
A Descriptive Study of the Interactive Guided Imagery Experience

Judie A. Heinschel, Ph.D., R.N., C.C.R.N.

University of Illinois

The purpose of this Study was to describe the experience of participating in Interactive Guided ImagerySM (IGI) from the perspective of clients. A qualitative descriptive design guided the research. Ten clients who had engaged in IGI, each with an R.N., IGI-certified practitioner, composed the sample. To explore participants' perceptions of their IGI experience, data were gathered through semistructured, in-depth interviews. Data analysis was carried out through data coding, categorizing, and subcategorizing; thematic synthesis; and structuring of relationships. Six primary themes emerged to compose the description of the experience of participating in IGI: the client's lived experience, use of a nonordinary state of consciousness, the guide, the guide-client relationship, influencing factors, and the results of IGI use. Based on the primary themes and their interrelationships, a model of the IGI experience was developed. The description and the model of the IGI experience provide the basis for further nursing knowledge development of the IGI modality.

Guided imagery (GI) has been used in a variety of health and healing practices in the Western world for the past three to four decades.

AUTHOR'S NOTE: This research was conducted as part of the author's doctoral dissertation while a student at the University of Colorado School of Nursing. Dr. Heinschel would like to thank Dr. Marlaine Smith of the University of Colorado for her help and Dr. Richard Christiansen of the University of Illinois for his support. Nurses, physicians, psychologists, and professional counselors who want to become interactive guided imagery practitioners can enroll in the Academy for Guided Imagery's certification program, an intensive and comprehensive educational curriculum that includes didactic, clinical, and preceptorial components.

JOURNAL OF HOLISTIC NURSING, Vol. 20 No. 4, December 2002 325-346

DOI: 10.1177/089801002237591

© 2002 American Holistic Nurses' Association

Health care providers in medicine, nursing, and psychology have used and researched various forms of imagery. A distinct form of GI, known as Interactive Guided ImagerySM (IGI), has been used with both clinical and anecdotal reports of positive results. This type of imagery is highly interactive in three ways: interaction between client and the trained professional guide, interaction between the client and his or her images, and interaction among the client's images. The IGI guide is always present with the client. In a typical session, the client is first guided into a state of relaxation. Unlike GI, however, in IGI the client describes his or her imagery as it is happening. For example, the guide may suggest, "Allow an image to form of a beautiful, peaceful place that is special to you and describe that place to me when you are there." The client describes this special place to the guide, to which the guide can make a personalized response. This interaction allows the guide to follow the client's imagery closely and respond accordingly. The imagery session proceeds in this interactive and individualized way.

THE PROBLEM

Research investigating GI has been published, but no scientific studies investigating IGI, either within or outside of the nursing discipline, could be located. A few articles described imagery that is in some way interactive, though none referred to IGI as such. Because nurses and others are using IGI, an urgent need exists to generate a scientific knowledge base about this modality.

Rationale for studying IGI as a potential nursing intervention included the following: (a) Growing numbers of people in the United States are seeking approaches to health care that are complementary to conventional care; (b) although few conclusions can be drawn from the results of GI research to date, its beneficial use in the areas of anxiety and pain have been well established; (c) the IGI technique is related to but distinct from GI; (d) clinical and anecdotal reports of IGI indicate its usefulness; and (e) no published research regarding IGI could be located.

THE PURPOSE OF THE STUDY

The purpose of this study was to describe the experience of participating in IGI, from the clients' perspectives. Specific study aims were

to describe clients' perceptions about (a) the IGI process, (b) the relationship between the guide and the client, (c) the roles of deep relaxation/trance, (d) factors that facilitate or inhibit the IGI process, and (e) changes in clients' personal health and healing associated with their use of IGI.

REVIEW OF THE LITERATURE

GI Literature

The use of imagery as a nursing strategy was first published in McCaffrey's (1979) book on pain management and continues to be included in various nursing texts. Scientific investigation of GI began to appear in the nursing literature in 1981; nursing studies from that time through 1997 were located and reviewed. A list of these studies appears in Appendix A, and a synthesis of them is presented here.

Most GI research in nursing has focused on the effect of GI on various outcomes. Fifteen studies report investigating the use of GI for anxiety. Eight (53%) of these report statistically significant positive results (Achterberg, Kenner, & Lawlis, 1988; Frank, 1985; Holden-Lund, 1988; King, 1988; Rees, 1995; Speck, 1990; Stephens, 1992; Thompson & Coppens, 1994). The remainder either did not find significant positive results for anxiety or did not measure or report significance (Broome, Lillis, McGahee, & Bates, 1992; Collins & Rice, 1997; Houldin, McCorkle, & Lowery, 1993; Lambert, 1996; Pederson, 1995; Rees, 1993; Vines, 1994). These studies were done using a variety of participants, including patients (cancer, burn, surgical, coronary), nursing students, and parents of children. All studies used some form of the State Trait Anxiety Inventory to measure anxiety.

Eight studies investigated the use of GI for pain. Five (63%) of these show statistically significant positive results (Achterberg et al., 1988; Daake & Gueldner, 1989; Lambert, 1996; Sloman, 1995; Swinford, 1987). Geden, Lower, Beattie, and Beck (1989); Broome et al. (1992); and Pederson (1995) reported no significant positive findings in the use of GI for pain. The pain studies were also conducted with a variety of samples; however, all were persons seeking health care. Measurement of pain varied considerably within these studies; some used the McGill Pain Questionnaire or a form of it, whereas others used a visual analog or a numeric scale. The number of analgesics used was a

common form of pain measurement. Other techniques included observational methods and self-reports.

Recently, Tusek, Cwynar, and Cosgrove (1999) and Deisch, Soukup, Adams, and Wild (2000) reported shortened hospital lengths of stay for patients who used GI. Several other outcomes have been studied, some with trends that are promising but insufficient to draw serious conclusions about the use or effects of GI.

To summarize the GI research in nursing, the following conclusions can be drawn: (a) Most studies fell within the positivist paradigm and were experimental or quasi-experimental, and no research specifically to describe or define the phenomenon of GI was located; (b) GI research in nursing has often been conducted on nurses or nursing students, and a variety of patients, all who have predominantly been female; (c) there is vast inconsistency with which GI, as an intervention, has been applied, in terms of such aspects as duration and frequency of the imagery sessions, live or taped sessions, with or without music, and as group or individual sessions; and (d) two outcomes of GI, anxiety and pain, have been studied the most frequently, and both show statistically significant positive results for the use of GI.

In medicine, investigations have focused on studying the effects of GI on the immune response. Favorable immune system modulations with the use of some form of a GI intervention have been demonstrated, such as blood cortisol levels (McKinney, Antoni, Kumar, Tims, & McCabe, 1997), natural killer cell function (Zachariae et al., 1990), and production of immunoglobulin (Rider et al., 1990).

Interactive Imagery Literature

Although no scientific investigations into IGI were located, Griffin (1986); Rancour (1991, 1994); Barrett (1992); Dossey, Keegan, Guzzetta, and Kolkmeier (1995); and Weil (1995) have each written about clinical experiences with using an interactive imagery technique. Farr (1990), however, was the only one to report a scientific investigation of an interactive process that resembled IGI. She did not refer to the process as IGI but said that no attempt was made to predetermine the form or sequence of participants' imagery and that during the imagery session, the guide facilitated exploration of images or issues as they were evoked. In addition, her technique was developed partly from Assagioli's, as was IGI. In this study of 5 of her female clients who used this type of imagery, Farr reported that the intervention

facilitated exploration and disclosure of deep emotional material that may not be uncovered for many sessions with verbal interaction alone. Specifically, she described these findings: (a) The imagery enabled the participants to quickly discover and explore affective material related to important life issues, (b) their images were powerfully intense and real, (c) their images were perceived as being representative of events and relationships in their lives, and (d) the imagery process facilitated their discovery of personal meaning and increased understanding about their inner and outer lives. If Farr's specific type of GI, designed to facilitate the generation of spontaneous imagery, is indeed IGI, the findings from this study can be considered in light of hers.

PROCEDURE

The goal of this study was to generate a rich description of the IGI experience. This emphasis necessitated a design that would allow the phenomenon of experiencing IGI, from the point of view of those having the experience, to fully emerge. A qualitative descriptive study design was chosen to provide for the fullest picture possible and to produce a solid base from which to launch further studies of IGI. Because the research question called for knowledge that was broad, exploratory, and descriptive, the model described by Miller and Crabtree (Crabtree & Miller, 1992; Denzin & Lincoln, 1994) was chosen as a methodological guide for this inquiry.

The population for this study was clients who had used IGI with a professional nurse certified in IGI practice. A purposive sampling method was used (Denzin & Lincoln, 1994). The Directory of Certified Interactive Guided Imagery Practitioners was obtained from the Academy for Guided Imagery (AGI). Those identified as RNs were invited by the investigator to participate in a study of IGI. Of the IGI practitioners who responded to the invitation, three were selected on the basis of the number of clients they thought they could recruit. These practitioners were instructed to invite a variety of their clients, in terms of age, sex, purpose for using IGI, perceived degree of success or satisfaction with IGI, and length of time they used IGI, to participate. Interested clients then gave permission to be contacted by the investigator, who then invited the clients to participate in the study. As IGI clients agreed to participate, arrangements were made to meet

for the interview in the clients' hometowns. The final sample consisted of 10 adult IGI clients.

Data Generation

The study proposal was approved by the Colorado Multiple Institutions Review Board (COMIRB) prior to implementation. COMIRB protocol was followed, and participants were assured anonymity in any publication. Each participant's verbal and written consent was obtained prior to data collection.

Data were collected by individual, face-to-face, semistructured interviews. An interview guide (see Appendix B) that addressed the research aims was used, and as data analysis proceeded, other areas were explored with participants, to more fully elucidate the emerging theme(s) under query. The interviews began with broad opening statements and questions and narrowed in focus as topics were extensively plumbed. Interviews were audiotaped and numbered in chronological order; each tape was labeled with its number, participant's initials, and the interview date. A methodological filing system tracked each interview and its transcription, as well as each phase of data analysis.

Data Analysis Procedure

Tapes were transcribed, and the resultant text provided the data for analysis. The general approach to analysis was inductive in that patterns, categories, and themes were allowed to emerge from the data. Crabtree and Miller's (1992) editing style of data analysis, designed for exploratory research, was optimally suited for this study because scant scientific knowledge about the topic (the IGI experience) existed, and generation of new insights was desired. In this style, the approach to textual data occurs by searching for meaningful segments then cutting and rearranging them until the interpretive truth can be revealed (p. 20). The analysis was iterative: Initial data were gathered and analyzed, then the emerging findings were used to guide the gathering of further data, followed by a return to analyzing again, and so on, in an ongoing fashion until categories, subcategories, and themes become clear. Specifically, analysis proceeded in five steps: initial coding and return to interviewing, categorizing, identification of subcategories, synthesis of themes, and structuring of relationships. The final result of data analysis was a description of the

experience of IGI, composed of six interrelated themes, and an accompanying model.

Issues of Data Quality

In this study, attention to data quality followed the guidelines provided by Morse and Field (1995) and Denzin and Lincoln (1994). Planning of the study included the following considerations of data: credibility, applicability, adequacy and appropriateness, and confirmability. Credibility was addressed by creating a sample of persons who could adequately represent the phenomenon under study, that is, by selecting RNs who were certified as IGI practitioners and their clients as participants. Concurrent member checking was used during interviews to verify the investigator's understanding of the material, restatement and summarization responses were used to verify information given by the participants, and maintenance of truth value was provided by the investigator's use of a nonstudy IGI practitioner for comparison and verification of initial coding. Applicability of the findings to other contexts was addressed by using multiple participants and by providing descriptions of each of them as well as of the findings so that readers can develop a picture of the IGI experience and its context as fully as possible. The third criterion for rigor, adequacy and appropriateness of data was addressed in several ways. First, sampling was purposively done to secure clients whose ages, reasons for using IGI, length of IGI use, sex, geographic locations, and practitioner were varied and who were willing and able to provide extensive descriptions of their experiences. In addition, as a sense of the primary themes began to emerge, interviewing included the gathering of data that were relevant to those themes and concepts, thus enabling a rich description of the themes to emerge. Both of these actions provided for concurring and confirming data. Participants for whom the IGI experience might be perceived as negative were sought but were unable to be found. Confirmability was addressed through the use of an audit trail: Raw data, coding, categorizing, subcategorizing, thematic synthesis, and relationship structuring, as well as process notes, were documented and are available for reanalysis. Numerous examples of the raw data are included in the description of the findings, allowing readers to observe for congruence between the investigator's interpretations and the material from which they were drawn.

RESULTS

Sample

The 10 participants' ages ranged from 29 to 57 years, the average length for each IGI session they had had was 1 hour, and the total number of IGI sessions per participant ranged from three sessions to every 2 weeks for 9 years. Participants described wanting to use IGI for a variety of purposes: personal growth and clarity or help with anxiety, depression, or stress in general or related to bodily concerns such as back pain, chronic illness, or pregnancy complications (see Table 1). Study participants were clients of one of three IGI practitioners. All practitioners were female, registered professional nurses; were certified in IGI by the AGI for more than 5 years; and had private practices offering IGI to clients. Two were from the West Coast, and one was from the Midwest.

Description of the IGI Experience

The final description of the experience of IGI is composed of six primary themes: the client's lived experience, the use of a nonordinary state of consciousness, the guide, the guide-client relationship, influencing factors, and the outcomes of IGI use. Each theme is described below, with samples of raw data that contributed to the development of that theme. For each theme, each excerpt from raw data is from a different participant. Figure 1 presents the conceptual model of the IGI experience developed from the themes and their relationships to each other.

The Client's Lived Experience

The most central theme to emerge was the client's lived experience during imagery. This aspect was overwhelmingly clear: Clients using IGI do not have something done to them; they live an experience. IGI is not focused on talking about an issue or listening to someone else talk about it; it is not about thinking in a logical, analytical, linear way. It is an experience that occurs as the client interacts with images. That is, the client is not simply observing his or her images but interacting with them. For example, in the imagery, rather than the client visualizing himself or herself standing in a scene looking at an image of a wise, loving figure, the client is guided into a two-way communica-

TABLE 1
Attributes of the Sample

<i>Client and Practitioner (I, II, or III)</i>	<i>Age</i>	<i>Sex</i>	<i>Reason for Choosing IGI</i>	<i>Goal</i>
PA I	57	Female	Had read about it; discussed it with practitioner	To increase understanding of own internal processes; to learn about relaxation
LA I	29	Female	Practitioner suggested it; "previous therapy had not gotten to my core issues so I was ready"	To "get out of hell, to heal, to come out on the other side"; to find peace
BB II	53	Female	Practitioner suggested it, and it resonated; returned years later for further IGI use situation	To become a stronger person and be able to handle difficult job situation; to help clarify personal issues
EB II	47	Female	Physician suggested it to "deal with chronic illness"	To help with frustration and depression
RB II	44	Female	Practitioner suggested it	To relieve anxiety
MB II	30	Female	Looking for other ways to cope	To help with stress, anxiety, depression; "get some balance back in my life"
BA I	32	Male	Knew about it from graduate school	To gain greater integration of self/personality
JC III	52	Female	Was trained as IGI practitioner	To be more relaxed and accepting; to alleviate fears about upcoming surgery
KC III	46	Female	Knew practitioner personally	To help access greater wisdom; to get greater clarity about self as parent; to help with pregnancy/early uterine contractions
MC III	40	Female	Physician recommended it; "traditional Western medicine was not addressing the emotional aspect of my injury"	To improve situation of hopelessness, overwhelming feeling related to chronic back pain; to feel better emotionally

NOTE: IGI = Interactive Guided Imagery. The letters in the Client column represent the clients' initials. I, II, and III indicate which of the three practitioners each client saw.

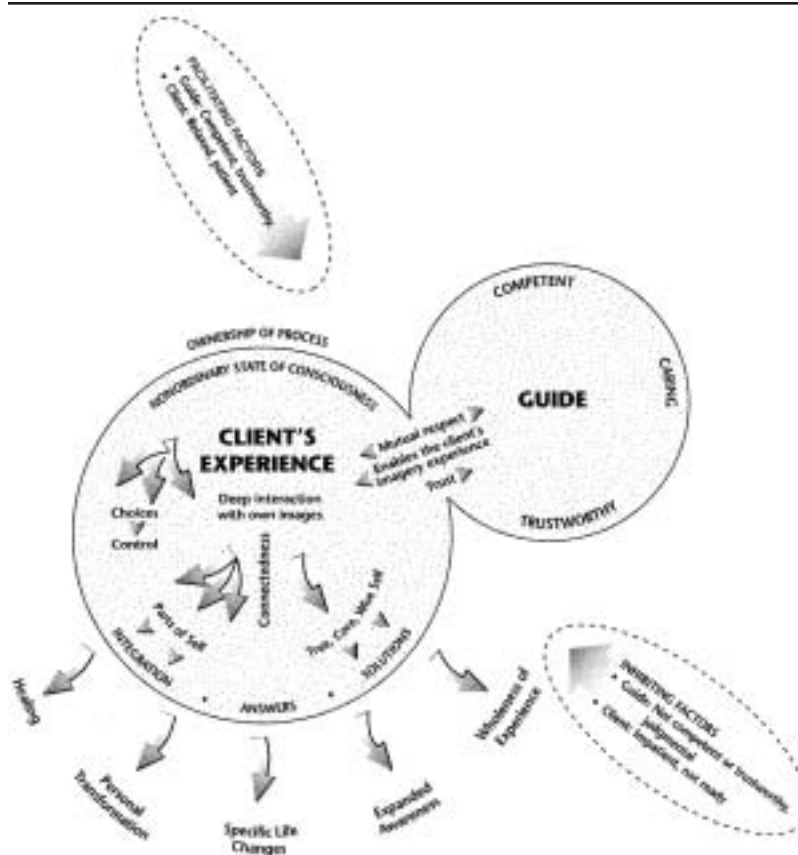


Figure 1: Model of the IGI experience representing themes and their interrelationships.

NOTE: IGI = Interactive Guided Imagery. Clients' imagery experiences are lived and occur with a nonordinary state of consciousness. The IGI guide is essential to this experience and is related to the client through a caring, mutually respectful, and trusting relationship. Clients associate personal transformation, specific life changes, expanded awareness, and healing with their use of IGI and consider the IGI journey as a whole, whereby the means is the end. Facilitating and suspected inhibiting factors can affect the IGI experience.

tion with the wise, loving figure. Or the client's image of his or her symptom as a fiery ball of red flames expresses its feelings to the image of the client, and a dialogue between the symptom and the client

is facilitated. There is ongoing, dynamic interaction within the client's imagery. The imagery is often accompanied by emotions.

IGI is going in to an image to solve a problem rather than problem solving by thinking through it. It is not linear thinking. It was an experience, rather than just thinking about it.
You can feel the images. It's not uncommon to have a very strong feeling like the image is real.
The interaction (with images) made the work more powerful. . . . It seemed to deepen the experience.
This is a way to not just think about it but to really explore it from deep within.

Use of a Nonordinary State of Consciousness

Participants described, in terms of both its purpose and nature, an altered state of awareness that they experienced during their imagery. Assisted by the guide, the client transitions into this nonordinary state of consciousness, the purpose of which is to allow the client to shift from a focus on external stimuli to a focus on internal stimuli. During this heightened awareness of internal reality, the client experiences a level of bodily disengagement but does not lose awareness of his or her external world. It is a very deeply relaxed state but at no time a loss of consciousness. Entering this state was seen as necessary for the IGI experience to fully occur.

Its purpose is to transition from the outside world to inside.
It centers you, connects you more inside, quiets you down.
My body was not all together there, but my mind was not spacey.

The Guide

The guide is essential in enabling the client's IGI experience and has two main roles: (a) provides overall help for the client's imagery journey and (b) assists the client to access and interact with his or her images. To do this effectively, the guide's characteristics must include a genuine human-to-human caring and competence, both of which are needed for the guide to be considered trustworthy. Two important elements of competence are allowing the client to make choices and providing a balance between structure and nonstructure for the client's imagery journey.

Imagery is more effective with a guide. I was calmer. She would keep me focused, lead the path. Doing imagery alone was good but not as effective.

With guided imagery, you wouldn't have the initial help to identify and crystallize the question and goal. With IGI, the guide shines the flashlight when you get stuck.

The guide helps it to unfold. I couldn't have done it alone. The guide makes the environment for profound things to happen.

If she [guide] hadn't interacted, I'd be standing there looking at this woman [the client's image] across the garden. She [guide] would have you connect with the images.

Guided imagery had nowhere near the impact on resolution that IGI has. She would ask me questions that would get me deeper into the experience and made the experience much more vivid and much more truthful.

The guide allows you to call the shots. It is like the guide says, "I will not control what goes on in your mind, and whatever you generate is the important thing."

She felt like a guider, without leading me. It was totally my experience, and she would guide me wherever it was I needed to go.

The Guide-Client Relationship

The relationship between the guide and the client had two prominent characteristics. The client must trust the guide, and mutual respect must develop between the two of them.

You build trust by the guide making sure it was the client's decision at every step, and the RN and client respected each other.

You've got to trust the guide.

Factors Influencing the IGI Experience

Participants described factors that either did or could influence their IGI experiences. Those factors that enhanced the participants' experiences were the competent guide who established trust and rapport and the client being relaxed and patient. Those factors that were speculated to negatively affect the IGI experience were an incompetent, judgmental, or nontrustworthy guide and an impatient client or one who was not in a frame of mind conducive to success.

Facilitating factors: A guide who is patient; her tone of voice, speed of speech, uses your senses, makes a more complete picture, doesn't put the picture in your mind—all result in being more completely there. The guide let the client feel in control of what's happening.

Inhibiting factors: If the practitioner could not get out of the way of the client's own process . . . and had his or her own agenda about the way I needed to process.
If I didn't trust the guide, I think I would edit the things I told her.

Outcomes of the IGI Experience

Participants associated various changes in their lives with their use of IGI. Five patterns of response emerged: major personal transformation, specific life changes, expanded awareness, healing, and the wholeness of the experience. These patterns may overlap; for instance, specific life changes are related to expanded awareness, and healing and major personal transformation share common elements.

Major personal transformation: It changed me 100%.
If you had seen me a year ago—I'm not the same person!
Changes? Positive, in everything from my actual experience on a body level to my mental outlook about my injury. . . . Just night and day difference.

Specific life changes: It made a huge difference physically.
It alleviated a tremendous amount of anxiety for me.
When I would lie down, I would just visualize that same thing—the helpful image—because I had described it in a lot of detail.
I had an image of myself as strong; then the next day I WAS strong.

Expanded awareness: I had been in counseling before in my life and made progress or had insights, but it didn't do what this has done.
It helped me realize I had choices. It opened me up to the possibilities.
Knowing that I have various aspects of myself that when I get into particular situations, these come into play. I have greater awareness of those aspects.

Wholeness of the experience—The journey itself: Whatever my experience was, it is its own thing and I didn't judge it like, "OK, now my back feels fine after that session." It wasn't about that. Even though I was there for chronic back pain, it was about the process of learning, of going in. Just giving myself that space to go inside—that was a gift in itself, and what I did once I was in there was just icing on the cake. It's not about measuring pain on a scale of 1 to 10. We can't measure out the results of IGI and of the healing.
It is a very complete, balanced way of accessing the total being; it uses your right brain and your left brain at the same time, so that it just feels like a total experience.

Healing: It totally changed my whole healing path in the right direction.
The healing I got was one of comfort, trusting myself.
Unequivocally it has to do with healing. You cannot separate a connection, an alignment, intercommunication with the self, from healing.

DISCUSSION

The findings from this study provide support for observations and claims made in clinical reports about the IGI modality and corroborate the results from Farr's (1990) study of an interactive imagery process. The themes are discussed below in relationship to relevant literature.

The finding that clients live their imagery experiences is similar to the finding by Farr (1990), in which participants' images were described as powerfully intense and real. That clients' imagery experiences are real may be related to the depth of clients' interactions with their images. Possible explanations for this depth are related to sensory aspects of the imagery experience, the imagery's three-dimensionality, and the emotions that frequently accompanied the imagery. Whether the typical physical sense modalities are used but are now turned inward, or whether other similar but distinct senses for use in perceiving inner stimuli are used, remains unknown. Out-of-body travelers who can "see" in all directions at once without turning their heads (Talbot, 1991, p. 236) describe their use of nonphysical senses in a similar way. Epstein (1986) claimed that the senses used in imagery are the same senses used to ascertain the external world and that the imagery sensory activity is concrete and the perceptions are real, but they just cannot be validated by others. In addition to, or perhaps because of, the sensory experience during the client's interactions with his or her images, the imagery also is three-dimensional. If images are considered to be holographic (Epstein, 1986; Pribram, 1991), this would make sense. Kosslyn (1996) summarized the considerable evidence that there is bilateral hemispheric image generation (p. 319), and in a study by Biggins, Turetsky, and Fein (1990), no evidence was found for a preferential locus of mental image generation in either hemisphere, both lending support to a holographic nature of images. Persons who experience precognition also describe images as three-dimensional and real, and those who experience near-death describe an incredibly vivid, three-dimensional replay of their entire lives: "It's like climbing right inside a movie of your life" (Talbot, 1991, p. 249). A third element related to the client's interaction with his or her images is the imagery's emotional accompaniment. In the study by Farr, participants also found that their imagery enabled them to quickly discover and explore affective material. Quite possibly, emotions are part of the information stored in the person's holographic record.

The theme describing the use of a nonordinary state of consciousness may be another important clue to the effectiveness of the IGI modality. This state is used for the focusing of clients' attention and senses inward, in turn allowing for full development of the imagery experience. Explanations for the importance of the nonordinary state of consciousness may be associated with its relationship to (a) sense perception, (b) one's perception of his or her body, and (c) time and space dimensions. Spiegel and Spiegel (1978) discussed the possibility that nonordinary states of consciousness allow persons to tap into kinesthetic and sensory modes represented in imagery. In the current study, many participants described feeling dissociated from their bodies, like their bodies were not even there. Similar study findings, in which people who experienced nonordinary states described the feeling that they did not have a body, unless they were thinking, have been reported (Talbot, 1991, p. 247). It may be that when one's consciousness is freed from its dependence on the physical body, access to implicate reality becomes experientially available (Talbot, 1991, p. 229). In Bohm's (1980) worldview, there is a foundational, implicate level of reality in which the totality of existence is enfolded within each region of space and time, and all points of infinity are connected in time and space. Time and space are each indivisible and whole in the implicate order of reality. Perhaps the clients' descriptions of imagery occurring outside of normal time and space dimensions may be related to an explanation that in a nonordinary state of consciousness, one is able to enter the implicate order of reality, a domain in which divisions between past, present, and future cease to exist.

The results of this study also show that the IGI guide is essential. Roles of the guide seen as critical were helping clients (a) move into a nonordinary state of consciousness, (b) access their own images, and (c) interact with those images—three interrelated processes. These aspects support a distinction between GI and IGI. In addition to the roles of the guide in IGI, certain necessary qualities of the guide were described: competence and the ability to develop a genuine human-to-human relationship with the client. This finding supports the work of nursing theorists for whom the emphasis on the human-to-human relationship is paramount. For Travelbee (1971), the relationship between the nurse and the patient is a human-to-human relationship and is established when the nurse and the recipient of his or her care have attained a rapport, and Watson (1988) emphasized the human-to-human care transaction between the nurse and the person. In a study by Carey and Burish (1987), imagery and relaxation

administered by trained professionals (one nurse, four psychologists) reduced emotional distress and physiological arousal in persons undergoing chemotherapy more than imagery and relaxation administered by trained volunteers and by audiotapes.

There were five categories of changes that clients associated with their use of IGI. One of the changes, described by 6 of the study participants, was that of major personal transformation. Wade (1998) defined personal transformation as a "dynamic, uniquely individualized process of expanding consciousness whereby individuals become critically aware of old and new self-views and choose to integrate these views into a new self-definition" (p. 713). Several explanations may be offered for this finding. It may be related to the new insights or new view that clients were afforded as a result of their imagery. It may be that the IGI experience itself, the journey, is transformative. Perhaps the deep imagery interaction in the context of the nonordinary state of consciousness is unlike anything else individuals have experienced. It may be that accessing the implicate order of reality is a transforming experience. Perhaps transformation occurs when the client connects with his or her core, authentic self or experiences the connectedness with and among all parts of self. Using the whole self, experiencing the self as whole, may be so novel and profound as to be life altering. A second outcome of IGI was a group of specific life changes, related to either the specific purpose for which IGI had been used or a particular area of their lives. One explanation for the increased self-confidence, the decreased anxiety, or the improvement in coping, for example, might be related to the feeling of personal control participants described as associated with their IGI use. Another important result of IGI was the expanded awareness of answers, possibilities, or solutions that participants gained. The client's nonordinary state of consciousness may contribute to allowing this information to be brought into awareness. This heightened awareness may also be associated with the holographic nature of images, imagery's relationship to time and space, implicate reality, and the depth of interactivity between guide and client and between client and his or her images. Healing was another result of IGI use that emerged. Grof (1997) suggested that nonordinary states of consciousness allow or are even necessary for healing to occur in a way that is not possible in the typical awake state. It may be that the thinking brain actually gets in the way of healing (Weil, 1997). The word *heal* is derived from a word meaning whole and healthy, and because an image is a representation of the whole person, imagery can be linked

at least etymologically to healing. Epstein (1986, p. 27) stated that the image is, in fact, the appearance in a human being of his or her movement toward wholeness, the mental counterpart of what happens in physical healing. Finally, there is something about the experience itself, about the process of having and living the IGI experience, regardless of what happens in terms of content, that is key and meaningful. That is to say, it is experiencing the journey of IGI, rather than an outcome at the end, that accounts for its usefulness. Because the IGI experience is real; because the client accesses and experiences himself or herself as whole, acknowledging and using all parts of self; and therefore has a more balanced and integrated experience of self; and because the client experiences himself or herself in relationship to the wholeness of the implicate order of reality, it makes sense that the IGI experience is an experience of wholeness! The whole is greater than the sum of the parts, and taking apart the pieces diminishes it. When we look at or are aware of only fragmented pieces of ourselves or lives or experiences or feelings, as we often are, there is a tendency to feel broken or divided rather than whole; if imagery occurs holographically, then it is a whole brain experience, not a fragmented brain experience.

IMPLICATIONS

The description of the IGI experience for clients has significant implications for nursing knowledge development. As a seminal study, its results provide a broad landscape for extensive research.

First, the experience of IGI may be different for individuals from various cultures, age groups, or settings. For instance, future research should address the IGI experiences of children, the elderly, people who are hospitalized or seriously ill, couples, and clients for whom the IGI experience did not seem helpful. Persons with a particular issue or health concern, or those who have used IGI in combination with other specific modalities, should be studied.

The second implication is the further development of the IGI conceptual model through exploration of each of the themes identified here. Consideration should be given to the following areas: the meaning of the lived experience of IGI; the role of the nonordinary state of consciousness in healing; the relationships among expanded awareness, the nonordinary state of consciousness, and imagery; the relationships among power or empowerment, healing, imagery,

expanded awareness, and the nonordinary state of consciousness; the IGI guide's acquisition of essential characteristics; and the nature and role of the nurse's presence. Conceptual analyses of access to core self, expanded awareness, power, wholeness, and connectedness are all recommended. Relational statements among the primary themes should be clarified and, eventually, an IGI theory be proposed and tested.

Finally, theories and concepts related to IGI should be studied for their roles in the emerging IGI theory. Studies of the holographic nature of images, imagery as access to the implicate order of reality, and the role of imagery in information processing are each recommended to help illuminate how imagery in the IGI experience works. In addition, because the yin yang theory (a) is nonlinear; (b) focuses on understanding pattern, relationship, and change; (c) considers the individual's entire phenomenal field; and (d) emphasizes the concepts of the whole being in the part and each part being in the whole, this theory's relationship to IGI is another recommended investigation.

APPENDIX A

Nursing Studies of Guided Imagery

- Abraham & Reel (1992)
- Achterberg, Kenner, & Lawlis (1988)
- Bachman (1990)
- Broome, Lillis, McGahee, & Bates (1992)
- Bucher (1993)
- Butcher & Parker (1988)
- Collins & Rice (1997)
- Daake & Gueldner (1989)
- Donovan (1981)
- Frank (1985)
- Geden, Lower, Beattie, & Beck (1989)
- Groer & Ohnesorge (1993)
- Holden-Lund (1988)
- Houldin, McCorkle, & Lowery (1993)
- King (1988)
- Lambert (1996)
- Leja (1989)
- Moody, Fraser, & Yarandi (1993)
- Pederson (1995)
- Rees (1993, 1995)
- Sloman (1995)

Smith (1982)
 Speck (1990)
 Spiegel & Spiegel (1978)
 Stephens (1992)
 Swinford (1987)
 Thompson & Coppens (1994)
 Troesch, Rodehaver, Delaney, & Yanes (1993)
 Vines (1994)

APPENDIX B

Interview Guide

1. Describe the IGI process: How did each session go?
 2. Describe your thoughts and feelings about the relaxation part, before your actual imagery began.
 3. Is there anything that seemed to make IGI better or more effective for you? Is there anything that seemed to inhibit it or make it less effective?
 4. Describe what the relationship is like between the one who is guiding you and yourself.
 5. Have you experienced any personal changes, for example, in your health or healing, that you associate with your participation in IGI?
 6. Is there anything else you would like to say about your experience of using IGI that I have not asked about?
-

NOTE: IGI = Interactive Guided Imagery.

REFERENCES

- Abraham, I. L., & Reel, S. J. (1992). Cognitive nursing interventions with long-term care residents: Effects on neurocognitive dimensions. *Archives of Psychiatric Nursing*, 6, 356-365.
- Achterberg, J., Kenner, C., & Lawlis, G. F. (1988). Severe burn injury: A comparison of relaxation, imagery and biofeedback for pain management. *Journal of Mental Imagery*, 12(1), 71-88.
- Bachman, K. (1990). Using mental imagery to practice a specific psychomotor skill. *Journal of Continuing Education in Nursing*, 21, 125-128.
- Barrett, E. A. (1992). Innovative imagery: A health-patterning modality for nursing practice. *Journal of Holistic Nursing*, 10(2), 154-165.
- Biggins, C. H., Turetsky, B., & Fein, G. (1990). The cerebral laterality of mental image generation in normal subjects. *Psychophysiology*, 27, 57-67.
- Bohm, D. (1980). *Wholeness and the implicate order*. London: Routledge Kegan Paul.

- Broome, M. E., Lillis, P. P., McGahee, T. W., & Bates, T. (1992). The use of distraction and imagery with children during painful procedures. *Oncology Nursing Forum*, 19, 499-502.
- Bucher, L. (1993). The effects of imagery abilities and mental rehearsal on learning a nursing skill. *Journal of Nursing Education*, 32, 319-324.
- Butcher, H. K., & Parker, N. I. (1988). Guided imagery within Rogers' science of unitary human beings: An experimental study. *Nursing Science Quarterly*, 1, 103-110.
- Carey, M. P., & Burish, T. G. (1987). Providing a relaxation training to cancer chemotherapy patients: A comparison of three delivery techniques. *Journal of Consulting and Clinical Psychology*, 55(5), 732-737.
- Collins, J. A., & Rice, V. H. (1997). Effects of relaxation intervention in Phase II cardiac rehabilitation: Replication and extension. *Heart & Lung*, 26(1), 31-44.
- Crabtree, B., & Miller, W. L. (Eds.). (1992). *Doing qualitative research*. Newbury Park, CA: Sage.
- Daake, D. R., & Gueldner, S. H. (1989). Imagery instruction and the control of postsurgical pain. *Applied Nursing Research*, 2, 114-120.
- Deisch, P., Soukup, S., Adams, P., & Wild, M. (2000). Guided imagery: Replication study using coronary artery bypass graft patients. *Nursing Clinics of North America*, 35(2), 417-425.
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Donovan, M. I. (1981, April). Study of the impact of relaxation with guided imagery on stress among cancer nurses. *Cancer Nursing*, pp. 121-126.
- Dossey, B. M., Keegan, L., Guzzetta, C. E., & Kolkmeier, L. G. (1995). *Holistic nursing: A handbook for practice* (2nd ed.). Gaithersburg, MD: Aspen.
- Epstein, G. (1986). The image in medicine: Notes of a clinician. *Advances*, 3(1), 22-31.
- Farr, C. (1990). A study of the guided imagery process: Awareness and the discovery of personal meaning. *Canadian Journal of Counselling*, pp. 15-22.
- Frank, J. M. (1985). The effects of music therapy and guided visual imagery on chemotherapy induced nausea and vomiting. *Oncology Nursing Forum*, 12, 47-52.
- Geden, E. A., Lower, M., Beattie, S., & Beck, N. (1989). Effects of music and imagery on self-report of analogued labor pain. *Nursing Research*, 38(1), 37-41.
- Griffin, M. (1986, July). The mind's eye. *American Journal of Nursing*, pp. 805-806.
- Groer, M., & Ohnesorge, C. (1993). Menstrual-cycle lengthening and reduction in premenstrual distress through guided imagery. *Journal of Holistic Nursing*, 11, 286-294.
- Grof, S. (Speaker). (1997). *The healing potential of non-ordinary states of consciousness* (Cassette Recording No. 021). Berkeley, CA: New Medicine Tapes.

- Holden-Lund, C. (1988). Effects of relaxation with guided imagery on surgical stress and wound healing. *Research in Nursing & Health, 11*, 235-244.
- Houldin, A. D., McCorkle, R., & Lowery, B. J. (1993). Relaxation training and psychoimmunological status of bereaved spouses. *Cancer Nursing, 16*(1), 47-52.
- King, J. V. (1988). A holistic technique to lower anxiety: Relaxation with guided imagery. *Journal of Holistic Nursing, 6*, 16-20.
- Kosslyn, S. M. (1996). *Image and brain: The resolution of the imagery debate*. Cambridge, MA: MIT Press.
- Lambert, S. A. (1996). The effects of hypnosis/guided imagery on the postoperative course of children. *Developmental and Behavioral Pediatrics, 17*(5), 307-310.
- Leja, A. N. (1989). Using guided imagery to combat postsurgical depression. *Journal of Gerontological Nursing, 15*, 7-11.
- McCaffrey, M. (1979). *Nursing management of the patient with pain*. Philadelphia: J. B. Lippincott.
- McKinney, C. H., Antoni, M. H., Kumar, M., Tims, F. C., & McCabe, P. M. (1997). Effects of guided imagery and music (GIM) therapy on mood and cortisol in healthy adults. *Health Psychology, 16*(4), 390-400.
- Moody, L., Fraser, M., & Yarandi, H. (1993). Effects of guided imagery in patients with chronic bronchitis and emphysema. *Clinical Nursing Research, 2*(4), 478-486.
- Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, CA: Sage.
- Pederson, C. (1995). Effect of imagery on children's pain and anxiety during cardiac catheterization. *Issues in Comprehensive Pediatric Nursing, 18*(2), 91-109.
- Pribram, K. H. (1991). *Brain and perception: Holonomy and structure in figural processing*. Hillsdale, NJ: Lawrence Erlbaum.
- Rancour, P. (1991). Guided imagery: Healing when curing is out of the question. *Perspectives in Psychiatric Care, 27*, 30-33.
- Rancour, P. (1994). Interactive guided imagery with oncology patients. *Journal of Holistic Nursing, 12*(2), 148-154.
- Rees, B. L. (1993). An exploratory study of the effectiveness of a relaxation with guided imagery protocol. *Journal of Holistic Nursing, 11*(3), 271-276.
- Rees, B. L. (1995). Effect of relaxation with guided imagery on anxiety, depression, and self-esteem in primiparas. *Journal of Holistic Nursing, 13*(3), 255-267.
- Rider, M. S., Achterberg, J., Lawlis, G. F., Goven, A., Toledo, R., & Butler, J. R. (1990). Effect of immune system imagery on secretory IgA. *Biofeedback and Self-Regulation, 15*(4), 317-333.
- Sloman, R. (1995). Relaxation and the relief of cancer pain. *Nursing Clinics of North America, 30*(4), 697-709.

- Smith, D. (1982). Guided imagination as an intervention in hopelessness. *Journal of Psychiatric Nursing Mental Health Services*, 20, 29-32.
- Speck, B. J. (1990). The effect of guided imagery upon first semester nursing students performing their first injections. *Journal of Nursing Education*, 31(7), 314-320.
- Spiegel, H., & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. Washington, DC: American Psychiatric Press.
- Stephens, R. L. (1992). Imagery: A strategic intervention to empower clients, Part I—Review of research literature. *Clinical Nurse Specialist*, 7(4), 170-174.
- Swinford, P. (1987). Relaxation and positive imagery for the surgical patient: A research study. *Perioperative Nursing Quarterly*, 3, 9-16.
- Talbot, M. (1991). *The holographic universe*. New York: HarperCollins.
- Thompson, M. B., & Coppens, N. M. (1994). The effects of guided imagery on anxiety levels and movement of clients undergoing magnetic resonance imaging. *Holistic Nursing Practice*, 8, 59-69.
- Travelbee, J. (1971). *Interpersonal aspects of nursing* (2nd ed.). Philadelphia: F. A. Davis.
- Troesch, L. M., Rodehaver, C. B., Delaney, E. A., & Yanes, B. (1993). The influence of guided imagery on chemotherapy-induced nausea and vomiting. *Oncology Nursing Forum*, 20(8), 1179-1185.
- Tusek, D. L., Cwynar, R., & Cosgrove, D. M. (1999, March/April). Effect of guided imagery on length of stay, pain and anxiety in cardiac surgery patients. *Journal of Cardiovascular Management*, pp. 22-28.
- Vines, S. W. (1994). Relaxation with guided imagery. *American Association of Occupational Health Nurses Journal*, 42(5), 206-213.
- Wade, G. H. (1998). A concept analysis of personal transformation. *Journal of Advanced Nursing*, 28(4), 713-719.
- Watson, J. (1988). *Nursing: Human science and human care*. New York: NLN.
- Weil, A. (1995). *Spontaneous healing*. New York: Knopf.
- Weil, A. (1997). *Eight weeks to optimal health*. New York: Knopf.
- Zachariae, R., Kristensen, J. S., Hokland, P., Ellegaard, J., Metze, E., & Hokland, M. (1990). Effect of psychological intervention in the form of relaxation and guided imagery on cellular immune function in normal healthy subjects: An overview. *Psychotherapeutic Psychosomatics*, 54, 32-39.

Judie A. Heinschel, Ph.D., R.N., C.C.R.N., is an assistant professor of clinical medicine at the University of Illinois College of Medicine at Rockford. She also teaches nursing theory and research in the College of Nursing graduate school. She is interested in further developing an Interactive Guided Imagery model and invites readers to respond to her at 1601 Parkview Ave., Rockford, IL 61107. Recent presentations include Guided Imagery and Interactive Guided Imagery Use, presented at the SwedishAmerican Center for Complementary Medicine (2002), and The Use of Guided Imagery, presented at the University of Illinois Family Practice Residents' continuing education conference series (2000).