beginning work with Lazaris' meditations?

What is it like for you to use Lazaris' meditations?

How would you describe your life at this point in time?

Have you ever been active with any other kinds of meditations or self-development groups?

What have been the repeating patterns in your life?

How would you describe your family of origin?

What state of health best describes you?

How does your health compare to that of others?

What beliefs have you had to change to be as healthy as you are?

In what types of health care do you participate?

What would you want nurses who might take care of you to know about you?

What best describes your philosophy of life?

The Multidimensional Health Locus of Control Scale (MHLC), developed by Wallston, Wallston, Kaplan, and Maides (1976), measures an individual's perception of control they feel about their health and health practices. This perception of control could be considered empowerment and personal power (Gibson, 1991; Jones & Meleis, 1993; Barrett, 1986). The MHLC is a six-point Likert scale of 18 items that is available in two forms; both forms were given to participants in this study. The scale includes three subscales: The Internal Health Locus of Control (IHLC) subscale which describes the extent that individuals believe their own personal behaviors affect their health, the Chance Health Locus of Control (CHLC) which portrays chance as the basis for health, and the Powerful Others Locus of Control (PHLC) which reflects the degree that those more powerful than the self (doctors, health professionals, etc.) affect their health. The alpha reliability from previous research when the forms were administered as a summative single scale were .83-.86, compared to .67-.77 when used separately (Wallston, Wallston, & DeVellis 1978). Therefore, the summative scale of both forms was used in this study.

Participants were people who had used Lazaris' tapes and/or attended workshops. They answered in the affirmative to the question "Have you worked with Lazaris' meditations for over one year?" Respondents had meditated an average of 14.5 years and used Lazaris' meditations an average of 4.9 years. Twelve meditated daily, 3 meditated 4-6 times a week, 1 meditated 2-3 times a week, and 2 less than twice a week. Seventeen listened to audiotaped lectures and meditations. Participants lived in seven states; 14 were women and 4 were men. All were over 30 years of age, had at

least a high school diploma, and 12 were college graduates. Fourteen had incomes over $20,000. Twenty-one people were asked to participate. Two refused and one informant dropped out after half of the interview was completed. Data from that participant were deleted. No risks nor specific benefits for participating in the research were anticipated, and none were identified during the study. Participants were informed of their right to refuse to participate and to withdraw at any time. Initially, four volunteers were known to the investigator. Two became research assistants and each assistant interviewed one subject. The other two volunteers recruited other subjects. Additional participants were located through the snowball technique.

Data from the interviews were analyzed through content analysis. Data were transcribed by the investigator, and the tapes were erased. Five transcriptions (28%) were randomly selected and returned to the original informants for review. Four were returned. Two had no corrections; two had editorial changes. One sentence was changed by an informant. This process enhanced credibility of the transcriptions.

The investigator then read the scripts line by line and paragraph by paragraph grouping phrases according to themes. Three faculty from the University of Alaska Anchorage School of Nursing and Health Sciences assisted with theme validation. An immediate agreement of 87.5% was reached and after discussion, consensus was obtained for the remaining 12.5%. The MHLC and biographical questionnaire were analyzed using StatView SE plus Graphics, Version 103.

Results

The following definitions emerged from the interview responses and provided a backdrop for identifying patterns and themes.

Definitions From Interview Responses

Martyr - "the belief that it is necessary to struggle hard and to be unappreciated, that life and the world are unfriendly."

Power - "is the willingness and the ability to act and be responsible for those actions"; "knowledge is power"; "it comes from within. . .it supports laws of nature and other people's desires to get what they want in life"; "you are consciously creating what you do."

Meditation - "is altering your consciousness, relaxing, going within, stilling your mind, focusing your attention on something"; "a state of connecting with the higher realms and with my higher self"; "is questing outside time and space."

Metaphysical - "is knowing you create your own reality"; "is aware of and working with the multi-dimensional of existence, taking into consideration all other aspects of beyond the physical"; "is my relationship with my higher self, and God, Goddess, All That Is"; "the relationship between what you think and what happens in reality."

Lazaris - "is a being of energy who is not physical who is visiting our realm"; "is an entity that exists on another plane or another level of reality."

Source of Lazaris - "he's just not here"; "he's from outside of the set that we're in ... outside of the physical, mental, astral, causal planes"; "he's from inside of us."

Source of Lazaris' Meditations - "from a metaphysical source"; "from Lazaris"; "They're like inside of me."

Health - "a state of wholeness"; "a dynamic process"; "is balance . . . to understand the connection between my body and my mind and how to use that connection to create greater awareness and greater understanding, and greater balance for my physical body, my mind, and my spirituality"; "is a reflection of emotions and beliefs."

The Universe - "a term to funnel the energy of God, Goddess, All That Is."

Multidimensional Health Locus of Control Scales

A mean score of 33.14 on the Internal

Health Locus of Control section of the MHLC was much higher than in any other population reviewed in the literature. The mean scores of 8.47 for the Chance Health Locus of Control and 10.72 for the Powerful Others Health Locus of Control were noticeably lower for participants in this study than in previous studies. The persons in this study almost unanimously believed they controlled their state of health. Twelve of the respondents (67%) stated they did not like #8 on either Form A or Form B. Form A stated, "When I get sick, I am to blame"; Form B stated, "Whatever goes wrong with my health is my own fault." Respondents commented that these statements implied blame and punishment which had negative connotations: "There is no fault here"; "Blame increases the burden of illness"; "Blame and creation are not the same . . . I take responsibility"; "I hate the word fault. . . this is an old age way of thinking." All twelve stated they felt "responsible." Seven of them (39%) changed the statements by substituting the word "responsible" for blame and fault and then answered the questions with a "strongly agree" rating. Summative scores for the MHLC are described in Table 1.

Table 1
Mean Scores for Multidimensional Health Locus of Control Scales Summarized Across Types of Subjects

Sample	N	IHLC	CHLC	PHLC
*Chronic Patients	609	25.78	17.64	22.54
*Healthy Adults	1287	25.55	16.21	19.16
*Persons engaged in Preventive Health Behaviors	720	27.38	15.52	18.44
*College Students	749	26.68	16.72	17.87
Metaphysical Meditators	18	33.14	8.47	10.72

Note. *Wallston Summative Scores for forms A/B verified 3/9/92 in personal communication. The range for scores is 6-36 in each section.

When asked to describe their family of origin, informants talked about characteristics of the entire family and their reactions to living in them. For some informants the overall family was depicted as a "growing family" in which parents gave "wholesome values." Conversely, others spoke of a "toxic family" in which the "abuse and loneliness stands out." Parents "didn't fight, didn't drink, weren't abusive" which contrasted with being "alcoholics on both sides" or "martyrs and victims." Each individual member was described in equally contrasting terms. Reactions to living in families were also illustrated with opposites (a) "I'm glad most of them are dead" and (b) "I would change nothing; it all got me to where I am today."

Personal experiences were portrayed in ,15, interconnected, interrelated themes entwining two additional core themes: being spiritual and creating. A representative sample of exemplars illustrates some of the themes.

Being Spiritual

In one of the core themes, being spiritual, informants described the daily connection they felt to God, Goddess, All That Is and an interconnectedness with other living beings: "Everything just took a much deeper, much more serious approach to my spirituality. Really making it a priority rather than something you do whenever you have time and trying to live by that and not just talk it but really live it." "Lazaris does speak to everyone as a whole, as an earthly body. We're all here. We're all consciousnesses striving for the same purpose . . . and we're here to learn the reason why we chose to come into this lifetime."

Creating

This philosophy, "There isn't anything in my life I don't feel I don't have the power to change," permeated all aspects of respondents' lives. "I think I have very good fortune and it's because of the way I choose to have my live." "As soon as I knew I was

in total charge and control of my life then that's when I became healthy."

Searching, Struggling, and Changing

These themes described an internal force to seek answers. "I was always on a search to find answers." "It's always been a repeated pattern--being hurt and angry, feeling defeat or feeling betrayed; different kinds of self-sabotage and self-punishment." "In 20 years I'm not going to recognize myself, I hardly recognize myself now from what I was 4-5 years ago."

Evolving, Communicating, and Believing

Growth and movement were reflected in other themes. "We're here to grow, change, and evolve through happiness and joy; it doesn't have to be through pain and suffering. It's mostly a releasing or holding on to the pain and suffering." "I don't have any of those feelings anymore, (i.e.) helpless, hopeless, lost, purposeless, despairing, and unhappy." "Aches and pains are a message from my higher self or my inner self, from a portion of me trying to communicate to me something I've missed consciously so it comes up as an ache or pain." "Now my life has more magic in it; things happen more elegantly."

Perceiving Health Care

Subjects talked about their views and feelings about health care and their health status. "Meditation is my primary method of healing." "The whole medical establishment has this whole wrong idea that your body is something to be conquered and you sacrifice parts of it to fix it." "It's a patriarchal type of health care system: You can't survive unless I am here to take care of you. The person doesn't have responsibility." "Nurses have to have humility and a willingness to be intimate and intricate with people. . . to be flexible and try not to see me through limitations. . . to remember that others have free will and a right to choose whether they want to get ill, whether they want to die, or whether they want to be healed." "Nurses need to know what your values are and your belief system is so they can work with that." "I view nurses and doctors as assistants, not as supreme beings. They need to be able to go into their bag of tricks to help me get to a place to help myself."

Other general themes were Comforting, Meditating, Impacting, Feeling, Deserving, Self-Knowing, and Relating.

Discussion

The definitions of metaphysical ("working with multi-dimensional existence"), Lazaris ("a being of energy who is not physical"), and the source of Lazaris and Lazaris' meditations("from outside the set we're in") supported Rogers' (1992b) pandimensional view of the infinite nature of energy fields. Many in the sample agreed that metaphysical exists beyond the physical. Responses differed about the location being internal or external. Meditation was described as an altered state that connected one interpersonally with everything and intrapersonally with areas of one's self. Lazaris and the meditations were believed to be from outside this physical reality, from another dimension. According to the data, the meditations were from a metaphysical source. Lazaris (1991) has described people who attend the seminars as a "gathering of individuals." Answers to the interview questions, the Multidimensional Health Locus of Control Scale, and the Biographical Questionnaire are indicative of both the commonalties and differences in participants.

Macrae (1982) explored how meditators experience time compared to non-meditators by administering the Time Metaphor Test. She found that meditators had experienced time differently than non-meditators. Meditators chose slow-rated metaphors such as a "vast expanse of sky" or a "quiet, motionless ocean" whereas significantly greater numbers of non-meditators chose the fast-rated metaphors such as a "speeding train", a "fast-moving shuttle", and "marching feet" (Macrae,1982). Several subjects in her study experienced difficulty

answering questions on two questionnaire scales. Those subjects either checked the middle answers of the scale or left them blank. In this study, 12 of the participants disagreed with questions on the MHLC and seven (58%) rewrote those questions. They rejected the way the questions were stated and changed them to fit their belief system. This action-oriented behavior was an example of the overall theme of "I create my reality" instead of accepting the status quo. Informants were people who experienced childhoods and family situations that were different from one another. Their childhoods were reflective of those in the general population. They believed that they had chosen their respective families before birth.

Rogers (1992a) defined the Unitary Human Being as an energy field identified by nonrepeating patterns. Before using the meditations, repeating patterns consisted of struggling, betrayal, self pity, fear, shame, being a victim, self sabotage, and attempting to be perfect. The "struggling" exemplars clearly described patterns that could be altered and a process that could be used to do it. Rogers described the continuous change of patterns as the Principle of Resonancy (Rogers, 1989). As the patterns changed, negative cycles then became focused, more productive movement. Several adjectives kept recurring throughout the interviews: incredible, wonderful, exciting, amazing, really neat, really fun. Respondents reported evolving and changing beliefs so that enjoying life was now paramount. "The power of recognizing and making that decision not do that pattern was enough to stop the pattern." These statements of evolving and creating demonstrate Rogers' Principle of Helicy.

Words defined by people in this sample held different meanings than the more commonly accepted definitions. For example, martyr is used as a belief and a person instead of a person who believes. Power involves consciously creating as well as the ability to act. Meditation includes being outside of time and space.

Health was defined in terms of a dynamic process that is a state of interconnectedness or integrality among mind, body, spirit, and with an emotional component. Participants believed that illness was a message from one part of one's self to another and the individual has the power for self-healing. They no longer relinquish their health to doctors, medicine, or previous family history. Being proactive in health practices, which included such behaviors as exercise, meditation, and taking supplements was part of their lifestyle. The theme of creating was illustrated with "I realized I was the one in control of whether or not I got sick." Respondents portrayed illness as being a "reflection of people feeling they don't deserve to be healthy." Illness contained an unheard message from one part of one's self to another. Believing in a state of wellness and allowing magic in everyday life were felt to be significantly important. Perhaps another significant belief that affected health was being a victim. This belief and subsequent feeling of being powerless and undeserving would adversely influence one's health status.

The majority of meditators would choose alternative health care providers such as chiropractors and massage therapists or techniques such as magnets or flower remedies instead of traditional Western medical practices. Some would choose "whatever works." Participants sought the message in the illness and employed meditation as the primary method of healing. Seventeen percent thought that needing nursing services was unimaginable.

Respondents would prefer that nurses be honest with themselves about their motivations for providing services, be empathetic, non-judgmental, attentive, and interpreters of information. Meditators want nurses to provide a healing environment and knowledge about alternative methods of

healing. Several suggestions were given such as (a) allowing patients private time to meditate, (b) visualizing healing energy and light being sent to patients as the nurses chart on them, (c) supporting patients' use of special diets or supplements,(d) teaching guided meditations to help patients "learn reasons they were choosing to be ill," and (e) respecting the choices patients make about their own health regardless of the nurse's personal beliefs. One queried: "Where do we get these nurses?"

Meditators thought the universe was unlimited, that the human race is part of a larger picture. This recognition of human-environment mutual process is characteristic of Rogers' (1989) Principle of Integrality. One-half believed that humans were on a journey. Two-thirds of the sample believed that people are essentially good. These responses about human nature supported Macrae (1982), when she stated "the personal philosophy of meditators might have been more optimistic than that of the non-meditators" (p. 51).

The following limitations were established at the onset of the study (a) the sponsoring organization for Lazaris declined support, (b) uneven distribution of sexes in the sample, although gender did not emerge relevant to the themes, (c) no previous studies with this group so comparisons of similarities were not available, (d) only 28% reviewed their interview transcripts instead of 100%, (e) use of research assistants for two interviews, although cost effective, may have affected dependability, (f) personal bias which was offset by the faculty review and maintaining a personal journal, and (g) saturation may have occurred with fewer participants. This researcher believed that the number of participants should be predetermined and the data examined for differences among responses. This approach altered the focus from continuing until saturation to looking for the essence that made these participants unique.

Findings support the model of Rogers' Science of Unitary Human Beings (Rogers, 1989, 1990, 1992b) and Newman's Theory of Health as Expanding Consciousness (Newman, 1986). Nursing is now poised for others theorists to add to these existing theories. Those that promote nurse-driven care are no longer applicable. Partnership will be the care modality of the future. The findings suggest that nursing address the current messages, described in the exemplars, that have been given to the public about nursing, medicine, and health. Nursing education programs that sensitize students to the beliefs and attitudes of this group of people and promote cultural literacy are necessary. Students need to be taught complementary healing techniques. In the next century, nurses may be assisting the patient to heal primarily through thought by simply changing belief systems or teaching them to access the energy field. Machinery and current technology would then become obsolete or have diminished importance. In this time of health care reform, shifting paradigms may require quantum leaps.

Exemplars described the process of becoming empowered and through this process, developing awareness of each person's own personal power. Empowerment is defined in a broad sense as "a process by which people . . . gain mastery over their lives" (Gibson, 1991, p. 355). Power, on the other hand, is "being aware of what one is choosing to do, feeling free to do it, and doing it intentionally" (Barrett, 1986, p. 174). One is a process, the other is an outcome of that process although Jones & Meleis (1993) consider empowerment as both process and outcome. This research, viewed in its totality, is a study of meditators' empowerment (process).

Emergence of empowerment in the current study is similar to Gibson's (1991) concept as she describes how the concept of empowerment can impact nursing. Al-

though participants did not use the word empowerment, the creating and perceiving health themes are contextually the same. Gibson (1991) offered several assumptions that reflect beliefs nurses must practice to support this concept including (a) the primary responsibility for an individual's health rests with the individual, (b) respect for an individual's ability for growth must be provided so one can direct his/her own destiny, (c) people empower themselves, (d) "health professionals need to surrender the need for control" (p. 357), (e) the nurse and client must mutually respect one another as power shared as "empowerment is very much a collaborative process"(p. 357), and (f) trust is imperative. The nursing role will be to stimulate self-awareness and self-growth. Nurses' expertise will become a tool for facilitating empowerment as they become partners in helping provide health care. Gibson states that the individual nurse will have to develop more self-understanding, let go of any need to accumulate power for personal use, and become comfortable with risk-taking as the clients maintain their own beliefs and health goals. This nurse will learn to be more comfortable with more diffuse self-boundaries as interconnectedness with others develops.

"Educational programs, based on operational definitions of spiritual needs and spiritual care" will be essential (Clark, Cross, Deane, & Lowry, 1991, p. 75). Findings from this study also highlight the need for nurses to address clients' spiritual needs. As additions to the assessment phase of the nursing process, perhaps nurses could ask patients if they meditate or what form of healing they prefer. Piles (1990) stated that nursing education does not address the difference between psychosocial and spiritual interventions, and that spiritual needs are expressed through psychosocial behaviors. However, psychosocial skills will not address the core of the problem. Results from this study suggest that an alteration in thinking may be needed. Respondents describe themselves as spiritual beings who are being spiritual which is a state of mind, a belief system, a way of viewing the world. Every function in their life is a manifestation of their spirituality. All people are spiritual. Their conscious connection or lack of awareness of this connection to God, Goddess, All That Is, can be considered to be a nursing function. A nurse could teach someone how to reconnect through whatever method is appropriate for that patient. Meditating is one method used by participants in this study to connect. Arriving at an operational definition of spirituality could be a goal of future research.

Hatcher (1991) addresses the need for "transformative, spiritual leadership" in the health professions (p. 65). This kind of leadership will be important in the individual clinical nurse as well as in nursing management. Some of the techniques suggested by the sample population to change or to enhance their spiritual connections might be applicable for nurses either personally or for use in clinical practice. Thomas (1989) suggested that nurses might develop more balance in their lives and decrease burnout through integration of a spiritual dimension.

Rogers (1989, 1990) has stated that the art of nursing is the imaginative and creative use of knowledge for human betterment. This research has described the personal experiences of metaphysical meditators (unitary human beings) and their environments from a pandimensional perspective. Rogers' model has provided the bridge between one group of people who use metaphysical meditations to enhance their growth and health and people who use more traditional approaches. The practice of nursing will be to incorporate this abstract knowledge, which was obtained through scientific research and logical analysis, and to act on it in behalf of others. Perhaps this study will be a catalyst for additional research which will include evaluating the effectiveness of

Lazaris' meditations as treatment modalities to facilitate mental health or healing, or replicating this study with other groups of meditators.

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Anne Gibson, RN;MS
University of Alaska
Anchorage, Alaska

A MUTUAL FIELD MANIFESTATION: SUBSTANCE ABUSE AND NURSING

Merrilyn O. Johnson, RN;MSN

ABSTRACT

This paper presents a case of nurse substance abuse interfering with optimal patient care. It analyses the situation and possible therapeutic modalities utilizing a Rogerian perspective.

Introduction

"For the man on the needle, though he be your brother, is a stranger to every human who lives without morphine. --" this moving sentence from Nelson Algren's 1970 novel, *The Man with the Golden Arm*, (p.297) describes all too well the plight of the substance abuser and our failures in coping with his or her addiction. The prevalence of drug dependence among the approximately 1.853 million registered nurses (RN's) in the United States (U.S. Bureau of the Census, 1994), can only be estimated (Sullivan, 1987). In order to gain some insight into the extent of the problem among nurses (with 96% being women), it is useful to assess the figures obtained through community surveys in five different areas of the United States by the Epidemiologic Catchment Area study of the National Institute of Mental Health. It was found that in the month prior to interview, 1.6% of women and 6.3% of men had symptoms of alcohol or other drug abuse or dependence (Regier et al, 1988). Utilizing these data, it can be estimated that currently at least 29,000 nurses are chemically dependent. This figure may underestimate the actual number among the nursing profession as many cases are not reported (Haack & Hughes, 1989; Nace, 1995; Winick, 1974a). Kabb (1984) reports that 1 in 10 Americans is chemically dependent. Further the author reports that nurses have a rate of dependency 50% higher than non-nurses. The true rate among nurses has not been confirmed by direct survey research, but in studies by Trinkoff, Eaton and Anthony (1991), and Blazer and Mansfield (1995), it was found that nurses report substance abuse rates similar to those of the general population. An addicted health professional, placing patients at risk with incompetent caretaking, has the potential to harm others (Haack & Hughes, 1989; Kabb, 1984; Sullivan, Bissel, & Williams, 1988). The total estimated cost of drug dependence per nurse has been stated as $54,120.00. Fifty-nine percent of this cost is borne by the individual nurse, 33% by the employing agency, and 8% by the professional regulatory agency (LaGodna & Hendrix, 1989). Added to these costs are the significant human cost to the individual and to persons they are in mutual process with, as well as the cost associated with the institution's organizational ability to function smoothly. Substance abuse by health professionals at the expense of their patients has serious ethical implications (Sullivan, Bissel, & Williams, 1988). It threatens the integrity of individual patients and of the healthcare system. Therefore, the community charges licensing boards and professional organizations with the responsibility for monitoring substance abuse by profes-

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sionals. These institutions are responsible for investigation and appropriate censure or punishment necessary to reduce or eliminate such abuse from professional services (American Nurses' Association, 1984).

This paper uses the illumination of Rogers' Science of Unitary Human Beings to examine substance abuse by nurses, and to develop a fresh, value-free approach to this pattern of behavior. It is postulated that the proposition so developed can be used to change the trajectory of abuse.

Incident

Although I am myself a nurse, being a patient and the receiver of nursing care was by itself a frightening and enlightening experience for me. Six days post-op, I had recovered from the acute pain which had been managed earlier by Intravenous Patient Controlled Analgesia (PCA), and was now controlled with oxycodone and acetaminophen tablets (Percocet) on an "as required" order every four hours. My nurse and I found that I did not need pain medication very often.

It was different, however, the day my regular nurse went to lunch and his duties were covered by a non-local, travelling nurse, as distinguished from an agency nurse from a local nursing pool. The substitute nurse bounced into my room introducing himself and proceeded to tell me a little of his history. He appeared fidgety and agitated. Sometimes he sat, sometimes he paced around my room, and he talked continuously. He was also sweating profusely, but as he was of solid build and the day was warm, I did not think this behavior to be unusual. At one point he asked me if I needed my pain medication. I replied that I did not feel I needed any. He then emphasized that I could have it every four hours, noting that it had been six hours since my last dose. His repeated insistence finally resulted in my agreeing to have another dose of Percocet. The tablets he gave me, although the same color, were larger than I remembered, but not being a suspicious person I did not make any connection at that time. The nurse returned to my room later and there was a change in his human field pattern manifestations. He was more in control and calmer, with less sweating.

Thirty minutes after taking the medication, when the expected relief of pain and discomfort would have been evident to me, it was as if I had never taken it. When my regular nurse returned, I mentioned this, as well as the strange behavior exhibited by the travelling nurse. He judiciously and appropriately questioned me and then left the room. On his return, he said that he had reported my observations to the nursing team. We later learned that University Police had arrested the travelling nurse at the end of his shift that same day on charges of possession of contraband narcotics.

Theoretical Overview

Califano (1986) stated that "50 million Americans are hooked on cigarettes, 3.5 million of these under the age of 17; 13 million are addicted to alcohol or abuse it; millions more are addicted to heroin, cocaine, marijuana, tranquilizers, barbiturates, sedatives, and a variety of other pills" (p. 70). More recent epidemiologic surveys of psychiatric disorders in the United States estimate that 6-12% of Americans have drug abuse or dependence at some point in their lives (Kessler et al., 1994: Regier et al., 1990). This makes substance abuse a significant health issue in our society (Brady, 1995: Califano, 1986; APHA Healthy People 2000). The abuser and the environment within which the incident occurs are changed mutually by the situational context of abuse. Rogers' Science of Unitary Human Beings, which views the integrality of human and environmental fields as a mutual process, affords a somewhat unique perspective to the issue of drug abuse.

Rogers does not define the concept of health, except to say, "Health and illness, ease and dis-ease are dichotomous notions,

arbitrarily defined, culturally infused and value laden ... health and sickness, however defined, are both expressions of the process of life" (Rogers, 1970, p. 85). Health and illness are recognized as expressions of the life process of human beings, co-extensive with the environment.

Pattern manifestations identify energy fields, which are the fundamental units of both living and non-living entities. Within the mutual human-environmental field, patterns may be manifested as work, recreation, and social alliances (Joseph, 1990). Each environmental field is specific to its human field. Both fields change continuously and creatively, unfolding in mutual process. Energy fields are infinite, open, and integral with one another (Marriner-Tomey, 1989), so that persons and their environment evolve inseparably.

Increased awareness of the pandimensionality of the mutual human and environmental process is assumed to accompany increasing field frequency and diversity (Rogers, 1970). It is within the process that is shared by person and environment that "man's[sic] self-knowledge and knowledge of his world emerge" (Rogers, 1970, p. 72). Activities such as imposed motion (i.e. exercise) and meditation are postulated to increase the opportunity for awareness of pandimensional reality. The drug user's experience of a "high" may also be described as the ability to perceive greater field diversity and pandimensionality (Cowling, 1986; Malinski, 1986; Rogers, 1980). Viewing substance abuse from the perspective offered by Rogers' Science of Unitary Human Beings allows one to look at the mutual changes in the human and environmental fields that are evolving simultaneously with the abusive behavior. Rogerian thinking also presents a model to guide the development and testing of innovative modalities, and it is a relevant theoretical backdrop against which to study the rhetorical issues posed by substance abuse.

The Manifestation of Addiction

Within Rogerian thinking the human energy field expressing addiction is viewed as the perception of high frequency (motion, intuitiveness, creativity and altered sense of time) in mutual process with an asynchronous (poorly differentiated) environmental field. Faced with incongruency of wave patterns of the human and environmental field, the individual seeks alternative ways to change the pattern diversity and be "at one with the world." A drug "high" becomes an accessible (though not socially acceptable) way to change the uncomfortable asynchronous relationship of person and environment. The drug-modified human field of the addicted person alters their perception and can "liven up" an otherwise dull environment. This drug induced euphoria creates in the person a feeling of entering a pandimensional world, where the experiences of timelessness and creativity exist beyond comprehension. Within Rogerian interpretation these feelings represent manifestations of increased field diversity and frequency with increased awareness of pandimensional reality. Rogers states, "Consciousness is a facet of man's[sic] becoming and in its emergence reflects man's expanding awareness of the world around him" (Rogers, 1970, p. 93). In the addictive circumstance, the individual seeks to gain harmony within the human-environmental field process by using drugs to change the perception of his/her environment. Unfortunately this change is only temporary, related to the short physiological activity of the drug, and thus does not constitute a lasting solution. During the period of changed perception, disturbed behaviors may occur and a dysphoria may accompany the resolution of the initial drug high. These simultaneously occurring circumstances may create changes that even widen the frequency distortion within the human and environmental field process, with increased feelings of asynchrony (Compton, 1989). Feeling the

increase in disharmony, the individual may try to restore his or her sense of integrality with further drug use at the risk of even greater disturbance within the human environmental field process.

Addiction in the Community

Historically, substance use has been part of every culture at all stages of human development (Sullivan, Bissel, & Williams, 1988; Musto, 1987). Types of substance used, ways they were used, and societal values surrounding their use have changed with time. However, the altered state experienced by the human being taking drugs has remained a hallmark of all observations (Bakalar & Grinspoon, 1984; Musto, 1987). Contrary to the popular belief that only the poor are abusers, today, more middle and upper class people are using drugs, (Leigh, 1985; Winick, 1974b). Except for medically prescribed pharmaceuticals and alcohol, the use of mind altering drugs is considered illegal in Western Culture today, and is viewed as a forerunner to compulsive use, with the users labelled "addicted" (Heller, 1972; Zinberg & Harding, 1982). Substance abuse, however defined, occurs within the mutual patterning process of human and environmental fields.

Addiction in the Nursing Profession

Applying Rogers' Science of Unitary Human Beings to the incident under scrutiny, the abuser and environmental field patterns can be examined simultaneously in order to gain a more complete understanding of the behavior involved in drug use. Environmental field patterning provided easy access to drugs in the case of the nurse described in the incident. It is probable that the desire for increased pandimensionality may have triggered experimentation with soft drugs (marijuana or alcohol), then more addictive drugs (cocaine, heroin). Past history may also reveal conflict and lack of security manifested as a deprived or poorly differentiated and less diverse environmental pattern. This pattern is often seen in the evolution of addictive behavior in young adults (Leigh, 1985; Meyer, 1986).

The nurse addict is often intelligent, in the top percentile of the class, and is perceptive and creative in relation to acquisition and "cover-up" of drug use (Bissel & Jones, 1981; Brennan, 1983; Reed, 1986). Nurses have access to drugs in the work place and are familiar with their analgesic and other properties. Winick (1974a) found role strain and diminished diversity of the environment to be significant factors in nurse dependency. Field manifestations of role strain included extreme fatigue, feelings of pressures arising from conflicting professional demands, and role deprivation. Contributing factors were uneasiness with job promotion changes, facing retirement, and leaving familiar surroundings. The latter would certainly apply to travelling nurses who must constantly face role challenges as they try to find harmony in a new work environment.

When conditions within the human-environmental process demand more than they can or wish to give, individuals yearn to restore congruence in the fields (Rawnsley, 1985). In addiction, drugs serve as the intermediary in this quest for harmony.

Proposition

For this author, Rogerian thinking proposes the phenomenon of addiction to be a manifestation of the unique mutual process of human field (drug user) and environmental field. Cultural, societal, and individual characteristics involved in the mutual process create a circumstance wherein the drug user turns to drugs and becomes addicted. Manifestations of habitual behavior in humans are not rare, but illicit drug use is somewhat unique in that it is one of the few personal habits considered criminal and pathological by society. Illicit drug use creates severe disharmony with the environmental field and is seen to interfere with the person's societal role fulfillment. Conversely, the particular environmental patterning is

profoundly associated with patterns of individual drug use. Addiction may therefore be more related to environmental field patterns than to the actual substance used. The quality of "high" experienced is a manifestation of multiple aspects of the mutual process such as, who is present, place of use, and mood of the user. Modalities such as meditation, imagery and/or exposure to high frequency phenomena can be expected to create changes in the human-environmental field that minimize the need for addictive behavior (Barrett, 1990).

According to Rogers, the nurse, as a helping professional, is not able to directly change the patterning of the drug abuser's human field. The nurse, however, can promote change by providing meaningful relationships and encouraging features of the environmental field that are growth promoting (Malinski, 1994). Just as a person's perceptions of pandimensional reality are enhanced with drug use, the modalities within Rogerian science focus on activities that increase one's awareness of diversity and pandimensionality (Rogers, 1987). Thus, these alternative therapies may substitute for, or satisfy, the desire the person has to experience diversity and pandimensionality, therein becoming a more lasting replacement for the use of drugs.

In the Rogerian model, the nurse would need to be supportive and non-judgmental, always working with the client as a partner. These are features of the Personalized Nursing LIGHT model of nursing practice (Andersen & Smereck, 1989; Andersen, Smereck & Braunstein, 1993). This model clarifies the nurse's role in assisting persons with addictions to improve their well-being and has been the basis of successful clinical practice. This author believes participation in meditation or other such human field enhancing activities will change the client's human environmental mutual process, reducing the need for drugs to modify their perception of synchrony and increasing their personal ability to maintain human environmental field harmony.

Endnote

In this author's opinion, Rogers' conceptual system is a more abstract and diffuse interpretation of Nightingale's environmental factors, taking her simplicity of interaction, human with environment, to a higher and non-linear level. It still emphasizes the nurse as the agent of change, modifying the relationship between individual and milieu, but Rogers sees this process as engaging clients in patterning their energies moment by moment in ways that serve them best. It presents a positive non-judgmental way for nurses to guide care, which is particularly important when working in the complex mutual process recognized as addiction.

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Merrilyn O. Johnson, RN;MSN
Nursing Collaborative Program
University of South Carolina
and
Medical University of South Carolina
e-mail: johnsomo@musc.edu

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ISSUES WITH MEASURING TIME EXPERIENCE IN ROGERS' CONCEPTUAL MODEL

Juanita Watson, RN,C;PhD

ABSTRACT

Time experience is a key concept in Rogers' conceptual model and has been uniquely interpreted by her as a manifestation of human field patterning. In this paper, issues with measuring time experience are addressed, especially with reference to the Time Metaphor Test, the instrument used most often in Rogerian investigations. Problems with obtaining and interpreting scores with this instrument are discussed, and the validity of the instrument is questioned. Recommendations for further instrument development are presented.

Although the concept of time experience is not specific to Rogers' (1970, 1992) conceptual model, it has been uniquely interpreted by her as a manifestation of human field patterning. "Awareness of the passage of time is a long-standing concomitant of the human condition" (Rogers, 1970, p. 115), which emerges "out of the human/environmental field mutual process" (Rogers, 1992, p. 31). In this paper, several issues with measuring time experience in Rogers' conceptual model will be addressed, including problems with interpreting the results of such measurement.

The Concept of Time Experience

According to Rawnsley (1977), time experience is "the perception of felt or experiential time rather than assessment ... of clock time" (p. 20). Meerloo (1970) stated that "the sense of time [is] a multilinear evolving process" (p. 3) that "connotes movement and becoming" (p. 6). He noted that "modern physical science has taught us that absolute objective time does not exist" (Meerloo, 1970, p. 7). In contrast, subjective time experience is a "continuous flow, a dynamic phenomenon" (Meerloo, 1970, p. 8). In applying Rogers' model to time experience, Paletta (1990) stated that the perception of time passing "evolves through a lifetime of continuous mutual [human and environmental field] processes, culminating in the individual's current pattern of time sense in relation to the environment" (p. 240).

Meerloo (1970) claimed that subjective time experiences vary as much as people do themselves. Similarly, Rogers (1992) indicated that diversity of the human field pattern, of which time experience is a manifestation, varies with the individual. According to Paletta (1990), time experience may be viewed as "a subjective experience with each person developing an individual rhythm"(p. 241).

Measuring Time Experience

In studies using the Rogerian model, time experience has been measured mainly through use of the Time Metaphor Test (TMT) (Knapp & Garbutt, 1958), an instrument consisting of 25 metaphors which symbolize the subjective experience of time passing. The author recognizes that Paletta (1988, 1990) has developed a similar instrument, the Temporal Experience Scales (TES),

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for measuring time experience in relation to Rogers' model. This instrument consists of 24 metaphors which symbolize the experience of time moving. Six of the 24 metaphors on the TES are the same as those on the TMT. Because the TES has not yet been as widely used as the TMT, and because Paletta (1988) acknowledged that the TMT "established a direction for instrument development within Rogers' framework" (p. 28), the focus here will be on the use of the TMT.

Description of the TMT

The TMT was developed from an original list of 40 metaphors collected from "quotations, anthologies, and other sources" (Knapp & Garbutt, 1958,p. 427). Based on the results of a pilot study, only those metaphors which elicited a wide range of valid responses were retained. The instrument was then administered to 73 male undergraduate students along with four standard Thematic Apperception Test pictures which were scored for n-Achievement (n-Ach). The intercorrelations of each metaphor with every other and with the n-Ach scores were computed. Factor analysis revealed two factors, with the highest loadings on the first factor. Through comparison of the factor loadings with the correlations between the metaphors and n-Ach, it was determined that the first factor defined a continuum ranging from swift to static time experience.

Despite low loadings on the second factor, the metaphors were placed on coordinates representing the two factors. Three distinct clusters emerged: *Dynamic-Hasty*, *Humanistic,* and *Naturalistic-Passive* (Knapp & Garbutt, 1958). The terms *Vectorial* and *Oceanic* are currently preferred instead of *Dynamic-Hasty* and *Naturalistic-Passive*, respectively (Fraser, 1966, p. 597). The Vectorial cluster was interpreted by Knapp and Garbutt (1958) as indicating the experience of time passing swiftly, whereas the *Oceanic* cluster as interpreted as indicating the experience of time passing slowly. The significance of the *Humanistic* cluster was not determined. Three metaphors were not included in any of the clusters and were designated as occupying intermediate spaces between the three clusters (Table 1).

According to Knapp and Garbutt's (1958) analysis, the metaphors included in the *Vectorial* cluster loaded substantially on the first factor, which was positively correlated ($r = .22$) with n-Ach. The *Oceanic* cluster loaded negatively on both the first and second factors; this cluster was negatively correlated ($r = -.094$) with n-Ach. The metaphors included in the *Humanistic* cluster loaded positively on the second factor, but had no substantial loadings on the first factor. This cluster was negatively correlated ($r = -.079$) with n-Ach. An F-test comparing the means of the three clusters yielded a statistically significant value ($F = 5.43, p < .02$). However, Knapp and Garbutt (1958) acknowledged that the *Oceanic* and *Humanistic* clusters did not differ significantly from each other.

Wallach and Green (1961) used the TMT in a comparative study of time experience in adults aged 18 to 20 years ($N = 118$) and adults aged 65 to 75 years ($N = 160$). Factor analysis revealed one major factor which concerned swift to static time experience and which was similar to the first factor extracted by Knapp & Garbutt (1958). The second factor varied from group to group. Wallach and Green make no mention of the clusters of time experience identified by Knapp and Garbutt.

Use of the TMT in Rogerian Studies

Even though the statistical validity of the TMT can be questioned, especially the derivation of the three clusters of time experience, the instrument has been used frequently in research using Rogers' (1970, 1992) conceptual model. Only those studies which have direct bearing on the issues addressed in this paper are presented.

Rawnsley (1977, 1986) used the TMT

Table 1
Clusters, Factor Loadings, and Rank Order of Metaphors on the Time Metaphor Test (TMT)

Metaphor by cluster	Loadings on first factor		Rank order
	K & G (N = 73)	W & G (N = 278)	W & G (N = 278)
Vectorial			
A fast-moving shuttle	+.69	+.76	1
A speeding train	+.66	+.74	2
A galloping horseman	+.53	+.69	3
A fleeing thief	+.50	+.65	4
A space ship in flight	+.39	+.37	6
A dashing waterfall	+.36	+.44	7
A whirligig: a pinwheel	+.36	+.61	5
Humanistic			
A devouring monster	+.15	+.38	9
A tedious song	+.12	-.18	14
A large revolving wheel	+.07	+.31	10
A burning candle	+.06	-.36	16
A winding spool	-.05	+.16	12
A string of beads	-.29	-.38	17
An old man with a staff	-.20	-.44	19
An old woman spinning	-.36	-.23	15
Oceanic Cluster			
Drifting clouds	-.12	-.46	21
Wind-driven sands	-.21	-.06	13
The Rock of Gibraltar	-.33	-.30	22
Budding leaves	-.34	-.42	18
A road leading over a hill	-.36	-.54	23
A quiet, motionless ocean	-.61	-.63	24
A vast expanse of sky	-.61	-.68	25
Intermediate			
Marching feet (Vectorial-Humanistic)	+.19	+.23	11
A bird in flight (Vectorial-Oceanic)	+.16	+.43	8
A stairway leading upward (Humanistic-Oceanic)	-.58	-.44	20

Note. K & G = Knapp & Garbutt (1958). W & G = Wallach & Green (1961)

to study the perception of speed of time passing and the process of dying in 108 hospitalized adults. She postulated that since dying is a developmental stage of the life process, it should be related to other manifestations of human field patterning such as time experience. The participants were divided into four groups: older, dying (ages 55 to 75, diagnosed with metastatic cancer) (N = 30); older, not-dying (non-life-threatening diagnosis) (N = 30); younger, dying (ages 17 to 30, diagnosed with metastatic cancer) (N = 18); and younger, not dying (N = 30). No significant differences in scores were found between age groups although younger, not-dying individuals had a preference for swifter metaphors, whereas older, dying individuals had a preference for the slowest. There also were no significant differences between the dying and not-dying groups on the TMT. The hypothesis that younger, dying persons would perceive time as passing more swiftly than older, not-dying persons was not supported. Indeed, these two groups were the most similar with respect to time experience of the four groups studied.

A problem with interpreting the results of this study is that Rawnsley (1977, 1986) used Knapp and Garbutt's (1958) original designations of swift to slow metaphors in scoring the TMT. Macrae (1982) has suggested that those metaphors originally interpreted as the slowest may actually represent the fastest, connoting an experience of timelessness. When Rawnsley's scores are interpreted as suggested by Macrae, her additional hypotheses that older persons perceive time as passing more swiftly than younger persons, and that dying persons perceive time as passing more swiftly than those who are not dying, are partially supported.

Ference (1979) used the TMT to assess the relationships of time experience and human field motion, for which she developed the Human Field Motion Tool (HFMT). In her study of 213 volunteer adults, she elicited a positive relationship between the canonical variate which she named "Human-Field Motion" and time experience (r = .90). Allen (1988) and Hastings-Tolsma (1992) also studied human field motion and time experience, along with other variables pertinent to their respective investigations, using the TMT and the HFMT. Scores on the TMT were reported according to the three clusters of time experience identified by Knapp and Garbutt (1958). Scores on the HFMT were reported according to the three basic dimensions of a semantic differential: activity, potency, and evaluation (Osgood & Suci, (1958). In both studies, significant positive correlations were found between the *Vectorial* cluster of the TMT and each of the three dimensions of the HFMT.

Macrae (1982) used the TMT to study time experience, as well as human field motion, in a comparative study of meditating (N = 45) and non-meditating (N = 45) individuals. Meditators describe changes in the perception of time passing, so she expected that different metaphors would be chosen by meditating and non-meditating participants. Macrae posited that meditators might choose metaphors which were identified by Knapp and Garbutt (1958) as indicating the slowest time experience because such metaphors symbolize the sense of timelessness experienced during meditation. In Rogers' (1992) model, the experience of timelessness can be interpreted as "a wave frequency so rapid that the observer perceives it as a single, unbroken event" (p. 31). That is, time is experienced as passing swiftly, not slowly. Macrae's (1982) hypothesis about time experience was supported (t = 4.75, df = 73.09, p = .001).

Butcher and Parker (1988) used the TMT to study the relationships of guided imagery and time experience, along with human field motion, in a pre-test/post-test

design, using 60 participants who were randomly assigned to either the experimental or the control group. Like Macrae (1982), they predicted that participants experiencing pleasant guided imagery would have lower scores on the TMT, with low scores indicating the experience of timelessness. This hypothesis was supported ($F(1,118) = 4.358$, $p < .05$).

Strumpf (1982) used the TMT to investigate the relationships among life satisfaction, self-concept, and time experience in a sample of 86 women, ages 65 and older. She found no significant relationships between time experience and life satisfaction ($r = -.048$, $p = .328$), nor between time experience and self-concept ($r = -.042$, $p = .350$). In explaining these results, she stated that perhaps the TMT "failed to capture the meaning of temporality" (p. 89) in her sample of older women.

Watson (1993) used the TMT to explore the relationships of sleep-wake rhythm, dream experience, human field motion, and time experience in a sample of 66 healthy women, ages 60 to 83 ($M = 71.2$). She also found no significant relationships between time experience and any of the other main variables. However, there was an unexpected significant correlation between time experience and chronological age ($r = .2863$, $p = .05$, two-tailed test).

Problems with Interpretation

One problem with interpreting the results of measures with the TMT is the variation in methods used to obtain scores on the test. Both Knapp and Garbutt (1958) and Wallach and Green (1961) instructed participants to rate all 25 items using rank scores of one to five.

> Select the five phrases that seem most appropriate and before each place the number "1." Then pick out the next five most appropriate phrases and before them place the number "2." Continue this process until you have placed the number "5" before the five least appropriate phrases (Knapp & Garbutt, 1958, p. 428; Wallach & Green, 1961, p. 72).

This laborious approach to completing the instrument has been problematical. Ference (1979) reported that participants had difficultly selecting five metaphors with respect to the "five quantitative values" (p. 63), and recommended that in future investigations, participants simply check the five metaphors "which most closely resemble how time seems to be moving in your life" (p. 65). The method recommended by Ference is similar to that used by Rawnsley (1977, 1986), who needed a simpler method of administering the test because her sample included individuals who were dying. She instructed participants to choose five metaphors and assign ratings of "1" to "5" to them, with "1" indicating their first choice. Watson (1993) used the original directions for completing the test in her pilot study ($N = 19$) and found that five participants were unable to complete the instrument. Those who did indicated it was difficult and time-consuming to do so. For the main study, the approach recommended by Ference (1979) was employed. This approach also has been used by Butcher and Parker (1988), Macrae (1982), and Strumpf (1982), with the directions re-worded in accordance with Ference's (1979) recommedations. Ference, for example, refers to time as moving, whereas Rawnsley (1977, 1986) describes it as passing.

In studies in which participants are instructed to check the five items on the TMT that most closely resemble how time is moving for them, scores have been determined using Wallach and Green's (1961) rankings for each metaphor. These are based on their factor analysis of the instrument which revealed a swift-to-static factor similar to that identified by Knapp and Garbutt (1958). In the studies by Butcher and Parker

(1988), Macrae (1982), Rawnsley (1977, 1986), and Strumpt (1982), the rankings used were the same as those from Wallach and Green (1961). In Watson's (1993) study, the metaphors originally interpreted as a slow experience of time moving were given the highest scores, because these metaphors have since been interpreted by Macrae (1982) as representing timelessness, which is the fastest time experience in Rogers' (1992) model. Thus, high scores on the TMT in Watson's (1993) study would be comparable to low scores in the aforementioned investigations.

Allen (1988) and Hastings-Tolsma (1992) used a different approach for administering and scoring the TMT. According to Allen (1988) there is "considerable loss of data" (p. 49) when participants check only five of 25 items. Further, it is not possible to determine alpha reliability, nor to perform validity measures such as factor analysis when only five items are checked. Thus, Allen applied a five-point rating scale to each metaphor, and participants rated each item independently of the others. Possible scores for each metaphor ranged "from 0 to 4, with the lowest score assigned to the response 'definitely does not resemble my sense of time'" (Allen, 1988, p. 49). Unlike previous studies, a total score on the TMT was not reported. Instead, scores were reported in relation to the three clusters of time experience identified by Knapp and Garbutt (1958). In supporting her use of cluster scores, Allen (1988) reported that 'the Time Metaphor Test measures three distinct ways of viewing time which may not be summative and, therefore, may be best viewed by cluster scores" (pp. 48 & 49). When cluster scores are used, those metaphors designated by Knapp and Garbutt (1958) as occupying intermediate spaces between the three clusters are omitted in analysis.

Using her method of scoring, Allen (1988) was able to report alpha reliability for each cluster of scores: *Humanistic* = .62, *Oceanic* = .64, *Vectorial* = .79. She indicated that the low reliabilities may have been due to the fact that each cluster contains less than 10 metaphors. Allen did not report a factor analysis using her method of scoring, possibly because of the sample size (N = 181). According to Munro and Page (1993), "a ratio of at least 10 subjects for each variable is desirable to generalize from the sample to a wider population" (p. 254). Thus, for the TMT a sample size of 250 would be needed. Hastings-Tolsma (1992) used Allen's method for scoring the TMT. She reported alpha reliabilities similar to Allen's: *Humanistic* = .60, *Oceanic* = .63, and *Vectorial* = .82. Her sample size was 173, and she also did not report a factor analysis.

Although the method of scoring used by Allen (1988) and Hastings-Tolsma (1992) is an improvement in terms of yielding more data, questions could be raised about the validity of using cluster scores and about how these cluster scores should be interpreted. A closer examination of how the clusters were developed by Knapp and Garbutt (1958) is required to answer these questions.

As noted earlier in this paper, Knapp and Garbutt (1958) used loadings on a swift-to-static factor and loadings on an unnamed factor on which none of the loadings was especially high, along with correlations with n-Ach, to determine that there were three clusters of time experience. The *Vectorial* cluster was, however, the only one that correlated significantly with n-Ach. Similarly, Allen (1988) and Hastings-Tolsma (1992) found that only the Vectorial cluster correlated significantly with the activity, potency, and evaluation factors of the Human Field Motion Tool.

The metaphors identified by Knapp and Garbutt (1958) as comprising the *Vectorial* cluster loaded positively on the first factor at .36 or greater. One metaphor, "a galloping horseman," also loaded on the

second factor at -.37. The metaphors which contributed to the *Oceanic* cluster were identified as having negative loadings on both factors. Inspection of the magnitude of these loadings reveals that five of the seven loaded negatively on the first factor at .33 or greater; the remaining two had negative loadings of only .12 and.22. Only one of the seven loaded negatively on the second factor at .30 or greater. Metaphors contributing to the *Humanistic* cluster were identified as those with positive loadings on the second factor and no substantial loadings on the first factor.Inspection of the magnitude of these loadings reveals that only five of the eight metaphors loaded on the second factor at .30 or greater. In addition, one metaphor loaded on the first factor at -.36. Of the three intermediate metaphors that did not fit into any of the three clusters, "a stairway leading upward' loaded at -.58 on the first factor, and 'a bird in flight" loaded at -.31 on the second factor. In fact, if a minimum cutoff of .30 for factor loadings is used, only 14 of the 25 metaphors loaded sufficiently on the first factor, seven positively and seven negatively, whereas 8 to the 25 metaphors loaded substantially on the second, five positively and three negatively. Three metaphors had loadings of .30 on both factors. Six of the 25 metaphors did not have salient loadings on either factor.

Knapp and Garbutt (1958) used centroid factor analysis without rotation. Nunnally (1978) stated that this method "is not quite as efficient at condensing variables as . . . the method of principal components . . . [although] it is far simpler to compute" (p. 349). The sophisticated computerized approaches to factor analysis in use today were not available at the time of Knapp and Garbutt's investigation. Moreover, their sample size was only 73, which is insufficient for factor analysis of a 25-item instrument (Munro & Page, 1993).

Wallach and Green (1961), in their study with 278 participants, were able to identify a factor similar to Knapp and Garbutt's (1958) swift-to-static first factor, using the centroid method without rotation. Twenty of the 25 metaphors loaded at .30 or greater on this factor, 10 positively and 10 negatively. Of those that did not load substantially, three were from the *Humanistic* cluster, one was from the *Oceanic* cluster, and one was an intermediate metaphor. Four of these five also had no substantial loadings on Knapp and Garbutt's first factor, although two loaded substantially on the second. It is interesting to speculate why these metaphors were retained on the instrument and how their inclusion affects validity and scoring, especially when cluster scores are used. More importantly, Wallach and Green (1961) did not report a second factor, nor did they discuss their findings with respect to Knapp and Garbutt's (1958) three clusters. Thus, the three clusters of time experience used by Allen (1988) and Hastings-Tolsma (1992) were derived from one study in which an out-dated method of factor analysis was used with an inadequate sample size.

Compounding the problem of how the clusters were determined are the different ways in which they have been interpreted. According to Knapp and Garbutt (1958), metaphors in the *Vectorial* cluster represent the experience of time passing swiftly, whereas those in the *Oceanic* cluster represent the experience of time passing slowly and passively. The *Humanistic* cluster was not interpreted, but most of these metaphors' loadings on the swift-to-static factor fell between those for the *Vectorial* and *Oceanic* clusters. When scores are determined using Wallach and Green's (1961) rank order of loadings on the first factor, the *Humanistic* metaphors fall approximately in the middle of the range of 1 to 25.

The metaphors by cluster do not line up exactly on the swift-to-static factor, and there is some overlap among the clusters. Thus, scoring done by cluster differs some-

what from scoring which is done in relation to rank order of the metaphors. Yet, in investigations in which the rank-order approach to scoring has been used (Macrae, 1982; Strumpf, 1982), there is a tendency to discuss findings on individual items in relation to the clusters within which they fall, and not in relation to their rank order.

Moreover, in this writer's analysis of metaphors selected most and least frequently in the studies by Macrae (1982), Strumpf (1982), and Watson (1993), striking similarities were found, despite wide age differences in the three samples. For example, the metaphors selected most frequently by the healthy older women in Watson's sample were not only similar to those selected by Strumpf's older women, but were also similar to those selected by Macrae's group of younger, non-meditating participants (Watson, 1993). Further, there were similarities among these three groups and Macrae's meditators. The only differences were that meditators were more likely to select metaphors such as "a quiet, motionless ocean," "budding leaves," and "a vast expanse of sky," and less likely to select "a speeding train" and "a fast moving shuttle." Perhaps this indicates that only some of the metaphors are truly operative in differentiating time experience among various groups. Indeed, of the five aforementioned metaphors, four were among those with the highest loadings on the swift-to-static factor identified by Knapp and Garbutt's (1958) and Wallach and Green's (1961) analyses.

Macrae (1982) was the first to suggest that metaphors in the *Oceanic* cluster were "descriptive of the experience of timelessness" (p. 8), which in Rogers' (1992) model is the fastest experience of time passing. At the time of Macrae's (1982) investigation,the manifestation of patterning pertaining to time experience was delineated by Rogers (1979, 1983) as "time drags/time races/seems timeless" (Table 2). This was changed

Table 2

Interpretation of Time Experience

	Slowest		Fastest
Knapp & Garbutt (1958)	Oceanic	Humanistic	Vectorial
Macrae (1981) & Watson (1993)	Vectorial	Humanistic	Oceanic
Allen (1988) & Hastings-Tolsma (1992)	Humanistic	Vectorial	Oceanic
Rogers (1979) & (1983)	Time drags	Time races	Seems timeless
Rogers (1985) & (1992)	Time experienced as slower	Time experienced as faster	Timelessness

by Rogers in 1985 to "time experienced as slower/time experienced as faster/timelessness," and remains her current interpretation (Rogers, 1992). Based on Macrae's (1992) interpretation, the *Oceanic* cluster became associated with timelessness, while the *Vectorial* cluster became associated with time racing.

How the *Humanistic* cluster was interpreted in relation to Rogers' ideas of time experience is not clear, but in investigations using Wallach and Green's (1961) rankings, scores continued to be assigned according to rankings which fell roughly between those for the *Oceanic* and *Vectorial* clusters. Thus, scores were assigned to metaphors which were not interpreted by Knapp and Garbutt (1958) and which did not appear to have a theoretical relationship to Rogers' model. The aspect of "time dragging," i.e., the slowest experience of time passing, remained unmeasured.

Although cluster scoring avoids the problem of using summative scores which include the eight metaphors from the *Humanistic* cluster, a question could be raised as to why this cluster should be included at all. Interestingly, both Allen (1988) and Hastings-Tolsma (1992) interpret the *Humanistic* cluster as indicating "time dragging." Neither elaborates on how she arrived at this conclusion, nor is the interpretation related to the position of metaphors in this cluster on the swift-to-static factor (Knapp & Garbutt, 1958; Wallach & Green, 1961). Moreover, results of both Allen's and Hastings-Tolsma's studies revealed that the *Humanistic* cluster did not correlate significantly with any of the other variables except for the *Oceanic* cluster in both investigations, and with the *Vectorial* cluster in Hastings-Tolsma's investigation.

When Paletta (1988) developed the Temporal Experience Scales, she determined separate measures for each aspect of time experience postulated by Rogers (1983). Although she defined "time dragging" as "a human field pattern of experiencing the movement of events in the environmental field as slow, boring, tedious, leaden, or dull" (Paletta, 1988, p. 3), she did not explicitly relate time dragging to metaphors in the *Humanistic* cluster, nor did she include any metaphors from this cluster on her time dragging scale. Yet, she did include three metaphors from the *Vectorial* cluster on her time racing scale, and two metaphors from the *Oceanic* cluster on her timelessness scale.

Conclusions and Recommendations

Despite the wide use of the TMT in Rogerian studies, and realizing that some researchers were able to support their hypotheses with the instrument (Butcher & Parker, 1988; Ference, 1979; Macrae, 1982), questions can be raised about the validity of this instrument, especially with respect to the initial development of the three clusters of time experience. Even more problematical is the interpretation of the results in relation to Rogers' model. Yet, time experience is a manifestation of human field patterning in her model, and an approach to measuring it is needed.

Perhaps the answer is to develop new instruments as Paletta (1988) did. Another possibility is to replicate the factor analysis of the TMT, using larger samples and modern data analysis techniques. Allen's (1988) and Hastings-Tolsma's (1992) approaches of having participants rate each metaphor independently would provide the data needed for such analyses. Perhaps there are clusters of time experience that are not yet identified. Certainly, the Humanistic cluster should not be used in investigations using Rogers' model as the origins of the cluster and its meaning in relation to the model are highly questionable. Finally, it is possible that qualitative studies are needed to determine what Rogers' (1992) terms for time experience mean to others, so that regardless of which quantitative instruments are used eventually, there would be consistency

in interpretation across studies as well as in relation to Rogers' model.

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Juanita Watson, RN,C;PhD
Assistant Professor of Nursing
Camden College of Arts and Sciences
Rutgers, The State University of New Jersey
311 North 5th Street
Camden, NJ 08102
(609)225-6238 (Office)

A UNITARY FIELD PATTERN PORTRAIT OF DISPIRITEDNESS IN LATER LIFE

Howard Karl Butcher, RN;PhD;CS

ABSTRACT

The purpose of this investigation was to enhance theory and understanding of the phenomenon of dispiritedness in later life within the context of Rogers' Science of Unitary Human Beings using a research method congruent with the ontological and epistemological tenets of Rogers' nursing science. Eleven persons 52 to 92 years of age who identified themselves as being in later life and having experienced dispiritedness participated in a 40 to 70 minute in-depth interview which focused on their experiences, perceptions, and expressions of dispiritedness. A field pattern profile was created for each participant. The unitary field pattern portrait of dispiritedness in later life was created through a process of mutual construction using the hermeneutic-dialectic circle and two phases of pattern synthesis. Ten unitary themes of resonating human-environmental field patterning emerged from the 11 field pattern profiles and were synthesized to form the unitary field pattern portrait. The portrait was interpreted within Rogers' nursing science to create the theoretical unitary field pattern portrait: Dispiritedness in later life is experiencing the oscillating rhythm of dissipating energy expressed as a perception of emptiness and patterns of dwindling vitality; experiencing dissonant rhythmicity amidst adversity and uncertainty expressed as feeling out of synchrony with the universe; integrality experienced as fractured expressed as disengaging from life's flow; openness and pandimensionality perceived as collapsing expressed as increasing restrictiveness, ambiguity, and apprehension; continuing to participate knowingly in change while wanting to relinquish the will to live; and in a continuous rhythm with inspiritedness accelerating movement toward patterns of greater diversity manifested by visioning infinite potentials and creating innovative ways of actively participating in the later life process.

The evolution of nursing as a scientific discipline is predicated on the development of conceptualizations of phenomena central to its concern from a unique nursing science perspective. If nursing is to develop a scientific knowledge base, inquiry within nursing must be guided by nursing's conceptual systems (Fawcett, 1989; Parse, 1987; Smith, 1992), Rogers' (1970, 1988, 1992). The Science of Unitary Human Beings is specific to the nursing discipline rooted in the scientific and metaphysical emerging worldview of wholeness. Rogers' nursing science provided the ontological and epistemological foundation for the research method used in this investigation and guided the conceptualization of dispiritedness.

Key words Dispiritidness, Rogerian nursing science research methodology, aging process
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Phenomenon of Interest: Dispiritedness

The phenomenon investigated in this study was the nature of dispiritedness in later life. Dispiritedness describes a personal experience and does not have the connotation of a diagnostic category, disease, mental illness, or abnormality (Bugental, 1980). The phrase, "my spirits are low," is a common expression reflecting the phenomenon of dispiritedness. There are few references to dispiritedness in the health literature. Jourard (1971), an existential-humanistic psychologist, described "dispiritation" (p. 9) as a phenomenon related to, yet different from, depression by emphasizing the subjectivity of dispiritedness. Jourard further characterized dispiritedness as feelings of hopelessness, purposelessness, meaninglessness, worthlessness, low self-esteem, and isolation. Bugental and Bugental (1984),

also existential-humanistic psychologists, extended Jourard's work by identifying dispiritedness and defining it as a "condition of blocked intentionality" (p. 50).

Dispiritedness is also viewed as a common human experience. Periods of being in low spirits are a normal occurrence in the life process of human beings (Bugental, 1980). Bugental (1980) explained that "change is a common characteristic of all living things and . . . our bodies are constantly flowing and evolving" ; when "flow is interrupted to some extent, the person experiences a drop in spirits" (p. 52). A "dysphoric, blue, unhappy tone . . . a complaint of a lack of energy and inability to mobilize oneself to act . . . a recurrent sense of blunted intention" is characteristic of "low-spirited times" (Bugental, 1980, pp. 51-52).

Identifying and establishing initial features of dispiritedness is fundamental to using the concept in research and theory development. Clarifying the initial features produced a set of criteria that were used to determine if the phenomenon exists in a particular situation. Based on a review and synthesis of definitions, descriptions, and literature on dispiritedness, the tentative criteria distinguishing the phenomenon of dispiritedness were: a sense of meaninglessness, purposelessness, and valuelessness in one's life; a sense of hopelessness and disconnectedness; dysphoria; a loss of will, energy, and vitality; feelings of low spirits, dejection, and lost enthusiasm (Bugental, 1980; Bugental & Bugental, 1984; Jourard, 1971).

Population of Focus

Jourard (1971) postulated that aging was a potentially dispiriting process. Elderly persons often make statements such as "I lost my spirit;" "my spirits are low; " "my spirits are broken;" and "I feel dispirited." Jourard contended that social conditions can also be so devoid of opportunities for inspiriting satisfactions that a person can become demoralized or dispirited. "Forcible retirement can produce demoralization, and under such conditions, depression - loss of spirit - is common" (Jourard, 1971, p. 85). However, there is no research on the phenomenon of dispiritedness. A primary goal of this study was to enhance understanding of the nature of dispiritedness as described by participants who have experienced dispiritedness in later life. The term, later life, defies definition. There is general consensus among gerontologists that later life probably begins in the mid to later 60s. However, Silverstone and Hyman (1992) stated that many gerontologists believe that somewhere in their 50s, individuals begin to pick up the message that they are getting old. Those who considered themselves to be in later life, even if they were in their 50s, were eligible as potential participants in this study.

Method

The unitary field pattern portrait (UFPP) research method is a phenomenological-hermeneutic research method developed specifically for nursing research guided by Rogers' Science of Unitary Human Beings. The method (see Figure 1) is a unique synthesis of Guba and Lincoln's (1989) constructivist-phenomenological methodology and Cowling's (1989, 1990, 1993a) Unitary Pattern-Based Practice methodology (Butcher, 1994a, 1994b). The method provides a motion lens with a nursing filter for viewing significant human-environmental phenomena. The phases of the (UFPP) research method include: initial engagement, the identification of Rogers' nursing science as the *a priori* perspective used to guide the method and interpretation of findings, immersion, intensity sampling, natural setting, pattern appraisal with use of pandimensional modes of awareness, field pattern profile construction, use of the hermeneutic-dialectic circle to create a mutually shaped pattern profile, unitary field pattern portrait construction using a process of creative pattern

synthesis, and lastly, theoretical unitary field pattern portrait construction through the process of evolutionary interpretation. A detailed description of how the UFPP research method was derived from Rogers's ontology and epistemology is described in Butcher (1994b).

Scientific rigor was maintained throughout the study by employing Guba and Lincoln's (1989) criteria for establishing trustworthiness in qualitative research. The credibility criterion was met in this study through prolonged engagement, persistent observation, multiple sources of data, participant checks, and peer debriefing. Prolonged engagement was accomplished by the researcher's immersion into the phenomenon of dispiritedness through reading numerous vivid personal accounts of older persons and engaging with persons who have experienced dispiritedness in later life for extended periods in natural settings where dispirited older persons may commonly live. Persistent observation was attained through focusing on the appraisal of manifestations of field patterning during the pattern appraisal process. Multiple sources of data were used in addition to interview data, including the researcher's field notes and the inclusion of participant's descriptions of artifacts (notes, poetry, and art work from participants) that offered additional understanding of the phenomenon. Participant checks occurred throughout pattern synthesis by sharing the field pattern profile with each participant for validation and revision. The researcher maintained a dynamic dialogue with peers and other researchers and regularly consulted with dissertation committee members during creative pattern synthesis and evolutionary interpretation of the data. A debriefer (committee mentor) monitored the developing construction to assure the researcher's construction was not over-shadowing the participants' constructions. An audit trail was maintained so that all constructions could be traced to original sources, and the processes of pattern synthesis can be confirmed. A detailed description of the setting, sample, and vivid field pattern profiles facilitates transferability judgments.

Initial Engagement

Initial engagement is the process of intense interest and passionate searching and surfacing of a research question central to the well-being of unitary human beings. After 18 months of intense searching of the literature on depression in later life, the phenomenon of dispiritedness in later life emerged as the focus of inquiry. In conversation with numerous older adults, nursing colleagues, psychiatrists, and nursing scholars, the researcher confirmed the presence of dispiritedness in later life as an experience unique from the current DSM-1V diagnosis of depression. However, no research existed which provided a description and conceptualization of dispiritedness from the perspective of persons in later life.

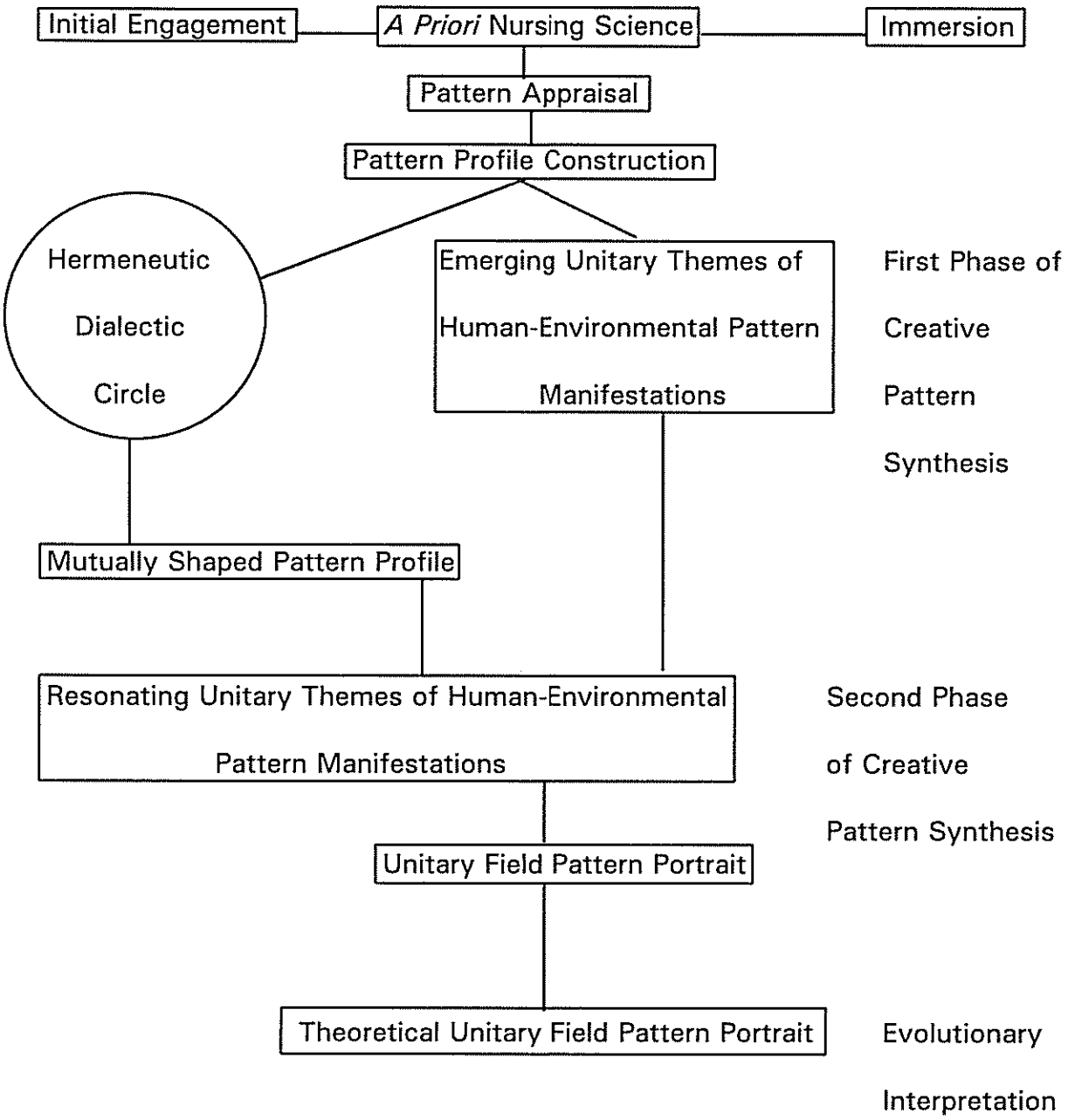
A Priori Nursing Science

All research flows from some theoretical perspective (Guba & Lincoln, 1989). The Rogerian mutual process epistemology recognizes the integrality and inseparability of the researcher-researched into (Butcher, 1994b). The Science of Unitary Human Beings served as the researcher's *a priori* nursing science. The researcher's theoretical perspective permeates all aspects of the research process, and the interpretation of the findings reflects the researcher's theoretical orientation. Interpreting qualitative findings from a theoretical perspective grounded in nursing science allowed for development of knowledge specific to the nursing discipline.

Immersion

In the immersion phase the researcher was steeped in the topic of dispiritedness. The researcher was absorbed in literature, poetry, music, motion pictures, photographs,

Figure 1. The Unitary Field Pattern Portrait Research Method



journal writings, dialogues with self and others, and art work that drew the investigator closer to the topic of dispiritedness and revealed its multiple meanings. Immersion enhanced the researcher's initial understanding of the nature of dispiritedness. For example, the researcher read numerous vivid personal accounts which reflected later life, viewed movies depicting features of dispiritedness, and engaged in dialogue with elderly persons who identified with the experience of low spirits. Examples of motion pictures depicting later life included "Cocoon" (20th Century Fox/Zanuck-Brown,

1985) and "A Women's Tale" (Orion Pictures, 1991). The researcher read a number of anthologies on aging (Berman, 1989; Booth, 1992; Fowler & McCutcheon, 1991) as well as books of poetry such as "When I am an Old Women I Shall Wear Purple" (Martz, 1987). The intense immersion in mutual process allowed the investigator to encounter, examine, and fully participate in a rhythmic flow with the phenomenon in order to initially depict the experience in its many aspects, core themes, and essences.

Intensity Sampling

Patton (1990) stated "an intensity sample consists of information-rich cases that manifest the phenomenon of interest intensely (but not extremely)"(p. 171). Extreme or deviant cases may be so unusual as to distort the manifestations of the phenomenon of interest. Following the logic of intensity sampling, the researcher sought rich examples of dispiritedness in later life, but not unusual cases. An assumption of this study was that individuals who identified themselves as having experienced low spirits can provide the best description of the phenomenon. Following approval from the university's IRB, the researcher asked faculty members, support staff at the university, and co-workers at a hospital if they knew of any persons in later life who have experienced "low spirits." Once a referral was obtained, the researcher either called or approached potential participants to answer questions they might have concerning the study. The tentative criteria of dispiritedness were used to assist the researcher in determining if potential participants experienced dispiritedness rather than some other experience. Potential participants were asked if they had ever experienced a sense of meaninglessness, a loss of will, energy, vitality, low spirits, or lost enthusiasm. In all cases, potential participants viewed themselves as being in later life and believed they could describe their experiences, perceptions, and expressions associated with feeling dispirited.

Eleven persons who identified themselves as having experienced dispiritedness agreed to participate in the study. There were no specific exclusion criteria regarding the potential participants' sex, ethnic background, or medical health status. No participants were taking any mood altering medications and no participants had any serious medical conditions. All participants were required to speak English. The age of nine female and two male participants ranged from 52 to 92 years of age. Two participants were in their 50s, two in their 60s, three in their 70s, and the other participants each were 82, 87, and 92 years of age. The two male participants were in their 70s. All participants maintained their own home and had no major health problems. Three of the four employed participants were contemplating retirement. Four participants lived alone and four were widowed.

Natural Setting

All interviews were conducted by the investigator in natural environmental settings chosen by the participants. Conducting the pattern appraisal process in a natural setting chosen by the participant assured that the study of dispiritedness occurred in mutual process with the participant's natural environment. Settings chosen for pattern appraisal were diverse. Seven interviews were conducted in the homes of participants; three at participants' places of employment, and one interview was conducted in a participant's hospital room the day before being discharged from the hospital.

Pattern Appraisal

A person's experiences, expressions, and perceptions are pattern manifestations emerging from the human-environmental field mutual process (Cowling, 1990, 1993a, 1993b). Pattern appraisal is the process of acquiring knowledge about the participant's experiences, perceptions, and expressions. The human instrument was used in pattern appraisal. The process of reflection and

synthesis integral to personal knowing is consistent with the use of self. The researcher acted as the human instrument by obtaining descriptions of the phenomenon of dispiritedness through an in-depth interview conducted in a person-to-person encounter between researcher and participant.

An important ingredient in the pattern appraisal process involved efforts directed toward creating an atmosphere of trust and relaxation. The investigator actively listened, conveyed unconditional acceptance, and remained fully open to human-environmental field process. Pattern appraisal involved the use of an informal conversational interview style that fostered spontaneous generation of questions and conversations. An informal conversational interview is consistent with the rhythm and flow of mutual process and aims toward encouraging expression, elucidation, and disclosure of the participants' experiences, perceptions, and expressions of dispiritedness. An open-ended approach allowed participants the time and space to explore the topic in a manner that promoted discovery, depth, and richness. During the pattern appraisal process, the researcher acted as a facilitator, clarifier, and evoker as a means to allow the participant's depictions of dispiritedness to unfold. Throughout the pattern appraisal process, the researcher utilized all forms of knowledge including pandimensional modes of awareness such as tacit knowing and intuition.

While some general questions were formulated in advance, genuine dialogue cannot be planned and arise from a stance of genuineness. Examples of general questions concerning the experience of dispiritedness included: "How would you describe what it's like to feel dispirited? "Describe for me any feelings you may have had when feeling dispirited." Examples of open-ended questions concerning the participants' perceptions of dispiritedness were: "How do you know when you are in low spirits?" "How do things change when you feel dispirited?" "What helps you most when you are in low spirits?" "Do things around you look different when you are in low spirits?"

When appraising participants' expressions, the researcher asked: "What happens when you experience this?" "How would anyone know you were feeling dispirited?" Participants were asked if they could draw or paint a picture of dispiritedness what would it look like? In addition, each participant was asked to identify a single word, particular music, poem, story, or phrase that describes the nature of dispiritedness. Pattern appraisal continued until the participant reported they had nothing further to say.

Field Notes

In addition to the descriptive pattern information collected through interviews of each participant, the researcher recorded field notes. The field notes were organized into three categories: observational notes, theoretical notes, and methodological notes. This organization provided a means of effectively reflecting on and processing the patterns as they emerged (on-going synthesis) and as they ultimately came together in the final synthesis (unitary field pattern portrait and theoretical construction). Consistent with characteristics of Rogerian inquiry, the mutuality of the researcher and the participants were reflected in the content of the field notes.

Field Pattern Profile Construction

The field pattern profile is a rich description of experiences, perceptions, and expressions in the participant's own language. Each pattern profile was constructed using the first phase of creative pattern synthesis. Creative pattern synthesis describes the qualitative processing of pattern manifestations. Patterns are processed within unitary science using synthesis rather than analysis (Rogers, personal communication, July 31, 1992). To accomplish field pattern profile construction through pattern synthesis, each taped interview was transcribed

onto a microcomputer using a word processing package. The Ethnograph 3.0 (Seidel, 1986) computer program was then used to manage transcribed dialogue by identifying text segments that related to the experiences, perceptions, and expressions of dispiritedness. Inclusion of contextual comments allowed for inclusion of both human and environmental field patterns inherent in Rogers' unitary perspective. Contextual comments such as observations or descriptors by the researcher were helpful in including any observational field notes that were later used in pattern synthesis.

A selective, or highlighting, approach (van Manen, 1990) was used to identify the essential thematic statements. When using a highlighting reading approach, the researcher asked, "What statements or phrases seem particularity essential or revealing about dispiritedness?"(van Manen, 1990, p. 93). The Ethnograph 3.0 (Seidel, 1986) was used only to identify thematic statements and group the statements and phrases together. A field pattern profile was constructed for each participant by synthesizing the thematic statements and phrases into a descriptive narrative which depicted the experiences, perceptions, and expressions of dispiritedness. It is important to note the field pattern profile was expressed in participant's language. After the field pattern profile was constructed, the researcher either met with the participant individually or conversed with the participant over the phone to share the field pattern profile for comment, revision, and confirmation. Of the 11 Pattern Profiles, one is included in this paper (see Table 1).

Hermeneutic-Dialectic Circle

A key feature of the (UFPP) Research method is the mutual shaping of the emerging field pattern profile using the hermeneutic-dialectic circle described by Guba and Lincoln (1989). After the first field pattern profile was validated by the first participant, the researcher engaged in pattern appraisal with the second participant. The same process described above was repeated with the second participant, except, at the end of the second interview, the second participant was asked to comment on the first field pattern profile. The comments of the second participant on the pattern profile were used to identify common and universal human-environmental pattern manifestation of dispiritedness in later life.

Table 1

Examplar Pattern Profile

Pattern Profile of Participant 4

Dispiritedness is a lack of an inner life that seems to have an ebb and flow and rhythm. Spirit to me has a religious connotation and is a life force that gives me meaning and significance. Dispiritedness has varying degrees of intensity and I have experienced both high and low spirits. The greatest intensity of low spirits was during a very difficult struggle. When I'm in low spirits, I may not feel like jumping out of bed but I get out of bed anyway. The life force seems like it is missing leaving a sense of emptiness. When I've been dispirited I have felt discouraged, dismayed, frustrated, dissatisfied with myself, and perceive no joy in this day. When I've created barriers between me and my environment, I become detached from the aliveness of the world. When I was most dispirited, I was empty inside and I lost my sense of identity and self worth. Dispiritedness is an empty and isolated person in a burnt-out environment; where trees are bent, broken, burned, and charred. There is no sun, no water, and no growth. With nothing inside, I have no energy, little desire, and my hope is diminished. But in the soil there is always potential, and I respirit myself by engaging in activities that water and replant the earth. Even though events associated with aging can lower my spirits, I can create a sense of balance of spirits through my faith in God, and engagement with my family and my work.

After validation of the second participant's field pattern profile, the researcher synthesized the two field pattern

profiles into one unified, mutually derived field pattern profile using the hermeneutic-dialectic process. The process was dialectic because there was a comparison and contrast of possible divergent views with an aim of achieving a higher level synthesis of all participant field pattern profiles. The process is hermeneutic (interpretive) in that each participant considered and interpreted the construction of other participants' descriptions of dispiritedness in relation to his/her own experience. After the interview with the third participant was completed, the participant was asked to comment on the synthesized construction of participants one and two. This process was respectively followed for each new participant. The final participant read and commented on the synthesized construction of the previous 10 participants. Therefore, at the end of pattern appraisal, there were 11 individual pattern profiles and one synthesized, mutually shaped field pattern profile.

The process of constructing a pattern profile for each participant and a mutually shaped construction continued until pattern repetition was attained. Pattern repetition was reached when no new information or themes emerged from participants that were not already part of the mutually shaped pattern profile, and there was redundancy in pattern information. Redundancy referred to the duplication and repetition of experiences, perceptions, and expressions of the participant's descriptions of dispiritedness compared to what had been previously described by the other participants. Pattern repetition was reached after the ninth interview. Two additional interviews were conducted to assure pattern repetition was fully reached. The final mutually shaped pattern profile, therefore, was a synthesis of all 11 pattern profiles and its final length was 4 pagers. Due to its length, it was not included in this paper.

Unitary Field Pattern Portrait Construction

A second phase of pattern synthesis was used to construct the unitary field pattern portrait. The second phase of pattern synthesis was a hermeneutic and phenomenological process of synthesizing all pattern information and was initiated after pattern repetition was reached. The researcher then immersed with each pattern profile and identified key short phrases and themes. These themes were named *emerging unitary themes of human-environmental pattern manifestations* and subsequently used in the second phase of pattern synthesis. Table 2 lists the emerging unitary themes identified in the exemplar pattern profile.

A total of 159 emerging unitary themes of human-environmental pattern manifestations were identified from the 11

Table 2.

Emerging Unitary Themes of Human-Environmental Pattern Manifestations from Exemplar Pattern Profile

A rhythmical ebb and flow	Emerged during a very difficult struggle
Missing the life force	Creating barriers
Meaning and significance is missing leaving emptiness	Loss of identity from not being valued
Getting up anyway	A sense of emptiness
Detached from the liveliness of the world	Feeling joyless and discouraged
Surrounded by a burnt-out, charred, environment	No energy
Loneliness and isolation	Diminishing desire and hope

Being engaged with the environment and having faith balances ebb and flow of energy

pattern profiles. Once all the emerging unitary themes of human-environmental pattern manifestations were identified, the researcher immersed in and dwelled with all 11 pattern profiles, the 159 themes, the mutually shaped pattern profile, and all observational field notes for three months as a means of illuminating the deeper nature of dispiritedness's human-environmental field process.

The 159 emerging themes were sorted and synthesized into common universal unitary themes called *resonating unitary themes of human-environmental pattern manifestations*. Thus, each resonating unitary theme of human-environmental pattern manifestations reflected a common set of emerging unitary themes of human-environmental pattern manifestations. Table 3 provides one example of how each resonating unitary themes was created from a common set of emerging themes from the 11 pattern profiles. The researcher used imaginative, tacit, intuitive, and contempla-

Table 3.

Emerging Unitary Themes reflecting the Resonating Unitary Theme *Emerging Amidst Life's Adversity*

Feeling down admist sadness and loss (1)	Everything is against you (1)
Effort seems useless (2)	Going down hill (2)
A desperate life (2)	No longer feeling needed while becoming older (3)
Loss of identity from not being valued (4)	Emerged during a difficult struggle (4)
Comes out of a time when life is meaningless (5)	From being over the hill and there is not much time left (5)
Discouraged while no longer feeling valued or having purpose (5)	Fearing uselessness and dependency (6)
No longer feeling needed while becoming older (3)	Comes with adversity (7)
Not being able to function (7)	Everything is against you (7)
When life becomes restricted it pulls one down (8)	Let down by adversity (9)
Feeling useless and unable to work (9)	No peace (10)
When going through a difficult time (10)	Being down in the dumps amidst adversity (11)

Note. The number after each emerging unitary themes signifies the associated pattern profile

tive sources of knowledge and insight to discover the nature of the phenomenon and synthesize the themes and essential patterns into one theme. Through synthesis and re-synthesis, ten resonating unitary themes of human-environmental pattern manifestations of dispiritedness emerged. The researcher then dynamically compared the resonating unitary themes across all field pattern profiles and the mutually shaped pattern profile to assure that each resonating theme was present in at least 9 of the 11 pattern profiles. Note that the resonating unitary theme *"emerges amidst life's adversity"* was present in all 11 pattern profiles. The ten resonating unitary themes of human-environmental pattern manifestations are listed in Table 4. The 10 resonating unitary themes were then synthesized into one unified descriptive unitary portrait of dispiritedness grounded in the experiences, perceptions, and expressions of all participants. The resonating themes were then combined and synthesized into one unified unitary field pattern portrait of dispiritedness. The unitary field pattern portrait of dispiritedness was expressed in the form of an aesthetic rendition of universal patterns that embraces the phenomenon and attempts to portray the nature of dispiritedness (see Table 5).

Table 4

Resonating Unitary Themes of Dispiritedness in Later Life

A resonating integral human experience in later life
Experiencing the ebb and flow of dissipating energy
Perception of an abyss of emptiness
Emerges amidst life's adversity
Feeling adrift in swirling chaos while out of rhythm with the world
Enduring adversity while wanting to relinquish the will to live
Moving aimlessly and apprehensively through a dense fog with uncertainty
Feeling detached, alone, and disconnected from the flow of life
Expressed as dwindling vitality and liveliness
Active involvement, connectedness, and maintaining hope propels inspiritedness.

Table 5

The Unitary Field Pattern Portrait of Dispiritedness in Later Life

Dispiritedness is experiencing the resonating ebb and flow of dissipating energy while perceiving of an abyss of emptiness amidst enduring adversity in later life. Dispiritedness embraces loneliness, disconnectedness, and feeling of being adrift in swirling chaos while out of rhythm with life's flow. Dispiritedness is expressing dwindling vitality, liveliness, and wanting to relinquish the will to live, yet, moving aimlessly and apprehensively through a dense fog with uncertainty. Active involvement, connectedness, and maintaining hope propels inspiritedness

Theoretical Unitary Field Pattern Portrait Construction

The final phase of the (UFPP) research method was the construction of the theoretical unitary field pattern portrait. To accomplish theoretical unitary field pattern portrait construction, the researcher gathered, immersed in, and dwelled with the unitary field pattern portrait, theoretical field notes, and notes in the reflective journal for an extended period of time in light of Rogers' Science of Unitary Human Beings using

creative inductive and deductive pattern synthesis. Creative inductive and deductive pattern synthesis linked the patterns inductively identified in the field pattern portrait to the deductive interpretations guided by the researcher's *a priori* nursing conceptual system. Interpretation, guided by Rogers' Science of Unitary Human Beings, is termed evolutionary interpretation and involved interpreting the field pattern portrait in light of Rogers' (1988) principles of resonancy, integrality, and helicy, and the postulates of pandimensionality, pattern, openness, and energy fields to create a theoretical unitary field (see Table 6) pattern portrait of dispiritedness. All of Rogers' postulates and principles were used in the creation of theoretical unitary field pattern portrait.

The purpose of constructing the theoretical unitary field pattern portrait was to explicate the theoretical structure of dispiritedness by interpreting the unitary field pattern portrait from the perspective of Rogers' unitary science. Theoretical construction also aids in advancing the evolution of nursing science by moving the unitary field pattern portrait from description to theory, and is expressed in the language of Rogerian nursing science. Lastly, the theoretical unitary field pattern portrait allowed for creatively positing ideas for further research and nursing practice possibilities.

Discussion of the Theoretical Unitary Field Pattern Portrait

A detailed discussion of each of the 10 resonating unitary themes is beyond the scope of this paper but may be found in Butcher (1994a). Rather, the focus of this paper is on the examination of the theoretical unitary field pattern portrait. The meaning of each of the six theoretical statements is examined in light of Rogers' Science of Unitary Human Beings and relevant literature.

The first theoretical statement is an interpretation of dispiritedness as *experiencing the oscillating rhythm of dissipating energy expressed as a perception of emptiness and pattern of dwindling vitality*, included Rogers' principle of resonancy as well as the postulates of energy field and pattern. Rogers proposed that human beings and the environment are energy fields. Furthermore, energy fields are in continuous motion. According to Rogers (1970), the life process of human beings is a "symphony of rhythmical vibration oscillating at various frequencies" and that human beings experience their environment "as a resonating

Table 6

Theoretical Unitary Field Pattern Portrait.

Dispiritedness is:

experiencing the oscillating rhythm of dissipating energy expressed as a perception of emptiness and patterns of dwindling vitality;

experiencing dissonant rhythmicity amidst adversity and uncertainty expressed as feeling out of synchrony with the universe;

integrality experienced as fractured expressed as disengaging from life's flow;

openness and pandimensionality perceived as collapsing expressed as increasing restrictiveness, ambiguity, and apprehension;

continuing to participate knowingly in change while wanting to relinquish the will to live;

in a continuous rhythm with inspiritedness accelerating movement toward patterns of greater diversity manifested by visioning infinite potentials and creating innovative ways of actively participating in the later life process.

wave . . . rising and falling; now fast, now slow" (p. 101). The principle of resonancy describes the continuous change in wave frequency patterns. The oscillation refers to rhythmical ebb and flow of energy in the human-environmental field mutual process. Rogers (1970) stated "persons may be referred to as magnetic, forceful, moody, withdrawn--observations consistent with a concept of fluctuating field intensities and dimensions" (p. 90). Participants in this study described dispiritedness as having an ebb and flow and as a loss of energy. The term *dissipating* signified the perception of a loss of energy. *Dwindling vitality* is a manifestation of field pattern indicating a perception of dissipating energy and emptiness during the experience of dispiritedness.

A perception of emptiness was a universal feature of the experience of dispiritedness and within an energy field perspective, emptiness can be viewed as a loss of energy. While dispiritedness is an awareness of emptiness, it is not the nature of reality in a unitary universe. "Feelings and thought are manifestations of [the] field" (cited in Sarter , 1984, p. 176), rather than a part of a field or the field itself. In a unitary universe, energy fields are an emptiness as well as a plenum, empty because mass is essentially empty space and plenum because there is infinite energy in mass. In other words, what appears as empty space is actually infinitely full of energy and the source of creativity (Bohm, 1986; Capra, 1977). In the quantum world, emptiness has infinite potential as its boundless energy gives rise to transformations of matter. Furthermore, energy is not lost in a unitary universe, but is transformed. Thus, dispiritedness may be viewed as awareness of energy of the human energy field being transformed and subjectively perceived as being lost or dissipating into the environmental field. Hanchett (1992) has drawn similarities between the Madhyamika-Prasangika school of Tibetan Buddhism conceptualization of emptiness and Rogers's concept of energy fields. The Dalai Lama (1986) explained that all changes and transformations are possible because of emptiness. Therefore, the perception of dissipating energy and emptiness creates the possibility of rhythmical transformation between dispiritedness and inspiritedness.

The second theoretical statement was developed to describe the experience of dispiritedness as *experiencing dissonant rhythmicity amidst adversity and uncertainty expressed as feeling out of synchrony with the universe.* This theoretical statement also incorporated Rogers' principle of resonancy along with the principle of helicy's concept of uncertainty. When describing the principle of resonancy, Rogers (1970) asserted that "the life process may be likened to cadences--sometimes harmonic, sometimes cacophonous, sometimes dissonant" (p. 101). Dispiritedness was described as emerging from experiencing adversity or difficult times. Adversity is a manifestation of dissonant or dysrhythmic environmental energy field patterns which are experienced by the human energy field. Dissonant rhythms also were manifest in the experience of unpredictability or chaos. Participants described the experience of storms and turbulent events as associated with dispiritedness. Adversity and turbulent storms are inherently chaotic, unpredictable, and transformational (Butcher, 1993). Rogers's (1992) included the idea of unpredictability when discussing the nature of change. Chaos theory is a theory of complex nonlinear systems which describes the turbulent and unpredictable fluctuations in dynamic systems (Butcher, 1993; Phillips, 1991). Experiencing chaos and turbulence was expressed as dissonant environmental rhythms and feeling out of synchrony with the environmental energy field. Expressions such as feeling "out of kilter with the world" and feelings of dysphoria emerging from experiences of adversity in later life are

manifestations of the experience of chaotic and dissonant environmental rhythms. Furthermore, "continuous change emerges out of nonequilibrium and exhibits punctualism not gradualism" (Rogers, 1992, p. 32). Experiencing chaos and unpredictability becomes the potential creative source of change (Briggs & Peat, 1989; Butcher, 1993; Prigogine & Strengers, 1984). Therefore, the chaotic and dissonant rhythms of dispiritedness potentially leads to greater creativity, innovativeness, and diversity in human-environmental field patterning.

The notion that creativity can emerge from the experience of difficult situations or adversity is also consistent with Bugental's (1980; 1987) conceptualization of dispiritedness. In describing the "other side of dispiritedness," Bugental (1980, p. 61-67) described how dispiritedness can lead to greater personal awareness and harmony. "When they [feelings of low spirited times] are accepted and understood, when they are incorporated into our total being and worked through, they free us to live more fully, to experience the good times more thoroughly, to know our total natures more authentically"(p. 65).

The third theoretical statement, *integrality experienced as fractured expressed as disengaging from life's flow,* describes dispiritedness in relation to Rogers's principle of integrality. In Rogers' (1970) early work, she stated that "deviations in the rhythmical relationship between man[sic] and environment may be postulated to manifest themselves in disruption and reorganization in human field and the environmental field directed toward evolving a new rhythmical relationship between man[sic] and environment"(p. 188). Reinterpreted to be more consistent with the current understanding of Rogerian science, changes in the mutual process of human-environmental mutual field process may be postulated to manifest themselves as increasing innovative and diverse human-environmental field patterning. The principle of integrality describes the continuous mutual human and environmental field process (Rogers, 1992). The human and environmental energy field are continuously open to each other and, therefore, inseparable. Mutual process signifies the dynamic interconnectedness of everything. While the nature of unitary universe is a seamless unbroken flow of human-environmental field patterning, persons experiencing dispiritedness perceive a disruption in integrality. Descriptions of feeling separated from life's flow, alone, isolated, detached, not involved, out of touch, and disconnected were expressions of feeling disengaged from the flow of human-environmental field patterning. Feelings and thoughts of integrality as being fractured are a manifestation of experiencing adverse turbulent, dissonant, and chaotic human-environmental field patterning and are, therefore, not a reflection of the true integral nature of human and environmental fields.

The fourth theoretical statement included in the theoretical unitary field pattern portrait, *openness and pandimensionality perceived as collapsing expressed as increasing restrictiveness and uncertain future,* incorporated the postulates of openness and pandimensionality to describe the experience of dispiritedness in later life. Rogers (1970, 1988, 1992) asserted that the universe is an open system. "Energy fields are open, not a little bit, but continuously . . . A universe of open systems explains the infinite nature of energy fields" (Rogers, 1992, p. 30). Therefore, energy fields are without boundaries. Within Rogers' nursing science, all reality is postulated to be pandimensional. Pandimensionality provides for an infinite domain without limit and is defined as a nonlinear domain without spatial or temporal attributes (Rogers, 1992). Nonlinearity means that reality spreads all over; it is not a line; it represents an infinite transcendent domain. Nonspatial means

reality cannot be bound in spatial geometry, and nontemporal refers to the relativity of time and to the relative present for any individual (Sarter, 1988).

The pandimensional human energy field is characterized as having *imaginary* fluctuating boundaries. Persons who are experiencing dispiritedness perceived their field boundaries as being restricted, limited, contained, and contracted, rather than open and infinite. Expressions of feeling trapped, powerless, restricted, not as active, experiencing barriers, disconnected, and cut off, were pattern manifestations of dispiritedness reflecting *perceived imaginary* boundaries of the infinite pandimensional human energy field to be restricted or collapsing. Furthermore, participants in this study described a future filled with apprehension and uncertainty. Descriptions of a "dense fog," the "future looking fuzzy," "cloudiness," "darkness," "bleakness," "world looking like it is ending," feeling in "limbo," "little to look forward to," fear of being useless, and fearing a storm looming on the horizon, all conveyed a sense of apprehension and ambiguity about the future. The infinite domain of unlimited possibilities and potentials of a pandimensional reality seems restricted to a person experiencing dispiritedness. The future does not seem present in the infinite now. In dispiritedness, the pandimensional reality seems like it is shrinking and collapsing as choices seem limited and restricted.

The theoretical underpinnings of *continuing to participate knowingly in change while wanting to relinquish the will to live* are derived from Barrett's (1984, 1989, 1990) theory of power as knowing participation in change. Barrett's theory of power incorporates all of Rogers' postulates and principles. Within Barrett's Rogerian theory of power, power is defined as the capacity to participate knowingly in the nature of change characterizing the continuous patterning of human and environmental fields as manifest by awareness, choices, freedom to act intentionally, and involvement in creating changes. Participants in the present study described dispiritedness as an awareness, but an awareness of limited choices, increasing restrictiveness, and feeling detached. Interpreted within Barrett's (1989) theory of power, dispiritedness is an experience of low frequency power in human-environmental field patterning manifested by low frequency choices, low frequency in acting intentionally, and low frequency involvement in creating changes. In experiencing low frequency power participants described feelings of "wanting to give up" and of "losing the will to live," yet and at the same time felt they could not give up. Instead, when dispirited, participants would continue to "push" themselves; "not allowing myself to give up;" "become industrious;" continue to work; "get out of bed anyway;" or continue to care for a loved one. Thus, while one's sense of knowing participation in change is "challenged" while dispirited, participants would not "give up" during adversity. Rather, dispiritedness was characterized by continuing forward motion toward an uncertain future. Thus, dispiritedness is characterized by low frequency power while persons continued to exercise their relative power by enduring and not giving up. Interestingly, a number of participants stated that the difference between depression and dispiritedness was that depression is when you do give up. Dispirited persons in later life continued to participate in the human-environmental field mutual process despite experiencing low frequency power.

The final theoretical statement further illustrated participants' continued involvement in their own life process in later life. The statement is a description of the evolutionary potential of the continuous rhythmical oscillation of dispiritedness with inspiritedness. The theoretical understanding of dispiritedness as *a continuous rhythm*

with inspiritedness accelerating movement toward patterns of greater diversity manifested by visioning infinite potentials and creating innovative ways of actively participating in the life process was best described within Rogers' principle of helicy and Barrett's (1988, 1989) theory of power as knowing participation in change. The principle of helicy describes the change process as the continuous, innovative, unpredictable, increasing diversity of human-environmental wave frequency patterns (Rogers, 1988).

All participants in this study who were asked to describe their experiences, perceptions, and expressions of dispiritedness in later life also included descriptions of how they dealt with feelings of dispiritedness. Participants described multiple, creative, diverse, and innovative ways of staying connected, actively involved, and infusing hope in the later life process. Rogers' principle of helicy describes this continuous rhythmical movement toward patterns of increasing diversity. The continuous dispiritedness-inspiritedness rhythmicity created new potentials for knowing participation in change in the later life process. Participants spoke of becoming "industrious" and "getting energy from friends." Another participant stated "sometimes when I'm dispirited, before I go to sleep, I day-dream, and think about what I have to do next, and that somehow energizes me." Using the imagination and envisioning future potentials is an example of pandimensional modes of awareness that facilitate knowing participation in change. Several participants mentioned that their spirit was "nourished by harmonic music;" or they would "listen to old time hymns;" music "soothes me and makes me happy and content."

Perhaps Participant 4 stated it best:

> I respirit myself by engaging in activities that water and replant the earth. Even though events associated with aging can lower my spirits, I can create a sense of balance of spirits through my faith in God, and engagement in my family and my work.

Conclusions

The intent of this researcher was to investigate dispiritedness in later life using the (UFPP) research method to: expand nursing science; contribute to the development of Rogers' Science of Unitary Human Beings; and to expand Rogers' nursing science for guiding practice by enhancing an understanding of dispiritedness in later life.

Expansion of Nursing Science

A direct contribution to the expansion of nursing science was the construction of a theoretical description of the experience of dispiritedness grounded in a theoretical system specific to the nursing discipline. The theoretical description of dispiritedness is a conceptualization of the experiences, perceptions, and expression of dispiritedness which may serve to increase understanding of dispiritedness in the language of nursing science. Current conceptualizations of dispiritedness by Jourard (1971) and Bugental and Bugental (1984) are not specific to nursing and are incongruent with Rogers' unitary perspective (Butcher, 1994a). Dispiritedness was conceptualized as a unitary, irreducible energy field pattern manifestation emerging out of the human-environmental mutual field process. All the postulates and principles that constitute Rogers' nursing science were included in the theoretical description of dispiritedness. The theoretical unitary field pattern portrait of dispiritedness in later life provides a new, evolutionary, and unitary conceptualization of dispiritedness specific to nursing science, thereby advancing the development of nursing theory.

Expansion of Rogers' Nursing Science

The results of this study expanded Rogers' nursing science in two major ways. The research methodology used in this study was the first application of the (UFPP) re-

search method. The method is specific to Rogers' nursing science. The research methodology led to the development of a unitary conceptualization of a phenomenon specific to the well-being of human beings. Thus, the UFPP may be used to investigate other phenomena central to nursing's concern as a means to develop concepts specific to Rogers' Science of Unitary Human Beings.

Secondly, the unitary conceptualization of dispiritedness expanded understanding of Rogers' nursing science. The theoretical description of dispiritedness in later life as perceiving integrality as fractured, openness and pandimensionality as collapsing, energy as dissipating, and resonancy as dissonant are new ways of using the principles and postulates in the Rogerian system to conceptualize the unique personal experiences of unitary human beings. For example, ebb and flow of the dispiritedness-inspiritedness rhythm in the life process creates the potential for personal transformation as new and innovative potentials for participating knowingly in the later life process emerge. All participants described new ways of inspiration by staying connected to the environment, creating hope, and being actively involved in the later life process.

Expansion of Unitary Pattern-Based Practice

The findings of this study contribute to the enhancement of knowledge guiding unitary pattern-based practice. Dispiritedness was found to be a common, universal human experience in later life relevant to understanding the nature of well-being. Unitary pattern-based practice focuses on the experiences, perceptions, and expressions of unitary human beings (Cowling, 1990). The unitary field pattern portrait provides a vivid description of the experiences, perceptions, and expressions of dispiritedness in later life. The portrait may enhance nurses' ability to recognize and appreciate the human-environmental pattern manifestations which characterize the experience of dispiritedness in later life.

Nurses guided by Rogers' nursing science can use the process of pattern profile construction to assist clients in describing their own unique patterns of dispiritedness. Sharing the pattern profile of dispiritedness with clients enhances their awareness of their own life process and potentially facilitates their knowing participation in change. The knowledge of the rhythmical nature of dispiritedness-inspiritedness may enhance the nurse in mutual process with clients experiencing dispiritedness to create opportunities to facilitate inspiritedness. For example, when caring for persons in later life, nurses can explore and create opportunities that: (1) enhance ability to remain actively involved in their later life process; (2) intensify connectedness to the nature, family, and friends; and (3) facilitate a sense of hope for a future manifest with kaleidoscopic and symphonic potentials.

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Howard K. Butcher, RN; PhD, CS
Assistant Professor
Pacific Lutheran University
School of Nursing
Tacoma, Washington 98447-0003
206-535-8489

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IMAGINATION COLUMN

Rizza O. Cea, RN;BS,BA
Graduate Student
New York University

The Garden: A Metaphor for Rogers' Science of Unitary Human Beings

As I sit here thinking of how to illustrate what Martha Rogers took years to develop, I am suddenly inspired by my surroundings. I start walking around the garden, focusing on each flower, tree, bush, weed, and blade of grass. I begin to see the pastel impatiens, how the grass is overgrown, how black the berries appear on the bush, how the weeds creep up from in between the cement blocks. I then try to focus on just one part of the garden, looking at every detail of that part and blocking out everything else. I begin to see how the colors change on the petals of the flowers from light to dark as the petal moves away from the center. As I direct all of my attention to this one part, I try to imagine the whole garden and I find myself completely unable to do so.

So I step back to see it in its entirety. With all my senses, my feelings, and my imagination, I look at this wonderful garden and I understand the Science of Unitary Human Beings. By focusing on one part of the garden, I cannot see the pattern in which the flowers were planted. I cannot appreciate how all the different hues are integral in creating an orchestra of colors. I cannot feel the calmness that the whole garden brought me as I sit in its midst. I cannot explain the flood of memories of other beautiful gardens that I have seen. I cannot understand the history of the garden. The garden, taken as a whole, is a new entity unto itself. It is irreducible and cannot be explained by the sum of its parts. So, too, neither can a human being be broken down into parts. According to Rogers, "human beings are wholes, not merely collections of body parts (heart, lungs) or body systems (cardiovascular, neurological). Wholeness is irreducible" (Lutgens, 1991, p.6). One cannot truly see and understand a human being by summing up all of the biological, physical, psychological and social parts. The sum does not equal the whole.

Metaphors for this concept can be found everywhere we wish to search. For me I found it in nature. Rogers uses the analogy of a cake by stating, "I cannot get a holistic human being by adding up parts any more than I can get a cake by adding up the ingredients of flour, sugar, vanilla, and eggs and proclaiming that I now have a cake" (Rogers, 1994, p.2). Quantum physicists are able to see this concept in the quantum realm. In *The Quantum Society,* Zohar and Marshall (1994) state that "at the level of holistic quantum reality, relationship itself creates identity - the identity (characteristics) of the whole quantum system emerges from the way its `parts' combine. Like the unity of consciousness, quantum holism cannot meaningfully be analyzed, or broken down, into those original separate parts" (p.72).

On rare occasions, I am able to practice nursing according to the philosophy of Martha Rogers. I find it challenging to see and treat a client as a unitary human being within an institution of acute care. Last week I came upon such an opportunity because the unit was calm, and no little emergencies seemed apparent. I took report from the previous nurse who was eager to get home after working 12 straight hours. The report went something like this: "Ms. Doe, 50 years old, upper GI bleed, alcohol withdrawal. No active bleeding at this time. No seizure activity noted. Vital signs stable. Afebrile. Alert, at times disoriented and very combative today. Attempting to climb out of bed with four side rails up. General weakness noted. IV fluid is D5 and 1/2 normal saline going at 75cc/hour."