Healing Factors in Guided Affective Imagery:

A Qualitative Meta-Analysis

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Abstract

This qualitative meta-analysis compares and contrasts European and American approaches to Guided Affective Imagery (GAI). From a comparative review of literature of the European and American approaches, it is observed that there are noteworthy differences in how GAI is understood in theory and applied in practice. In the United States, GAI is not perceived as a method of deep psychotherapeutic intervention for neurotic disorders by most practitioners. In Europe, GAI is one of the more prevalent intervention techniques that has been reported to be effective in many disorders. Secondly, this meta-analysis seeks to identify the essential healing elements of GAI as they are implemented in psychotherapy. Twelve factors are identified from the literature. Of fundamental clinical importance is the activation of a patient’s “resources,” the positive characteristics of an individual that can be accessed to reinforce the patient’s ability to deal with a past traumatic experience. GAI provides the imagery context by which the patient may re-experience the trauma. The therapist assists by encouraging the patient to repeatedly utilize internal resources to confront the fearful event. Lasting relief may be conceptualized as repeated resource activation leading to a biochemically-induced remapping at synaptic sites away from the limbic-centered, emotion-based neural path associated with the traumatic event toward the prefrontal cortex-centered, cognitive-based path of appropriate behavior.
Dedication

To Ronald
Acknowledgements

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Symbolic Portrayal of the Enemy Within One’s Self

Paul Klee's imagery of a catbird and the cat. The bird, his prey, is on the forehead of the cat. A genetically anchored picture of the enemy within itself. (From G. Tuschy’s “Die heilsame Kraft innerer Bilder und ihre Verwendung in der Psychotherapie-Die Einbeziehung von Wachtraumtechniken in die analytische und tiefenpsychologisch fundierte Psychotherapie” [The healing powers of inner vision and its use in psychotherapy - The use of imaginative techniques in psychoanalytic and analytically orientated psychotherapy], Göttingen, 2007).
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Chapter One: Introduction

Topic Overview and Historical Context

The Project Demonstrating Excellence that I have undertaken is a qualitative meta-analysis comparing and contrasting American and European literature in GAI and highlighting how the American and European approaches to healing imagery reflect the differences or similarities found in this study. The work is a review of the literature with a clear contribution along the lines of comparative analysis. Hanscarl Leuner of the Georg-August University in Göttingen, West Germany conceived Guided-Affective Imagery in 1948. He developed a procedure which assumed that significant psychodynamic processes are manifested in imagery (Leuner, 1969). This formulated procedure incorporated imaginal processes into psychotherapeutic sessions, intending to use guided imagery to accelerate the treatment of psychological and psychosomatic disorders.

Although significantly influenced by the psychoanalytic approach, he and Freud differed on the issue of transference with clients. Leuner stated that the client’s own imagery is so intense and vital to the understanding of him/herself that the phenomenon of transference can be largely circumvented. He explained how the in vivo process of dealing on a here-and-now level with issues decreases the need to deal with the therapist in that psychological arena. He felt that this was one of the reasons GAI takes less time to progress towards integration than classical psychoanalysis (Leuner, 1969).

Therapeutic benefits originate from the use of imagery symbols in a dramatic development of experiences called Symboldrama (Leuner, 1970). The kleine
Psychotherapie (brief psychotherapy) was shown to relieve some acute neurotic disturbances in a short time.

Many noted people have incorporated the use of imagery in their basic techniques. Robert R. Holt (1964) pointed out that the study of imagery is a relatively recent phenomenon. According to his findings, prior to World War I, introspective study had a respectable place within the higher echelon of psychological circles. However, with what Hebb (1960) has called the coming of the American Revolution, this emphasis was quickly changed. Abandoning the introspective and subjective, psychology rapidly adopted the scientifically objective modality.

J. B. Watson, the founder of behaviorism, declared in 1914, “… it is possible to write a psychology, to define it … as the science of behavior, and never to go back on the definition: never to use the terms consciousness, mental states, mind, content, imagery, and the like …” to describe behavior (Woodworth & Sheehan, 1964, p. 112).

Although many European schools maintained their work in imagery and the like, American positivists scoffed at the soft methodology represented by the introspective approach. The range of perspectives especially in US psychology departments, including those that predominantly have a behaviorally-oriented philosophy, are likely to give little credence to the imagery techniques involved in GAI. And yet, our current and ever-expanding systems of psychotherapy lend themselves to the assimilation of both the subjective and objective nature of self-growth and change (Wächtel, 1977). Involvement and research into GAI are important if we as clinicians are to have a broad spectrum of therapeutic information and tools from which to draw when working with clients. GAI is
uniquely different from the more well-known methods in psychotherapy and often can significantly impact the efficacy of the therapeutic process.

**Personal Connection with GAI**

My personal connection with GAI began during my master’s studies when I signed up for a seminar on *Motivation and Fantasy* facilitated by William A. Richards, PhD, a former research assistant for the founder of GAI, Hanscarl Leuner, MD in Germany. The significance of what I experienced during my own imagery sessions, as well as those of my classmates, was transforming. Upon further study and later conducting workshops for psychological associations and facilitating therapeutic imagery sessions with clients, it was apparent that I wanted to engage in a more in-depth examination of the topic.

**Importance of Research Regarding GAI**

Frequently when I mention to colleagues my interest in GAI, it is usually met with intrigue and wonderment. I have encountered few professionals who have heard of the term. Many articles in the literature deal with imagery techniques; however, there are few exploring the use of GAI. In reviewing the American and European literature on the topic, it was interesting to note that therapists on those two continents rarely cite the other’s work.

Not sharing in each other’s work only adds to the isolation we may experience as we proceed with a technique that can have significant efficacy in therapeutic treatment. By shedding light on our differences and similarities we can benefit from the knowledge and insights gained, share in the failures from which we learned, and enable our work in GAI to flourish.
Research Objective

Through this dialogue of scholars and practitioners new avenues of intervention can be forged with the hope that more clients will be given the opportunity to experience their own psyche at work in the resolution of psychological and psychosomatic disorders. The topic of GAI has had limited exposure in the therapeutic literature and practice of psychotherapy. It is time to collaborate and thoroughly research the practice of GAI. I therefore have compared and contrasted European and American literature on the topic of GAI in hopes of prompting such a dialogue.

Glossary of Terms Pertinent to the Current Study

Throughout this dissertation, the German terms Katathyme Bilderleben (KB) and Katathyme Imaginative Psychotherapie (KIP) will be used synonymously with the English equivalent terminology: Guided Affective Imagery (GAI).

Active introjection is a technique to treat deeply disturbed clients with therapeutic-imagining while they simultaneously remain in dialogue with the therapist. At critical points in the imagery where the client needs support, the therapist brings himself into the picture (Zindel, 1996).

Catamnesis is the follow-up survey and/or therapy of a patient after terminating therapy.

Conflict refers to “a mental struggle that arises from the simultaneous operation of opposing impulses, drives, external (environmental), or internal demands. Termed intrapsychic when the conflict is between forces within the personality; extrapsychic, when it is between the self and the environment” (American Psychiatric Glossary, 1988, p. 38). These are often called core conflicts,
frequently arising from dynamics experienced at an early developmental age and often are unconscious. GAI can identify and assist with **conflict clarification** and processing at the symbolic level (Bahrke, 1999). **Core conflict transformation** occurs when these core issues have been made conscious and can be processed for resolution.

**Contextualization** refers to the fixed nature of the symbolic interpretation within the therapeutic context. This occurs differently in the explicit and implicit memory. That is, the unconscious aspect of the explicit memory has a conceptual form, it unfolds as a symbol, and has the ability of linguistic expression with symbolic saturation. The contents of memory are explicit in its episodic structure which is the basis for the autobiographical memory (Dieter, 2006). The content of implicit memory, and thus the basis of most of unconscious processes, can only be activated and reactivated procedurally (Grawe, 1998). Since the implicit memory is a re-recognition memory, it is bound by external triggers and therefore needs a new external stimulation to transform the stored data so that the memory is accessible. This external stimulation Grawe (2007) called procedural activation. Koukkou, a psychoanalytic dream researcher, and Lehmann, a neuroscientist, (1998) were able to use their “state-change model” of the brain to show that memories of the past are **heavily dependent on whether the brain at the time of remembering was in the same EEG state that it was at the time of the initial experience**. The neurobiological basis of memory with the similarity of EEG patterns of the brain at the time of experiencing (i.e., the time the memory was formed) (Koukkou & Lehmann, 1998), is the framework of the current thinking
of the psychotherapeutic process of context (Salvisberg, 2005) where the **environmental factors must be similar in both the encoding and retrieval processes.** These procedural and contextual activation dependence factors are recognizable as effective factors in the therapeutic process in the KIP. Salvisberg (2000, 2005) points out that the primary process reflecting the holistic, thinking of a little child is available even to the adult. It only needs to be supported to lead to the implicit context of the past. The starting point of the motif reveals the contextual factors: things, people, plants, landscapes, impressions of the senses, body, feelings, emotions, moods. The primary process does its work by mobilizing these contents and through symbolization, displacement, and condensation meaningfully arranges them. They are then available in KIP through the therapeutic dialogue (Dieter, 2006).

**Coping** mechanisms are “ways of adjusting to environmental stress without altering one’s goals or purposes, including both conscious and unconscious mechanisms” (American Psychiatric Glossary, 1988, p. 41). **Coping and mastering** refer to techniques implemented in order to facilitate the learning of new coping strategies (Grawe, 2007). Coping experiences contribute to an improvement in the client’s disorder because they mitigate conditions that maintain the disease (e.g., avoidance behavior) and enhance improvement of the disorder (Grawe, 1999).

**Countertransference** is the therapist’s “partly unconscious or conscious emotional reactions to the patient” (American Psychiatric Glossary, 1988, p. 42).
Explicit (conscious) means that the catathymic imagination formed in the representation (symbolically presented) can be processed by the conventional method in the therapeutic process. Implicit (unconscious) means that the missing symbolization dimensions are revealed through the intrapsychic dimension of imagery (Dieter, 2006). They are also related to a neurobiological substrate, namely, the explicit and implicit memory (Kohler 1998). Explicit memory is understood to be localized in the neocortex and cerebral cortex. Implicit memory; however, is understood to be in the limbic system which is associated with a much older part of the brain. Explicit memory is a declarative, episodic structure and contains primarily factual information. It is linguistically and pictorially coded, and the contents can be retrieved or recalled consciously. It is also where some unconscious episodic experiences are stored, which are basically becoming conscious. Implicit memory is non-declarative, procedural, not episodically structured and includes primarily affective knowledge, emotional rules, and the unconscious knowledge of the acquisition of skills (speaking, walking, etc.). It is not linguistically encoded and not metaphorical, but involves the sensorimotor aspects and has verbal interaction in the form of imagery (Stern, 1985).

Guided Affective Imagery was founded as a psychotherapeutic intervention in 1954 under the hallmark work of Hanscarl Leuner in Göttingen, Germany. GAI is more than a therapeutic procedure. It provides a system of differentiated methods and directing principles for handling the mental imagery in psychotherapy. Unlike other forms of therapy used in mental imagery, it is a regular therapeutic system that focuses on the subconscious component of mental health problems
(Singer, 1974). At the same time, it can allow the patient maximum freedom of individuality and creative unfolding of the imagination. This allows a high degree of adaptation for the personality of the patient, the therapist, and the therapeutic task (Leuner, 1969).

**Healing** is a process which brings about an improved state of mental or physical health.

**Health** is a condition of mental or physical well-being.

**Implicit.** See Explicit.

**Incongruence** is a discrepancy between perceived reality (perceptions and experiences) and the motivational goals of a person. These objectives are directly linked to their intentional schemas, whose purpose it is to organize the mental activity of a human being and give it structure (Grawe, 1998). These intentional schemas are developed early in life and serve to meet the basic needs of a person: control and orientation, retention and access, increase self-esteem and self-protection, and pleasure or pain avoidance. Incongruence implies a failure to address and the neglect of important current needs (Grawe, 2007).

**Neurological change** or **remapping** as it relates to synaptic transmission refers to how the therapeutic intervention affects new neural pathways--neural activation patterns--in a way that leads to self-sustaining (biochemical transformation, alteration) improvement. A **neurological change** occurs when a communication pathway alters and new patterns of interaction are formed (Grawe. 2007).

**Neuronal network** systems communicate information to an organism about the environment and one’s self.
**Post processing** is the *secondary processing* of the GAI sessions where verbal interpretation and analysis occur between the therapist and patient.

**Primary process** is “the generally unorganized mental activity characteristic of the unconscious” (American Psychiatric Glossary, 1988, p.130). The primary process deals with the emotional world, is inwardly directed, and becomes involved with one’s inner experience and how it unfolds (Noy, 1969). The primary process functions entirely in the service of the self and, as a result, it monitors the consistency and continuity of the inner identity and ensures sustainable processing and integration of experiences (Stigler, 2005). Primary process is related to emotions and the unconscious. In Freudian theory, it is subject to the fulfillment of wishes, the governing principle of pleasure, and is therefore, primitive, chaotic, regressive, and not logical (Uhrová, 2004).

**Problem activation** refers to addressing the patient’s reason for seeking therapy. Although actively discussing the presenting problem is essential for clarification of the patient’s situation, spending too much time on this aspect in therapy can have a negative effect on the therapeutic process and the therapeutic alliance. In contrast, resource activation often has a decidedly positive effect on therapy outcome (Grawe, 2007).

**Problem clarification** process ensures that the patient gains greater understanding of him/herself in relation to the presenting problem (Grawe, 1999).

**Procedural activation** means that the emotional experience in the present (i.e., in the therapeutic process) comes from old emotional patterns and thus implicitly activates memories (Salvisberg, 2005; Grawe, 2007).
Qualitative meta-analysis was first used by Stern and Harris in 1985 in “reference to the synthesis of a group of qualitative research findings into one explanatory theory, model, or description” (Paterson, 2001, p. 2). According to Hall (1997) meta-analysis links theories and equivalents by showing logical relationships. Noblit and Hare (1988) refer to meta-analysis as the synthesizing of data. The metaanalytic researcher, rather than using statistical analysis, draws upon the descriptive, contextual material to analyze and interpret the findings of each of the studies (DeWitt-Brinks & Rhodes, 1992). Sandelowski and Barroso (2007) point out that this process allows qualitative research studies to move from being isolated islands (Paterson, Thorne, Canam, & Jillings, 2001) of data to an amalgam of knowledge about specific phenomena under investigation.

Resource activation is a pervasive change mechanism which influences the whole of the therapeutic process. It corresponds more to an attitude of the therapist rather than to a therapeutic technique. Resource activation is a therapeutic activity whose goal is “to utilize and positively emphasize pre-existing resources, characteristics, and abilities of the patient” (Grawe, 2007, p. 369).

Secondary process relates to verbalized conscious elements and is arranged according to the principle of reality and logic (Uhrová, 2004). The secondary process is permeated by the language of thought, whose structures include concepts and linguistic signs (Soldt, 2004). The secondary process relates to rational thinking, clear decisions, and planned actions. Thus, the secondary process provides for the acute management of current events and recently experienced emotions.
Secondary process is connected to abstraction, social behavior, time, moral imperatives, order, and restraint (Stigler & Pokorny, 2001).

**Somatic change** refers to any alteration in the patient’s physical condition (i.e. heart rate, dermatological conditions, blood pressure, etc.).

**Symbol** is “a general mechanism in all human thinking by which some mental representation comes to stand for some other thing, class of things, or attribute of something. This mechanism underlies dream formation and some symptoms. The link between the latent meaning of the symptom and the symbol is usually unconscious” (American Psychiatric Glossary, 1988, p. 163). Symbols and symbolic figures are meant to be illustrative and serve to better understand the meaning of psychic contents that spontaneously emerge from the unconscious (Hälg, 1980).

**Symbolic interpretation and processing** is a key component of GAI. The GAI processing allows the symbolic representations to be interpreted and new patterns of thinking and feeling to occur (Grawe, 1994).

**Transference** is “the unconscious assignment to others of feelings and attitudes that were originally associated with important figures (parents, siblings, etc.) in one’s early life” (American Psychiatric Glossary, 1988, p. 168). In GAI, the transference is frequently manifested within the GAI sessions.
Chapter Two: Literature Review

Introduction

There are numerous approaches to the field of psychodynamic therapeutic imagery. In my qualitative meta-analysis, I examine literature that utilizes a technique called GAI. Appendix C. will highlight, in detail, the quantitative effectiveness studies showing the efficacy of the GAI method. The publications and research in this field are limited. Therefore, a brief overview of some significant contributions of other European approaches in the field of imagery will be cited as a contrast, to the therapeutic model discussed in this dissertation. The subheadings will include:

- Sigmund Freud
- Carl G. Jung
- Roberto Assagioli
- J.H. Schultz
- Robert Desoille
- Akhter Ahsen
- Frétigny and Virel
- Hanscarl Leuner
- Current Work in GAI
  a. Current American Literature in GAI
  b. Current European Literature in GAI
  c. Literature Review Integration
  d. Research Question
Several sources were found to be helpful in the search for the available literature:
a) The libraries of George Washington University, Georgetown University, Harvard
University Medical School, George Mason University, The Carl G. Jung Institut-Zürich,
and the United States Library of Congress; and b) The databases of ProQuest,
PsycARTICLES and PsycINFO.

**Sigmund Freud**

A classic example of the use of imagery in psychotherapy is illustrated in the case
of Anna O. in *Studies on Hysteria* by Breuer and Freud in 1895 (1955). Both men
alleged that, in catharses, where memories are revisited, the visual imagery is very
intense (Watkins, 1976).

Freud theorized that a client's unconscious fantasy became the basis for thought
and action. Through the use of hypnosis, he encouraged such fantasy to help facilitate
the re-experiencing of what he hypothesized to be repressed and traumatic events.

In 1892, Freud used his concentration technique for the first time as an alternative
to hypnotism. This involved pressing his hand on the client's forehead and suggesting
that when his hand was removed, a thought or a visual memory would form, one
associated with details and feelings he wanted the person to express. Acquiring
confidence in this free flow of images, he found that there was less need for him to direct
or otherwise influence the client's visions (Watkins, 1976).

Although it was Freud’s work and writings on dream interpretation that stands as
a hallmark of more advanced research, after 1900 he changed his emphasis to free
association. He regarded dream imagery as a blockage to the essential components in the
psychotherapeutic process (transference and resistances). Until that time, Carl Jung and
he were close friends and colleagues. However, the Freudian approach of free
association strongly opposed the Jungian school of thought that permitted the creative
imagery process and allowed for the possibility of profound self-understanding and
growth (Jordan, 1979).

**Carl G. Jung**

After severing ties with Freud, Jung encouraged a more open approach toward the
idea of the unconscious. Between 1912 and 1917, Jung allowed his unconscious to freely
flow and his conscious mind to record such experiences as the spontaneous painting of
mandalas and the conversing with imaginary characters. This, as M. Watkins writes,
became his *rite d'entrée* to the unconscious. As an outcome of these experiences, Jung
created his thoughts on active imagination (Watkins, 1976).

Active imagination consists of encouraging a client to consciously re-enter the
world of a previous dream. The person is requested not to force activity in the image;
one needs only to allow room for the natural expression of the unconscious. Jung
believed that rather than being identical to our conscious behaviors, the unconscious
appeared to have its own definitive existence and values (Watkins, 1976). Jung
hypothesized that the process of active imagination is more facilitative than nocturnal
dreams in uncovering the unconscious (Jordan, 1979).

Jung mentioned that when we:

…concentrate on a mental picture, it begins to stir, the image becomes enriched
by details, it moves and develops. And so, when we concentrate on inner pictures
and when we are careful not to interrupt the natural flow of events, our
unconscious will produce a series of images which makes a complete story
(Jordan, 1979, p. 123).

He viewed mental imagery as an unfolding creative process of our inner psyche to
be utilized in achieving greater individual, interpersonal, and spiritual integration (Jordan,
1979).

**Roberto Assagioli**

An Italian psychiatrist who studied the ideas of Freud and Jung, Assagioli
attempted a more unifying approach while formulating his theory called psychosynthesis. The most distinctive feature of psychosynthesis in comparison with other existential
psychotherapies was the emphasis placed on will as a basic function of the self. The will,
in this case, is not merely will power as we have come to know it. The will is an inner
energy which in conjunction with the imagination, serves to benefit individual growth
and self-actualization. The various phases of the will are deliberation, motivation,
decision, affirmation, persistence, and execution. He devised various techniques for
arousing, developing, strengthening, and constructively directing the will. Many of these
techniques incorporate the use of imagery in their application to help a person become
more aware of current levels of concentration, will, observation, and memorization. His
eclectic theory draws from the methodologies of the psychoanalytic, humanistic, and
behavioral approaches, as well as from Eastern meditative practices (Assagioli, 1977).

**J. H. Schultz**

Early in the 1900's, J. H. Schultz devised a method of relaxation that he called
*autogenic training*. In a review article, W. Luthe defines this method as a
psychophysiologic form of psychotherapy in which the client implements passive
concentration upon certain combinations of psychologically adapted stimuli. Autogenic training had its founding in research on sleep and hypnosis at the Berlin Institute by brain physiologist, Oskar Vogt, from 1890 to 1900. Vogt observed that clients who had undergone a series of hypnotic sessions were able to put themselves into a state that appeared to be similar to a hypnotic state. Schultz, motivated by this research, set out to investigate auto-genic possibilities. He found an advantageous approach that decreased the client's dependency on the therapist and his/her passivity during hypnotic sessions. Many clients who underwent such training reported heaviness in their limbs and experienced a comfortable degree of warmth throughout their bodies. Such experiences were not unlike phenomena described by clients in a hypnotic state (Luthe, 1963).

**Robert Desoille**

One of the major contributors that influenced the development of mental imagery in Europe was a French engineer, Robert Desoille. Between 1938-1966 he formulated and perfected his theories on *Le rêve éveillé dirigé* (the directed daydream) (Jordan, 1979).

Desoille describes his daydream technique as:

The basic procedure for this experiment is quite simple: it consists of having the subject engage in a daydream while he is stretched out on a couch as comfortably as possible. We give the patient a starting image, for example a sword, or possibly, a seashore where the water is very deep. We have him describe this image as thoroughly as possible and ask him questions as to evoke details, if necessary. During the course of the first session, it may be
necessary at times to remind the subject that in a dream anything is possible (Jordan, 1979, p. 123).

Clients were encouraged to invite images to occur spontaneously and to consciously accept what is presented. This non-critical attitude is effective in circumventing resistances.

There are three phases to Desoille's method of treatment (Jordan, 1979):

Phase I. The client is introduced to six image themes that are representative of behavioral patterns in life experiences.

a. A sword (if male), a vessel (if female): dealing with sexual identity. This can be perceived by some scholarly communities as sexist. However, within this context, swords and vessels are part of our psyches. It can be viewed simply as the polarity within the psyche of the assertive and receptive principles, both of which are active in most, if not all, men and women (Jordan, 1979). Karen Horney stated that penis/sword/tower themes were symbols of assertiveness whether they occurred in the dreams of men or women (Solomon, 2005).

b. A descent into the depths of the ocean or moving underground: confronting unconscious conflict (Jordan, 1979).

c. A descent into a cave: for a man encouraging the finding of a witch or sorceress; for a woman, finding a wizard or a magician: the opposite-sexed parent is confronted (Jordan, 1979).
d. A cave descent with the man being encouraged to become involved with a male wizard or magician, and the woman with a female witch or sorceress: the same-sexed parent is encountered (Jordan, 1979).

e. Another cave descent to encounter a legendary dragon or monster: representing social prohibition (Jordan, 1979).

f. Sleeping Beauty located deep in the forest: showing how both sexes deal with the Oedipal conflict (Jordan, 1979).

Phase II. Treatment encourages awareness of untapped potential and promotes new behavior patterns through imagery techniques. Although there is freedom to let the imagery flow, the emphasis is on either ascending or descending. As might be expected, descending material may evoke fear while ascending images may express joy and triumph. Before a descent, the client is informed of the possibility of encountering frightening images and is encouraged to bravely confront what lies ahead (Jordan, 1979).

Phase III. The client is invited to go from imaged responses to realistic \textit{(in vivo)} responses in the environment. This transition can be aided by having the client bring in written accounts to the therapy session of a real-life situation. Desoille's work is reminiscent of some methods in behavioral-rehearsal techniques incorporated today by many behaviorally-oriented psychologists (Jordan, 1979).

\textbf{Akhter Ahsen}

Akhter Ahsen, although not European, is worthy of note because his eidetic therapy aligns closely to the European tradition. His explanation of the physiological processes involved with imagery adds a dimension to the understanding of the complex
nature of imagery and how it relates to affect and perception. In his book *Psycheye*, he outlines concepts of eidetic therapy. Eidetic (from the Greek eidos: *form*, and idein: *to see*) is defined as:

…a psychical visual image of unusual vividness. When this image is experienced in the mind, it is 'seen' clearly like a movie image…accompanied by pressure [sic] in visual apparatus, and a definitive change in consciousness…The individual, being more open in this state, readily learns new emotional perspectives (Ahsen, 1977).

The three component (and necessary) parts of an eidetic or I.S.M. are the *Image* (representing a situation), the *Somatic state* (denoting body feelings and emotions attached to the image), and the *Meaning* (of the image). Ahsen states that emotional and intellectual experiences are stored by the central nervous system. Experiencing an image is similar to reliving the original sensory messages. A fundamental concept in his thesis involves the importance of parents and their role and function in the eidetic image. Since parents often form the basis of a person's development, he claims that the parental images operate at the very core of the mind's functioning (Ahsen, 1977).

Three physiological processes are manifested in I.S.M. They include: a) *ideomotor*, relating to the nervous discharge connected with an image; b) *ideovascular*, involving circulatory changes as a result of a mental image; and c) *ideoglandular*, referring to glandular activity induced by a mental image. By getting to the core of issues, mental and physiological well-being can be attained. Ahsen's idein longevity theory claims that if neurosis can destroy life, then idein can generate healthy life. In its functioning, idein can remove neurotic symptoms and resistant psychosomatic problems
by enhancing the body's functions through a stimulation of the original image and evoking a positive motor response with long-term, health-producing genetic coding (Ahsen, 1977).

Ahsen's ideas are analogous with Allan Paivio's theory that language is linked with two basic coding systems in the brain. One code directly incorporates speech; the other code is nonverbal, closely relating to the private experience of imagery. Imagery occurs as an associative reaction to words and plays a role in the memory and comprehension of language (Paivio, 1971).

Seamon's experimental work implies that one's retrieval processes are dependent upon encoding strategies and that memory function is most efficient when one stores a perception of the incident (i.e., sight, sound) along with an explicit language association for the incident (Seamon, 1972).

The retrieval system for words is relatively easy because the words arrange themselves into categories or clusters. The experiences of early childhood, the joys and terrors fantasized and unconsciously stored, are not categorized in neat packages, nor do they have a verbal association. This may cause a delay in one's retrieving mechanism as well as confusion when trying to describe what one has on his/her mind (Singer, 1979).

This has implications when dealing with clients in imagery sessions. Tomkins (1962) states that the real causes of affect (the primary motivational system) are patterns of neural stimulation. However, the person's perception of these stimuli is responsible for the outcome of imagery content (Tomkins, 1962). J. L. Singer (1979) notes that the manifestation of these stimuli in our own images and private fantasies has the inherent capacity to arouse complex affective responses.
Frétigny and Virel

Roger Frétigny and Andre Virel were a French psychiatrist and psychologist team who conducted research in psychophysiology after World War II. They have attempted to relate what they called oneirotherapy (from oneiros meaning dream, oneiric meaning dreamlike) to current research on electrophysiological functions of the brain, nocturnal dreaming, and the sleep cycle. Their theoretical basis closely associates with psychoanalysis and Jungian theory. Oneirodrama is an approach using oneiric or quasi-dreamlike images. Their sessions begin with a complete case history. After the history is taken, the client is asked to relax deeply and begin the imagery process fashioned after the Desoille technique. The central process in oneirodrama is the vivid and dramatic confrontation through imagery of the client's critical problems. The therapist observes the client for evidence of the client's resistance. The therapist is concerned, in an analytical sense, about the onset of transference of behaviors or fantasies. Should these behaviors and fantasies occur they are treated in a Neo-Freudian manner (Jordan, 1979).

While active in the therapeutic experience by intervening when the client is frightened by suggesting magical devices when difficulties arise, the preference is to allow the imagery to unfold as naturally as possible. Rather than the therapist being a guide, Frétigny and Virel favor the term operator. Within their system, an operator begins a process in a particular direction and stands back to observe and accompany the client as the imagery unfolds (Singer, 1974).

The exploration of Freigny and Virel’s research hypothesis has concluded that while the electrophysiological responses of imagery resemble those of hypnosis, the close
relationship with the therapist during imagery sessions is naturally more active than
during hypnosis (Jordan, 1979).

**Hanscarl Leuner -- Guided-Affective Imagery**

While similar in part to the above described modalities, GAI is more systematized
and has undergone extensive research dealing with therapy outcome. Leuner’s
investigation included cases in which he used GAI techniques, the results of which were
later documented in two books which he and his colleagues authored (Leuner, 1984a;
Leuner, Horn, & Klessmann, 1983). Here is a brief history of GAI and a detailed
description outlining the basic concepts and procedures of the process. It is these
techniques and principles I have analyzed in this dissertation.

The GAI technique Leuner devised begins with the client reclining. Outer stimuli
are reduced as much as possible. Verbal suggestions are offered to allow a deeper state
of relaxation. Once the desired level of consciousness has been reached, the therapist
asks the client to imagine a meadow. The meadow is the first of Leuner's standard
situations. Once visualized, the client needs no further instructions to allow the imagery
to bring forth a scene with its related affective qualities. The meadow scene can serve as
the beginning point for images to which other scenes can easily be connected. As the
level of relaxation deepens, the imagery often becomes more vivid and paradoxically
promotes even greater relaxation. It is interesting to note that although the client's level
of consciousness is deepening, he or she is concurrently aware that it is a GAI session of
therapeutic intent.

The role of the therapist is multi-dimensional. There are times when a verbal
acknowledgement is sufficient. An intuitive silence, when appropriate, can be a sign of
trust and respect for the client's inner timing. However, there are definitely times when the therapist needs to exhibit strong and directive behaviors. These behaviors may occur when a client becomes frightened and experiences an impulse to flee from an anxiety-producing image that is emerging. In such a situation, the therapist may suggest that the client hold his/her ground and perhaps focus on a detail of the image. For instance, a client may come upon a fierce and aggressive monster. The first impulse may be to turn and run away. However, the monster will usually chase the client; escalating the panic and engendering paranoia. If the therapist can direct the client to focus on the eyes (or some other feature of the monster) and describe them in detail, the confrontation will allow the anxiety to lessen, insight to occur, and the images to continue (Krojanker, 1966).

Leuner describes the tools used in GAI as being divided into two categories. The first are the general methods for evoking, guiding and interpreting imagery. The second are the standard imagery situations or themes that are offered by the therapist as starting points for the daydream (Leuner, 1969).

General methods for evoking, guiding, and interpreting imagery

1. The Training Method Combined With the First Three Images

The first three themes, the meadow, the mountain, and the brook, when used at the beginning, provide excellent training for the client. A certain degree of empathy is necessary and a great deal of symbolic interpretation is not required (Leuner, 1969).

2. The Diagnostic Method: Initiated Symbol Projection (ISP)

When used as a diagnostic tool, rather than a dynamic therapeutic method, the therapist directs the client quickly through the standard situations in order to get a
concentrated richness of imaginative material. ISP may take between one to three sessions. The following highlights are what Leuner looks for:

- The varying quality of different themes, such as the rosebush, the mountain, and the forest.
- The resistance manifested in response to verbal instructions, such as following the brook or entering the forest.
- The inconsistencies noted in the various imagery scenes. For example, in one scene, a person may be in the middle of a snowstorm wearing a swimsuit. Also, he may look for possible meanings to the inconsistencies observed.
- The characteristics of the symbolic figures and their behavior. This can be accomplished by having the client approach the figures and describe his/her feelings (Leuner, 1969).

3. The Associated Imagery Method

This method closely relates to the process of free association in the traditional psychoanalytic technique. The client is encouraged to evoke a series of spontaneous images. There is no attempt by the therapist to direct the scenes. The therapist’s active presence by accompanying the client through the sequence is what is needed.

Often, as a result of this method, clients will be able to interpret the symbols by themselves. This is particularly evident when spontaneous age regression has taken place. Bringing a past experience to the present as a result of a meaningful association can have profound and insightful consequences (Leuner, 1969).

The following techniques have been shown to have potential therapeutic value and appear to be at the heart of Leuner's approach (Singer, 1974).

a. *Inner psychic pacemaker*. This method allows the image to control and set the pace for the journey. It can be evoked by asking the client to allow himself/herself to be governed and protected by one of the charitable symbolic images. Often a figure will arise from within the person's image (e.g., a fairy godmother, the wind, a mother image, or an animal that can be mounted) which will guide the person through scenes where issues are brought to light and confronted, in order for conflict resolution to occur (Leuner, 1984).

b. *Confrontation* is a method used when figures created in the imagery appear to be threatening the client. In such a situation, the instinctive response might be to flee or to fight. The therapist directs the client to hold his/her ground and to hold in check any anxiety that he/she might be experiencing. The client is instructed to stare the creature in the eyes and describe in detail such things as the appearance of the creature's eyes, lips, teeth, eyebrows, the irises of the eyes, and/or the emotional mood (affect) of its facial expression. It is crucial for the client to know that the therapist is present and totally involved in the journey. As with any of the
methods, if the client becomes anxious, a firm touch or supportive comment from the therapist will often encourage the client to continue toward conflict resolution (Leuner, 1984).

c. *Feeding* is one way for the client to relate to frightening creatures that appear in imagery scenes and to pacify or tame those that appear as frightening or threatening. This method can be used safely by the less experienced therapist. For example, in the case of a dinosaur coming out of a swamp, confrontation may not be desired due to the creature's size. One can suggest that the client imagine feeding the dinosaur. The therapist needs to be available for ideas of what the creature likes to eat as well as making certain that there is a sizeable quantity on hand in the image. It can be suggested that the client feed the dinosaur as much as possible, which means, in this case, that it needs to be fed much more than one thinks. The principle of overfeeding is very important. What typically happens when the dinosaur is overfed, is that the creature loses its aggressiveness, gets drowsy, lies down, and becomes more passive. Interaction with the symbol is then possible and insight may then occur more readily (Leuner, 1984).

d. *Reconciliation* can be used as an additional support to the principles of confrontation and feeding. The main purpose behind reconciliation is to befriend frightening symbolic figures by talking with them, touching them, and extending other kindnesses to them.
When reconciliation is suggested to the client during an imagery session, the suggestions may be strongly resisted. If this happens, it is often helpful to remember that the client may be in need of some additional encouragement and support. When offered, the client's reconciliation with the hostile figure is likely to be more feasible.

Leuner demonstrates reconciliation as a treatment in a case study involving a chemistry student who had failed an important examination. Although the student showed good knowledge of the subject when questioned by an associate member of the faculty, he froze with anxiety, and was unable to perform satisfactorily when his professor tested him on the material. After talking with the client, Leuner learned that the chemistry professor had characteristics similar to the client's father. A daydream was suggested in which the student, after envisioning a meadow, looked into the dark forest, and waited for the professor to emerge. When the instructor finally came out, he completely ignored the client. Any attempt to approach the professor was negated by the man. The feeding technique was applied and the student was encouraged to create a nice picnic. He offered the professor some sandwiches, chicken, and good wine. At this point, the client was asked to imagine over-feeding the professor. After the picnic, student and professor parted friends, joking and slapping each
other on the back. Following the imagery session, the student was instructed to imagine the same scene before falling to sleep that night. The next morning, the student reported a relaxed attitude during the chemistry exam. He passed it with a good grade (Leuner, 1984).

e. *Exhausting and killing* is a tool which needs to be used with caution, because the client may not have the ego strength to win the fight. Leuner advises that it be only implemented by the experienced therapist. Exhausting and killing is a powerful method where the client may feel as though the attack is on himself/herself. A moving example of its use is demonstrated in Leuner's (1969) account of his work with a female client:

As a consequence of an automobile accident, a thirty-four-year-old woman suffered from hypochondria which made her feel she would soon die. Although free from any organic trouble, she remained weak and would not leave her bed. In her imagery, she saw Death emerge out of the trunk of the tree against which her husband had driven his car. Death was brought forth into the daydream, and now was forced (by suggestion) to run into the countryside in order to exhaust him. When he wanted to sit down for a rest, he was pushed on. At one time, he tried to hide in a cornfield. On another occasion, he ran into the patient's
home, and wanted to rest on her couch. Arriving at the market place of the town, he was derided by the crowd. At last he arrived at a stream and fell into it. The waters dissolved his bones which fell away from each other. The next day, the patient's fear of death had vanished. She got up and, for the first time since becoming ill, she began to do some housework (p. 119).

The case cited above can be perceived by some scholarly communities as sexist. However, the sexist comment is contextualized to the era and culture in which it was written. It may sound dated by current standards, but the fact remains that she was able to function and resume what was considered normal activity which indicated a significant leap toward her mental health.

f. Magic fluids are often very therapeutic according to Leuner. They can be used to refresh and rejuvenate the client's psyche. One can drink or bathe in, or rub on wounds such things as water, mother's milk, semen, or urine. The usage of these magic fluids for the relief of body pains and aches needs to be done cautiously because clients may react ambivalently (Leuner, 1984).

5. The Gestalt Method

The gestalt method involves actually becoming the image. For instance, rather than looking at, and describing a bird in an imagery session, the client would be
instructed to assume the identity of the image, experience being the bird, describe how it feels, and to specify what the bird is doing and why. Becoming the image has often been found to circumvent the issue of resistance in confronting an image. Another gestalt approach is having the client conceptualize a penetration into the image. Instead of describing a monster's eyes, the client could dive into the pupils and explore the inner workings of the creature (Leuner, 1977).

**Standard imagery situations**

*The meadow* can be the beginning scene for every standard imagery session. It is a very loosely structured image upon which nearly every acute problem can be projected. The symbolism may convey a feeling of freshness, the Garden of Eden, or, on a deeper level, relate to a mother-child relationship. On the other hand, the meadow might be visualized as a barren desert. It is important to note the details of the first image of the meadow before venturing on into the session. Clients may at first have difficulty envisioning anything. In such cases, the therapist can assure them that it is perfectly natural. Invite them to lie back and allow the nothingness to take place and eventually ask them to describe what they are experiencing. As images begin to appear, suggest that they place themselves in a meadow. Note the plushness or barrenness of the topography. Are there grassy fields with flowers blooming and sun streaming down? Or are there sights of dried-up tumbleweeds and a thunderstorm brewing on the horizon? The therapist may invite the clients to describe the feeling, the smell, and the taste of the air. Also note the clients' ages, what they are wearing, and their feelings. It may be helpful to have the clients take a look around the land to determine what area they wish to move
into and explore. Many meadows have fences and walls which represent a client's depression and being enclosed in his/her life space (Leuner, 1977).

A client is then asked to *climb a mountain* and describe the view of the landscape. To invite this type of imagery, the client is instructed to look for a path on the meadow and follow it through the forest to the base of a mountain. The client is then asked to climb the mountain and describe in detail the view from the top. It is suggested that this symbolism refers to the client's feelings concerning mastery-of-life situations. A brief study by H. J. Kornadt attempted to show that the altitude of one's imaged mountain is proportional to one's level of aspiration (Singer, 1974).

Leuner illustrates a classic example of this:

I treated a physicist for an obsessive-compulsive neurosis accompanied by severe anxiety states and intercurrent depressions. He was incapable of climbing the ten thousand-meter high mountain he visualized. Instead he flew to the summit, but he always hovered a few feet above it and could not gain a foothold on it. Thus, he revealed that his ambitions were superhuman. When he looked into the valley down below, he saw an elderly man traveling on foot. At my request, he focused his binoculars on the man's face and instantly recognized the features of the Nobel Prize winner, Albert Einstein. He then admitted that, in secret, he dreamed of becoming an equally famous physicist (Leuner, 1977, p. 83).
Leuner points out that this example not only shows the relationship between the height of the mountain and aspiration goals, but also reveals that the GAI symbol is usually interpreted by the client. With passive clients, Krojanker (1966) has found this to be an ideal time to urge them to repeatedly overcome difficult obstacles on the way to the peak of the mountain. A frequent finding in Leuner’s work and most of the mental imagery techniques is that landscapes, which initially had been blocked or clouded, become more vivid and peaceful toward the completion of successful psychotherapy (Singer, 1974). One client, at the beginning of sessions with the author, experienced extremely rugged terrain often shrouded in dense fog. As the sessions progressed, she was able to travel up a much easier trail to the top and from its peak see a breathtaking landscape.

A client may be instructed to follow a brook upstream to its source or down to its destination. The client is asked to scan the meadow and find a brook, to choose a direction desired for the journey, and to describe what is seen along the edge of the stream. This often represents the flow of psychic energy and latent emotional development. Leuner relates the refreshing cool water to a reviving experience for the traveler. If there are signs of resistance along the way, the stream may not flow swiftly from its source or to its destination. The brook may submerge into an underground hole, vanish in a swamp, or it may turn into a dried-up river bed. When clients interact with the blockage they can deal directly with the situation and continue on the journey. In any case, it is suggested that the client be helped to focus clearly on these situations, unpleasant as they may be. By holding one’s ground in an uncomfortable setting, some
clients report having discovered heightened talents to deal with conflict. This has led to a deeper enjoyment of life (Leuner, 1977).

*The house* image can be symbolic of the person's personality. One can visualize a mansion with marble floors which may symbolize very ambitious expectations from life. Visualizing a run-down shack may symbolize low self-esteem. Of particular interest in the house are the cellar and the attic. These areas often symbolize the different dimensions of self. These areas may hold childhood memories of early events and may act as catalysts for dealing with and promoting conflict resolution (Leuner, 1977).

*Envisioning a close relative* may create images of a symbolic nature. For instance, a father or mother may appear in person or be symbolized as an elephant, a cow, or a deer. The client is asked to watch this relative or symbol from a distance and to describe the image's behavior and attitude as the client approaches it. Observing how these significant figures interact with the client can give insight into the quality of the client's emotional relationships (Leuner, 1977).

*A sexual scene.* The client is asked to visualize situations designed to provoke patterns of sexual feeling and behavior. A female client is encouraged to imagine herself on a lonely road looking for a ride because she has had car trouble. A car stops and the driver offers her a ride. There are many possibilities that Leuner says might happen with this visualization. No car shows up. The car has a woman driver, the car has a young boy for a driver. The driver appears sexually assertive, and he drives into a forest with the woman. Each of these possibilities can be brought into focus to allow for a better understanding of the client’s sexual issues (Leuner, 1977).
A male client is encouraged to envision a rosebush in the corner of the meadow. Leuner based this scenario on Goethe's poem, *Sah ein Knab' ein Röslein stehn*, about a little boy who, out of curiosity, touches a rosebush and pricks his finger (Singer, 1974). It is of clinical interest to note whether the rosebush is large or small, if the roses are delicate and white or large and red, are the petals dead and shriveled, or if the stems are covered with thorns. After having the client describe the bush, he is then asked to pick the rose. The therapist may inquire about what is done with the flower. Sometimes a client may feel in the imagery as though he is very awkward and clumsy. Some will carefully select the most perfect specimen. Then, having cut it from the bush, will throw it to the ground and stomp on it. Others, upon choosing their favorite, will put it in a crystal vase and isolate it on a book shelf, or atop a dresser in the guest room (Leuner, 1977).

*Confronting a lion* enables the client to see how he/she deals with aggressive tendencies. First, the therapist suggests that the client envisage a fierce beast such as a lion. Some clients imagine this animal in the form of a little cub, a decrepit old beast, or the king of the jungle. It then may be suggested that the client visualize a person whom he/she greatly dislikes. Next, this person and the lion are brought together. The client is asked to observe and comment on the lion's behavior (Leuner, 1977).

Leuner described the case of a salesman who, although physically healthy, developed heart and digestive disorders. These problems manifested after a customer, whom he disliked, hit him lightly on the stomach. A year after this incident, the salesman was still unable to work. When Leuner suggested that the lion confront the client's adversary, it reacted like a shy dog. By the end of the therapy (a total of 25 hours), the
lion was ready to attack and devour the client's enemy without resistance from the client. He had developed a much stronger feeling about his own rights and no longer felt like an underdog (Leuner, 1969).

*Deeply repressed material* may be discovered by having the client look into a dark forest from a meadow or into the dark opening of a cave. A monster, witch, or some other frightening creature (usually the same sex as the client) often appears. For this situation, it is advisable for the client initially to stay a safe distance from the forest or the cave. When the creature comes into view, the client can observe and describe it. The client, as in other situations, is encouraged to remain and confront the frightening image (Leuner, 1969). Leuner explains that impulses from the depth of the unconscious arise and are symbolized in the creatures. In repeated confrontations, it has been noted that the creatures move through the phylogenetic scale from low animal forms up to human figures (Krojanker, 1966).

Waiting for a figure to arise from a murky swamp can also be suggested. Among the possibilities that a client may encounter are a fish, a dog, a lizard, or a human figure. The facilitator needs to proceed cautiously, allowing the figures to slowly emerge, in order to control the emotional intensity that often accompanies these images (Leuner, 1969).

Humor has a place within mental imagery. Our unconscious is actually quite adept at allowing us to laugh or poke fun at some of the situations that normally our conscious state-of-mind can take all too seriously. Our unconscious sense of humor has a way of helping us grasp a new perspective on life.
Although there are many techniques in the field of mental imagery, some of which have been discussed, the captivating quality at their core is the impetus towards issue-resolution.

**Major Female Contributors of GAI**

One purpose of this dissertation is to bring the topic of GAI to the professional community in order to encourage open discussions and further research in the field, especially in the United States of America. Leonore Kottje-Birnbacher has been at the cutting edge of GAI theory having worked with Hanscarl Leuner since the early 1970s. She is the main proponent of GAI in the world today and a prolific writer having published articles second only to Hanscarl Leuner in number. Edda Klessman (1973, 1983, 1984, 1989, 1997) contributed to both books that Leuner (1983, 1997) authored and wrote and co-authored several other published articles on GAI. Nancy J. Chodorow (1994, 1999) has contributed by critiquing Freudian symbolic imagery. Helen Bonny (1990, 2002) has done seminal work in the field of guided imagery with music (GIM) which grew out of Leuner’s research with GAI (Bonny, 1990).

**Current Work in Guided-Affective Imagery**

**American articles.**

In her work, *Imagination and Healing: A Theoretical Exploration of the Use of Imagery in Three Models of Psychotherapy*, Anastasia Anagnostopoulou, PhD (1989) attempted to elucidate the core elements that allow for healing through imagery techniques. In order to elucidate these core elements she selected the psychodynamic perspective of Hanscarl Leuner’s GAI, the behavioristic perspective of Joseph Cantela on
covert modeling; and the medical/psychosomatic perspective of Jeanne Achterberg’s work in imagery to treat cancer and other diseases.

An outcome of Anagnostopoulou’s exploration indicated that there was no one healing image. Instead, healing occurred as a result of a series of scenes that unfold to elicit certain actions that led the person toward issue resolution, desired behavior, or healing. Her study also showed that the client needs to be an active participant in order for change to occur.

In her article, Imagery: An Overview with Suggested Application for Nursing, Jeanette Gagan (1984) explores the various uses of imagery. She discusses GAI, psychosynthesis, gestalt, systematic desensitization, and fantasy of in-the-body travel. She discusses the Simontons’ use of imagery with cancer patients.

Gagan reports that the processes involved in relaxation techniques have been shown to contribute to the enhancement of well-being. Nursing studies showed less post-operative pain and fewer complications when relaxation techniques were used with surgical patients. It also showed that the technique lessens anxiety and can be effective in the treatment of insomnia. Gagan reports that although imagery has not been found efficacious with psychotics or addicts, it has been therapeutic for other patients with conflicts and emotional difficulties.

In their article, Assessment of Guided Affective Imagery: Methods for Extracting Quantitative and Categorical Variables from Imagery Sequences, Jutta Bott and Eric Klinger (1986) describe the methods now available for scoring waking dreams. They mention Francis Galton’s (early 1900’s) questionnaire to assess individual differences in imagery. Non-GAI assessment methods do not address a number of variables essential to
GAI: mainly the dynamic of the therapist asking subjects questions about their imagery. These questions can be for the purpose of acquiring more information about what the subject is experiencing or to direct the imagery in ways the therapist deems therapeutic.

The scoring variables for GAI are outlined as formal, thematic, client state, and transformational. They report that the formal variables appear related to the depth of the client’s immersion in the imagery. The thematic and client state variables are related to mood states and personality traits. The transformational variables register the effects of experimental or therapeutic interventions, as well as the client’s reactions to preceding images. The assessment of these variables is discussed along with the procedure for rating GAI protocols. They conducted a single-case study involving nineteen psychodynamic therapy sessions. Six of the nineteen used GAI techniques. They then compared the remaining thirteen (which did not have imagery) to those six that did.

Thomas Yarnell, PhD (1972) in his article, *Symbolic Assertive Training Through Guided Affective Imagery in Hypnosis*, presents a case history and treatment of an excessively inhibited 22 year-old college male. Initial therapeutic techniques involved a combination of Wolpe’s reciprocal inhibition for the client’s fears and Salter’s assertive training to encourage the client to initiate interaction with other people in a more age-appropriate, assertive way. Little progress was reported primarily due to the intensity of his fears and lack of assertiveness. Guided Imagery techniques originating from Krojanker (1966) and Leuner (1969) were then introduced. Treatment consisted of eight one-hour sessions two times a week. The adjunct use of imagery was reported to be extremely positive.
In her article, *Tell Me a Story: The Therapeutic Metaphor in the Practice of Pediatric Occupational Therapy*, Linda Fazio, PhD (1992) describes the use of storytelling in working with young children and adolescents. She highlights the structure and therapeutic use of metaphor. The use of verbal metaphors through GAI is discussed. She comments on how European children have increased exposure to imagery through fairy tales, reading, and family narrative. American children, by contrast, may have a decrease in such exposure due to the visual and auditory storytelling in television and videos. She describes how the daily milieu of children is rich with imagery and emphasizes the importance of utilizing that richness in the therapeutic intervention.

Dorothy Singer (1994) in her chapter, *Imagery Techniques in Play Therapy with Children*, comments that imagery-rich thought and its symbolic language provides humans with a great gift. Such thought and language can imbue life with joy. It can likewise cause pain and suffering. The premise of her article is that imagery techniques in play therapy can greatly assist in uncovering hidden meanings that permeate a child’s thoughts and experiences. She covers the methods of systematic desensitization, cognitive therapy, guided-affective therapy, mind play techniques and art therapy.

In his article, *Imagery and Logotherapeutic Techniques in Psychotherapy: Clinical Experiences and Promise for Application to Alcohol Problems*, Eric Klinger (1987) reviews the imagery methods and logotherapy techniques in the treatment of alcoholism. He discusses the theoretical reasons for imagery use with this population. He describes the methods of Wolpe’s systematic desensitization, Stampfl’s implosive therapy, Shorr’s psychoimagination therapy, Cautela’s covert sensitization, Ahsen’s eidetic therapy, Moreno’s psychodrama, and Frankl’s logotherapy. While each
therapeutic model has had its share of success with individual cases, research does not show adequate available data with which to evaluate their effectiveness.

Roland Fischer, PhD (1978), in his article, *On Images and Pure Light: Integration of East and West*, poses the idea that Saint Ignatius of Loyola is the creator of GAI and re-discoverer of Eastern inspirational respiration techniques. He shows a correlation between the Zen concept of *being* mind rather than *having* mind and the Christian expression “having the mind of Christ” (p. 205).

St. John of the Cross is mentioned by Fischer as teaching that the light of God shines in all emptiness. Fischer reminds the reader that there are no magical techniques to get to that emptiness. “To enter upon the way is to leave the way, for the way itself is emptiness” (Fischer, p. 206). He goes on to discuss the role of imagery in mysticism. He claims that Saint Ignatius of Loyola initiated a new paradigm by exploring imagery methodically to construct the realm of the image as a linguistic system of the mystical experience.

The mantras used in varying cultures relate to Saint Ignatius’ *rhythmical recitation*. He quotes Ignatius “… at each breath or respiration, he is to pray mentally, as he says one word of the ‘Our Father’… or any other prayer that is being recited, so that between one breath and another a single word is said” (Fischer, p. 207). He goes on to quote Hebbel in a similar vein as saying, “When man prays, God breathes in him” (Fischer, p. 208).

Fischer describes the stages of prayer as: 1) orally repeating a prayer either out loud or silently, 2) eventually, the prayer grows more inward and it is repeated in the
mind, and 3) “finally the Prayer descends from the head into the heart, and from there it
domina tes the entire personality” (Fischer, p. 208).

Fischer (p. 209) reports that the earliest description of the breathing technique
dates back to the fourteenth century. He offers a quote from that description:

Sit down in a quiet cell, alone in a corner, and do what I tell you. Close
the door and raise your mind above all vain and passing things. Then rest
your chin on your chest and turn your bodily eyes, together with your
whole mind, towards the middle of your belly, that is, towards your navel.
Compress the drawing in of breath through your nostrils, so that you do
not breathe in and out freely, and search mentally in your inner parts so as
to find the place of the heart, where all the powers of the soul reside. At
first you will find darkness and an impenetrable denseness, but if you
persevere and practice this task day and night, you will find, o marvel!
endless joy. For as soon as the mind discovers the place of the heart, it
sees at once things which it never understood; for it sees the air that exists
in the midst of the heart, and it beholds itself wholly radiant with light.

In his article, Body Image Changes During Guided Affective Imagery, Stephen J.
Rojcewicz, Jr. (1990) describes a case study of a 42-year-old attorney who entered
therapy presenting with an absence of feelings. After five months of therapy where GAI
was used, he experienced the sensation of his whole body becoming four or five times the
normal size. This experience was a very pleasant one for the client and reminiscent of an
earlier experience when he was a child. Issues around his father’s lack of emotion, his
mother’s jealousy, and his wife not listening to him, were directly and symbolically addressed in the GAI sessions. He regained his ability to feel and was able to express a wide range of emotions.

Paul John Strop’s (1995) dissertation was entitled *A Study of Male-Female Intimate Nonsexual Friendships in the Workplace*. This work collected data to show underlying themes characteristic of such relationships. GAI was used as one means of eliciting data. The interactive dynamic of the co-investigators became one of the strengths of the study. The importance of individual intimate friendships was revealed. Each of the individuals had separate themes that were identified. Common to all four were themes associated with the positive impact the friendship had on their work life and their personal growth and development.

There are other non-American or European sources that inform this dissertation. For his dissertation, David Daniel Marais (1986) from the University of Pretoria, South Africa, studied the topic of *Psychotherapeutic Guidance to Role-Fulfillment with the Woman in Conflict*. The main focus of his work centered on role-conflict and role-fulfillment in women. He distinguished between intrapersonal, interpersonal and interrole conflict. Because of the broad range of conflicts experienced by modern women, he chose to use GAI to elicit inner themes and symbols. He found that this method helped the therapist to identify the conflict area and depth of disturbance so that therapy could address those issues. He also realized that the GAI technique, due to its flexible and symbolic nature, allowed the women to resolve conflict experiences. He emphasized the fact that the women were guided in the process rather than being part of a therapeutic intervention. He considered GAI a means of treating the total woman by
means of releasing her creativity. Marais concluded that when women are given the method to obtain knowledge of the conflict, their potential spontaneously emerges from the process. He considered the GAI method a means of treating the total woman by means of releasing her creativity.

Timothy L. Ingram, E.C. Hurly, and Mary T. Riley (1985) of the Institute for Child and Family Studies at the Texas Tech University describe a grief-resolution therapy in their article, *Grief-Resolution Therapy in a Pastoral Context*. They outline the differences in resolved and unresolved grief. Stages of grieving (shock, acute mourning, and resolution stages) are discussed. The grief-resolution therapy’s goal is to pinpoint the blockages of the unresolved grief by engaging in cognitive restructuring, GAI, and future-oriented identity reconstruction. The outcome of this program has been beneficial in allowing clients to resolve their grief and proceed with life.

**European articles.**

Michael Stigler and Dan Pokorny (2001) in their article, *Emotions and Primary Process in Guided Imagery Psychotherapy: Computerized Text-analytic Measures*, explore the therapeutic ingredients of a psychotherapy imagery technique. They mentioned that dreams and imagery mobilize resources by activating and combining schemas, memories, and emotions not otherwise accessible to conscious cognitive processing.

Stigler and Pokorny had three hypotheses:

1) Sessions with imagery would differ from pure verbal sessions by primary process vocabulary as indicated by the Regressive Imagery Dictionary.
2) Imagery sessions would have more emotion vocabulary specifically positive emotion words as indicated by the Affective Dictionary Item.

3) High referential activity would occur in the imagery sessions and low referential activity in the verbal sessions.

They discussed the procedure, method, instruments, and software used. All three hypotheses were shown viable.

In his article, *Katathym-imaginative Psychotherapie bei Borderlinestörungen* [GAI in Borderline Disorders], Wilfried Dieter-Facharzt (2000) describes treatment of borderline personality disorder in two case studies using the therapeutic technique of GAI. He begins by giving a brief psychodynamic overview of the Katathym-imaginative psychotherapie (KIP), which is another acronym for GAI. Work of Peter Fonagy and his research in the relationship of infant attachment and the use of symbol development to address borderline personality disorder is highlighted. Until recently, it was contraindicated in therapeutic circles to use KIP with borderline personality disorder. That thinking has changed as those using KIP have had favorable therapeutic outcomes. The reason noted KIP’s its beneficial results appear to lie in the fact that it helps the patient into a controlled regression within the therapeutic process and illuminates the path therapy can take. KIP is no longer just efficacious for short-term neurotic symptomology. It has been shown to help significantly with severe personality disorders.

Jörn von Wietersheim, Eberhard Wilke, Markus Röser, and Gerhard Meder (2003) authored an article entitled *Ergebnisse der katathym-imaginativen psychotherapie: Die effektivität der katathym-imaginativen psychotherapie in einer ambulanten längsschnittstudie* [Results of Katathym-imaginativen Psychotherapy (KIP)
(Guided-Affective Imagery): The effectiveness of KIP in a longitudinal outpatient study. They began by giving an overview of the Hanscarl Leuner’s GAI/KIP therapeutic technique and contrast it with Carl G. Jung’s *active imagination* process. The study involved 66 patients mainly with neurotic disorders, many of whom were also diagnosed with dysthymia. Data were collected by standardized questionnaires. There was significant efficacy of the treatment which remained consistent after an 18-month follow-up evaluation. Marked improvement of somatic symptoms, mood, depression, and life satisfaction were reported.

Günther Horn authored the article (1978), *Anwendungsmöglichkeiten des Katathymen Bilderlebens (KB) bei Kindern im Rahmen der Erziehungsberatung* [Applicability of guided affective imagery (GAI) to children in connection with educational counseling]. Two hundred twenty children between the ages of 7 to 11 years participated in this project. The GAI sessions lasted an average of ten minutes. After each session the children were asked to describe how it was for them. Ninety percent of the children questioned were excited and uplifted by the experience. The therapists reported that after a few brief sessions of GAI, noticeable therapeutic improvements were evident. The study showed that, while a limited number of sessions were of therapeutic value, too many sessions of imagery led to massive resistance on the part of the children. In a number of cases, the resistance led to premature termination of therapy. Based on a follow-up survey questionnaire of participating GAI therapists and the large number of case histories, it was concluded that individual GAI is a particularly effective therapeutic method for children and can be an important instrument for educational counselors.
Paul Hälg (1980) wrote *Symbolik und Verlauf in der Therapie eines dreizehnjährigen stotterers mit den Katathymen Bilderleben* [Symbolism and process in the therapy of a male juvenile stutterer with 25 sessions using the day dream technique of GAI]. In this article he describes the treatment of a thirteen-year-old male stutterer with the GAI technique. The child’s emotional and physical history is discussed along with the familial dynamics of his mother, father, and sister. Through the imagery sessions, the family dysfunctions are played out, confronted, and resolved. The specifics (sequence) of the imagery are highlighted in detail. As a result of the successful intervention, Hälg reports that the boy’s stuttering disappeared, the neurotic conflicts were resolved, and personality alteration was evident.

Otto Glanzer authored an article (1983), *Zur kombinierten Behandlung eines 12-jährigen mit dem sceno-material und dem katathymen bilderleben* [The combined treatment of a 12-year old with Sceno-material and GAI]. He covers the treatment of a 12-year-old male patient whose anxiety disorder expressed itself in a number of symptoms including refusal to speak. The use of systematic desensitization was implemented without success. The GAI therapy consisted of 22 sessions with the patient and 10 parent training sessions. Glanzer reports the outcome of the combination treatment was successful and a follow-up examination five years later indicated that, for the most part, the child’s recovery appeared to be permanent.

*Therapeutisch Arbeit mit Symbolen: Über die behandlung eines narzisstisch gestörten jungen mit dem katathymen bilderleben* [Therapeutic work with symbols: About the treatment of a narcissistic boy with the GAI] was written by Doris Voss-Coxhead (1987). She began with a detailed explanation of Leuner’s GAI process. She
emphasized the imperative nature of the relationship between the therapist and the patient in this type of work. Vox Coxhead notes that careful cultivation of the therapeutic relationship is necessary at the onset of therapy. In a case discussion, an 11-year-old boy was referred due to aggressive behavior. He was adopted at ten days old and at age four his adopted mother died of alcoholism. When his adoptive father remarried, an abusive marital relationship developed. The dysfunction of the family system was addressed in detail and the corresponding GAI sessions directly dealt with those issues. Treatment lasted 18 months where there were six phases of treatment undertaken. The author suggested that the significant success of this case was a combination of the GAI process as well as the patient’s high intelligence, strong ability to create images, and the good relationship that was cultivated with the therapist.

Konfliktbearbeitung und ressourcen aktivierung: Die katathym-imaginative
psychotherapie als tiefen psychologisch-systemisch fundierte therapie [Working on conflicts and activating resources: Guided-affective imagery as analytically and systemically oriented psychotherapy] was a case study written by Leonore Kottje-Birnbacher (1997). The article outlined an approach to treatment using GAI based on analytical and systemic therapeutic methods. The case utilized short-term analytic therapy which focused on specific conflicts and concurrently proceeded in actively cultivating a strong therapeutic relationship. The perception of the conflict was altered as inner resources and goals become evident. The therapeutic tools used in GAI actualized the conflicts being addressed and allowed the client to develop alternative methods of coping. GAI also led to new goals to emerging into conscious awareness. The therapeutic outcome showed significant reduction in the anxiety and perception of the
conflicts. It was also noted that the therapeutic alliance enhanced the ability of the client to engage in the GAI process.

C. H. Kulessa and F. Jung (1979) wrote *Die effizienz einer 20 stündigen kurzpsychotherapie mit dem katathymen bilderleben: Eine testpsychologische untersuchung* [The efficacy of a 20 hour short psychotherapy using guided affective imagery: A psychological test investigation]. In their article, Kulessa and Jung discussed the treatment of 26 outpatients of a psychiatric and psychotherapeutic clinic with psychoneurotic personality disorders and psychosomatic complaints. These patients were treated with the GAI technique over 20 sessions. Psychodiagnostic tests analyzed prior to treatment revealed that seven patients had insignificant psychopathological outcomes although they reported feeling badly and had a variety of psychosomatic complaints. Seven patients had neurotic disorders and occasional psychosomatic complaints. Twelve patients were shown to have neurotic symptoms and severe psychosomatic disorders. The study revealed that GAI proved to be an effective short-term treatment with the depressed and inhibited patients. There was a significant improvement in the less neurotic and psychosomatic disorders.

Leonore Kottje-Birnbacher (2002) wrote *Die katathym-imaginative psychotherapie: Ein erweiterter psychodynamischer behandlungsansatz am beispiel einer kolitisbehandlung* [Guided-affective imagery as an extended form of psychodynamic treatment exemplified by colitis therapy]. The article discussed the fundamental concepts of GAI and detailed the treatment of a 40-year-old woman who had suffered from colitis since the age of 14. The potential benefits GAI in this case study were noted as: the ability of the patient to work on long-standing relational issues
in the symbolic realm of GAI, to realize new dimensions of experience, and to draw on new psychic energy brought forth as a result of the imaginal processes. Although the woman’s colitis did not disappear all together, there were significant decreases in the symptomology. In this particular situation, the therapist carefully kept a balance between imaginal stimulation and relaxation, which ultimately turned out to be a key component in the successful outcome.

**Literature Review Integration**

The contributions of such scholars as Freud (1955), Jung (1922), Desoille, Jordan, 1979) Frétigny and Virel (Singer, 1974) provided a rich background in the field of imagery. Hanscarl Leuner, with his pioneering work in GAI in 1948 and his later work involving children and adolescents (1969, 1970, 1978), set the foundation for the current work in the field. The current literature highlights a variety of areas in which GAI is being used or discussed. Voss-Coxhead (1987), Hälg (1980), Glanzer (1983), Rojcewicz (1990), and Kottje-Birnbacher (2002) have shown that through the use of GAI, dysfunctional family dynamics, social, and relational issues can be uncovered and processed to help alleviate presenting symptomology. An array of conditions have been treated with GAI. These conditions include alcoholism (Klinger, 1987), inhibition (Yarnell, 1972, Kulessa and Jung, 1979), anxiety (Glanzer, 1983 and Kottje-Birnbacher, 1997), conflicts (Kottje-Birnbacher, 1997), absence of feelings (Rojcewicz, 1990), borderline personality disorder (Dieter-Facharzt, 2000), grief resolution (Ingram, Hurly, and Riley, 1985), neurotic disorders-dysthymia (von Wietersheim, Wilke, Röser and Meder, 2003), stuttering (Hälg, 1980), colitis (Kottje-Birnbacher, 2002), psychoneurotic personality disorders (Kulessa and Jung, 1979), psychosomatic complaints (Kulessa and

There was only one citation in the literature mentioning the difference between the United States and Europe in the therapeutic use of imagery (Fazio, 1992). The lack of comparative articles speaks to the need met by this dissertation of highlighting and bringing together the work done on both continents.

If we are to learn from each other in this important field of GAI, then the sharing of ideas and working in conjunction with one another’s research and clinical practice is imperative. This will offer an opportunity for professionals in the field to collaborate with each other, allowing the differences and similarities to enrich their work. Collaborating has the potential to contribute significantly to a body of knowledge that can be shared with the profession at large.

There have been no published studies which have engaged a systematic analysis of the differences between American and European research and theory development regarding GAI. In the current study, it was my intent to begin to fill that gap in the literature by conducting an analysis study of the similarities and differences between the studies and theories originating in the United States and Europe regarding GAI.

It is important that the analysis comparison of American and European research regarding GAI be engaged at this time. The research literature on GAI shows that most European researchers have an in-depth psychodynamic approach to therapeutic
resolutions. They address pathologies such as borderline personality disorder, colitis, dysthymia, anxiety disorders, psychosomatic complaints, and narcissism in an in-depth, often, case study presentation. American literature on GAI addresses issues such as assertiveness, mystical and spiritual aspects, play therapy with children, friendships in the workplace, relaxation, inhibition, grief resolution, and role-fulfillment. Issues regarding treatment of clients mandates that broader perspectives be available to both continents. Increasing communication between both continents will help toward a paradigm shift in how clinicians view the versatility and efficacy of GAI.

**Research Question**

What are the similarities and differences in American and European literature on GAI? As a result of this comparative analysis what are the most salient aspects/factors of each system that can be engaged to facilitate healing?
Chapter Three: Method

Research Question

There are two research questions for this dissertation study. What are the similarities and differences in American and European literature on GAI? As a result of this comparative analysis what are the most salient aspects/factors of each system that can be engaged to facilitate healing? The foundation for my research questions comes from a desire to understand why the Europeans seem to so readily accept GAI as a therapeutic intervention while the Americans do not. My questions were broadened by the seeming preference of non-GAI intervention methods in the American community of therapists. This prompted me to delve into the effectiveness aspects of why the two communities perceived GAI so differently and whether the therapeutic outcomes were affected by those differences due to knowledge, training, inculcation, successful experiences, and the like. My investigations reveal there are considerable differences in the way GAI is perceived between America and Europe. I did not attempt to place any assumed high degree of effectiveness in GAI methods in construction of the research questions. As for why GAI works well, it is evident in Table 1. in the Results section that GAI has become a standard method of therapy in Europe and has also shown to have effective healing aspects for reasons that are presented in Table 1. This PDE attempts to answer these questions by “comparing and contrasting” the methods employed by the two communities and displaying the salient elements of each community that produced effective results.
Definition and Philosophical Background of the Methodology

A qualitative meta-analysis methodology has been used. This methodology was chosen because qualitative methods tend to produce more in-depth, comprehensive, and richer data than quantitative methods (Patton, 2002). Theories and hypotheses evolve from data collection and analyses, which offers a holistic answer to the research questions (Patton, 2002). The in-depth analysis focuses on meaning and is interpretive, subjective, and diagnostic in nature (Holloway & Wheeler, 2002; Paterson, Thorne, Canam, & Jillings, 2001). Berg (1989) emphasizes that qualitative research focuses on quality, where the researcher refers to the essence of data collected. “Qualitative findings often have this simple yet elegant and insightful character” (Patton, 2002, p. 9). Within the field of qualitative research, it is an accepted practice of the researcher to be neutral. It would be inappropriate to be otherwise.

Meta-analysis is a research methodology that integrates and evaluates results from prior research studies (Abdellah & Levine, 1994). The prefix meta (from the Greek) is defined as beyond or behind and of a second or higher order (Oxford dictionary of English). Meta-analysis can be defined as a methodical identification, analysis, synthesis, and, when applicable, a statistical aggregation of all prior studies on a particular topic in accordance with an explicit methodology (Moher, D., Cook, D. J., & Eastwood, S., et al., 1999). Abdellah and Levine (1994) describe quantitative meta-analysis as a fresh look at data collected by others which may offer new insights with the use of improved statistical methods.

Before the mid 1970’s, the evidence of rigorous research reviews was rare (Cook & Cooper, 1992). Although Gene V. Glass coined the term meta-analysis in 1976 (Cook
& Cooper, 1992), Smith and Glass introduced the term in a review on the effectiveness of psychotherapy in 1977 (Smith & Glass, 1977). In meta-analysis, identification of patterns is a main focus of the research. McMillan and Schumacher (2006) point out that by examining studies that investigate the same phenomenon, meta-analysis can aggregate the data and increase the statistical power of the effect size. Baskin and Enright (2004) refer to meta-analysis as a means of synthesizing outcomes across multiple studies.

There is a five-stage model for meta-analysis methodology (Cooper & Hedges, 1994; McMillan and Schumacher, 2006). The stages include: (a) the problem formation stage; (b) the data collection stage, searching the literature; (c) the data evaluation stage, coding the literature; (d) the analysis and interpretation stage; and (e) the public presentation stage.

Stern and Harris first used the term qualitative meta-analysis in 1985 in “reference to the synthesis of a group of qualitative research findings into one explanatory theory, model, or description” (Paterson, 2001, p. 2). According to Hall (1997) meta-analysis links theories and equivalents by showing logical relationships. Noblit and Hare (1988) refer to meta-analysis as the synthesizing of data. The meta-analytic researcher, rather than using statistical analysis, draws upon the descriptive, contextual material to analyze and interpret the findings of each of the studies (DeWitt-Brinks & Rhodes, 1992). Sandelowski and Barroso (2007) point out that this process allows qualitative research studies to move from being isolated islands (Paterson, Thorne, Canam, & Jillings, 2001) of data to an amalgam of knowledge about specific phenomena under investigation.

A qualitative meta-analysis approach to research methodology includes the following steps, modified for this study (Noblit & Hare 1988, pp. 26-29):
1) Getting started. This initial step involves identifying an area of interest that is worthy of qualitative investigation.

2) Deciding what is relevant to the initial interest. This step involves deciphering what studies are relevant to the study.

3) Reading the studies. This step encourages repeated reading of the studies in order to grasp the nuances in the literature which is imperative in meta-analysis.

4) Determining how the studies are related. This step requires analyzing the relationship between studies and creating a list of key metaphors, phrases, and concepts in juxtaposition of each other.

5) Translating the studies into one another. In this step, translation involves treating the studies as analogies. In addition to being analogous, translations protect the particular, respect holism, and allow for comparison. All-important in this step is to compare metaphors and concepts and their interactions in one study with those in other studies. While there may be metaphors that emerge, for this study, the emphasis will be on comparing and contrasting the data analyzed. As O’Flynn (1982) states, meta-analysis is the use of old data to answer new questions.

6) Synthesizing translations. Synthesis is taking two or more entities, elements, or combinations to form something new culminating in more than the individual parts imply. Translations are one level of synthesis; however, when the number of studies is large and translations numerous, the translations can be compared to each other and thereby implementing a second level of synthesis which analyzes types of competing interpretations and translates them into one another.
7) Expressing the synthesis. This step involves choosing the appropriate venue in which to inform audiences for whom the study has significance. Noblitt and Hare use the term synthesis; however, for this study there will be an interpretive analysis of the data expressed.

A significant factor of meta-analysis is that it provides a basis for scientific methodology in the reviewing of research (Light & Pillemer, 1984). In doing so, the results can illuminate far greater understanding and the metaphoric significance of the research for the intended audience.

In this study it was determined that qualitative meta-analysis best served to answer the research questions: What are the similarities and differences in American and European literature on GAI? As a result of this comparative analysis, what are the most salient aspects/factors of each system that can be engaged to facilitate healing?

The essence of the data emerged in the form of themes and patterns for interpretation. The following six enumerated items (taken from Noblitt and Hare’s [1988] steps) were used in eliciting the meta-analysis data:

- Identifying GAI as the area of interest worthy of qualitative investigation;
- Deciding on articles that utilize GAI in their work or discussions;
- Reading (and where appropriate translating German articles to English) and re-reading the articles to grasp the nuances in the literature;
- Analyzing and determining how the works are related (creating a list of metaphors, concepts, phrases);
- Translating the works into one another by comparing and contrasting the nuances inherent in one article with those in other works. Translation means to find more
than a correlation of analogous content between the coded studies. Translation means finding the specific influences that produce a particular outcome that are consistent among the studies, be they positive or negative influences. The researcher has attempted to do this by identifying common intervention factors and process codes in the coding sheets such that they characterize the main healing factors that appear in the cited sources. By doing so, translations provide the unique means which enable comparison and contrasting of the influencing aspects to the reported outcome. The intervention factors enable the comparison of both the concepts and their interactions in one study to the concepts and their interactions of the other studies.

In eliciting these data, techniques of content analysis and historiography were examined and, where applicable, implemented. The data results are discussed in narrative form and summarized, as well as presented in tabular form per a graphic portrayal of comparisons and contrasts such as that outlined by Miles and Huberman (1994) and Hart (1998).

**Human Subject’s Research Considerations**

Owing to the nature of the method of meta-analysis, this research study primarily involved reading, analysis, and comparison of already published research articles. As a result, no human subjects were engaged in the research process. The Director of the Union Institute & University Institutional Review Board was consulted on the use of no human subjects. Her response, dated September 26, 2007, concurred that the current study was exempt from the use of human subjects.
Significance of the Study

The qualitative meta-analysis of American and European literature on the topic of GAI is a relevant addition to the literature because there has been a decided difference in how practitioners on the two continents engage in therapeutic intervention. The significance of this study is to bring together valuable insights from both traditions and offer a venue for open communication on a topic which has rarely been discussed inter-continentally.

Historically, psychology emerged from Western Europe. Early in the 1900’s American psychology split from its European roots and emphasized behaviorism as the legitimate *modus operandi*. With regard to the use of imagery in the therapeutic setting, American psychology has a tendency to suggest and impose imagery from *without* (external influences) where the European method tends to evoke imagery from *within* (internal sources). The American behavior therapists manipulate the conditions that facilitate change. In America, medical science is now utilizing imagery techniques and hypnosis with encouraging outcomes. The European therapists operate from a philosophical framework that assumes there is wisdom in the psyche and, if the right conditions are in place, the organism will heal itself.

Psychoanalysis and existential philosophies have, for the most part, been discounted by the mainstream of American psychological societies and organizations in recent years. Over the course of the past thirty to forty years these schools of thought and practice have been deemphasized. The clinical medical model takes precedence in our American culture. The cognitive/behavior therapy modalities have come into favor with the insurance companies and the pharmaceutical industry in our country. Short term
therapy is typically the treatment model of choice of HMO’s. The profit-motivated insurance industry has, in essence, molded the way in which we conduct therapy.

A comparative literature integration with a qualitative meta-analysis of GAI had not been attempted before the present study. This dissertation research attempts to fill that gap and illuminate how professionals from both continents can benefit from shared knowledge and experience. It is hoped that the information that has emerged from this study will establish valuable breadth and insight into a therapeutic technique that deserves consideration from the international professional community, as well as integration into the knowledge base of the discipline.
Chapter Four: Results

Approach

Restating the objectives of the meta-analysis from Chapter III, the following steps were performed:

- Identifying GAI as the area of interest worthy of qualitative investigation;
- Deciding on articles that utilize GAI in their work or discussions;
- Reading (and where appropriate translating German articles to English) and re-reading the articles to grasp the nuances in the literature;
- Analyzing and determining how the works are related (creating a list of metaphors, concepts, phrases);
- Translating the works into one another by comparing and contrasting the nuances inherent in one article with those in other works;

The research question was divided into two parts that are addressed separately. Part one asks to compare and contrast American and European approaches to the application of GAI as presented in the literature. Part two asks to identify the healing factors which make GAI effective, if it is, in fact, shown to be effective.

Consistent with the method described in Chapter III, the researcher identified all sources of GAI literature from books, articles, dissertations, and the Internet. It was necessary for each literature source to be four or more pages in length and deal specifically with GAI topics. Only informative sources were used. No web-based synopses or advertisements for services were considered in the review.

Four hundred fifty-three European articles were produced between 1954 (the year that Leuner first published on the GAI topic) and 2008. Of this number, 151 articles and
books were obtainable in the United States. As noted earlier, the literature available in the US was retrieved from the Library of Congress, National Library of Medicine, Harvard University Medical Library, George Mason University Library, Inter-collegiate Exchange Program with German Libraries, PsychINFO and PsychArticles databases, and the Internet.

Figure 1. provides the approach in responding to the first part of the research question. With exception of three articles, all European articles and books were in German, Slovakian, Swedish, or French. All 148 articles and books were translated to English using free translation tools available from several internet websites. Of the 148 translated articles and books, 111 were screened as acceptable for meta-analysis coding. The screening criteria for acceptance of an article in this analysis were:

1) Utility for identifying essential healing factors in GAI treatment,

2) Utility for defining GAI methods or techniques which bring about healing factors,

3) Confirmation or denial of GAI effectiveness as a therapeutic intervention.

During the course of the analysis, an important aspect of psychological healing became apparent. This factor deals with the underlying neurological process that occurs within a patient who may undergo physiological change during the course of the therapeutic intervention. I chose to include this neurological component in the analysis because the neurological remapping of behavior patterns within brain structures may be understood to facilitate the patient’s ability to “activate resources.” This same process is identified in Chapter IV as the ability to “activate” patient “resources,” one of the essential factors now believed to be at the center of psychological change (Grawe, 2007).
As a result of this revelation, the analysis was modified to include a neurological component as well as the previously identified methods and effectiveness factors of GAI.

The coding process consisted of reviewing each article to identify the most relevant underlying intervention techniques which are believed to have brought about a positive treatment outcome in the course of treatment. This was undertaken for each article that had a quantitative metric or qualitative assessment of success in comparing presenting symptomology to therapeutic outcome. Therapeutic success or effectiveness was judged based on the perspective of the therapist(s) judgment, not the researcher’s opinion of the results. Other studies in the meta-analysis were of a tutorial nature, and were useful in identifying the underlying processes taking place during the course of GAI intervention. These factors were then critically evaluated with respect to the rest of the literature. Tutorial articles were coded as informational and given a zero (not influencing) score for effectiveness due to lack of case studies or subjects on which to base the effectiveness of treatment.

The US GAI literature analysis followed the same process as the European literature review. Only twelve articles were found from US sources. No articles in GAI have been published in the US in the last ten years.
Question 1: What are the similarities and differences in American and European literature on GAI?

Step 1. Identify all articles, books, dissertations, and internet articles dealing specifically with GAI of 4 or more pages. Sources were: National Library of Medicine, Library of Congress, Inter-collegiate Exchange, Harvard University Medical Library, George Mason U., PsychInfo and PsychArticles Databases and the Internet

Step 2. Obtain available GAI literature for review

Step 3. Translate European GAI articles to English (Swedish, German, Slovakian, French)

Step 4. Screen GAI articles for Methods or Effectiveness applicability to meta-analysis coding

Step 5. Code GAI meta-analysis applicable articles

Step 6. Summarize findings from research of European and American literature

Figure 1. Research Question One Approach.

<table>
<thead>
<tr>
<th></th>
<th>European</th>
<th>American</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>453 titles identified and located (See Appendix D., European Sources)</td>
<td>12 titles identified (See Appendix D., American Sources)</td>
</tr>
<tr>
<td></td>
<td>151 articles and books obtained</td>
<td>12 articles obtained</td>
</tr>
<tr>
<td></td>
<td>148 articles and books translated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>111 articles accepted for GAI Meta-analysis</td>
<td>12 articles accepted for GAI Meta-analysis</td>
</tr>
<tr>
<td></td>
<td>Appendix A. European Meta-analysis Coding Sheet</td>
<td>Appendix B. American Meta-analysis Coding Sheet</td>
</tr>
<tr>
<td></td>
<td>Table 1. GAI Characterization Summary Table</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2. defines the steps in answering the second part of the research question. The identification of essential intervention factors was accomplished by isolating the most prominent use of specific intervention techniques in the GAI literature.

Following the identification of the significant intervention factors associated with GAI, a frequency of occurrence was tabulated for both the European and American literature. The intent was to characterize the frequency that selected GAI techniques were employed as they correlate to positive outcomes. If the effectiveness column of the meta-analysis Quick Look Scoring tables (Appendices A and B) showed a value of zero, then the associated interventions listed were not counted as causing a positive outcome and were not counted as such.

In order to more fully characterize the meaning of the twelve intervention factors, testing results employing these factors were identified. Additional information was identified on the effectiveness of the twelve intervention codes identified in the meta-analysis coding sheets (Appendices A and B) in eleven effectiveness studies. These effectiveness studies are presented in Appendix C. The Discussion (Chapter V.) is provided for an understanding of how the healing factors are linked in theory. The chapter also discusses the application of the healing factors and how they may be used therapeutically.

**Research Question One Results**

It is apparent from the literature review that there is a consistent body of knowledge and extensive skill sets in use today, especially in Europe, for the practice of GAI. Europe is, and has been, the engine for the implementation of GAI world-wide.
Figure 3. shows GAI literature of four or more pages produced in Europe and in the United States since the inception of GAI as a psychotherapeutic approach. The preponderance of information in the application of GAI techniques is based on the methods promoted by the European GAI technique beginning with the founding principles of Hanscarl Leuner. The European school of GAI has institutional centers in Germany, Switzerland, Austria, and Scandinavia for the teaching and certification of GAI practitioners. These societies have active members who practice GAI methods as part of their therapy skill set.

In contrast to Europe, the production of GAI literature in the US has been sparse. No articles on the subject have been produced in the past ten years. Of the articles that have been produced, none have made contributions to GAI theory to the degree of being accepted in practice. A major reason for this lack of therapeutic involvement in the US is the small sample of articles published in English. The dissemination of information to non-German speaking countries has most likely limited the use and acceptance of GAI in America, the United Kingdom, and the rest of the non-German speaking world.
Question 2: As a result of the comparative analysis in Question 1, what are the most salient aspects/factors of each system that can be engaged to facilitate healing?

Step 1:
From Question 1: Identify the common factors in the literature as therapeutic interventions from the use of GAI.

Prevalent and consistent intervention factors and process codes from Quick Look coding sheets

Step 2:
Identify, in detail, the GAI methods that result in positive results as healing factors from Step 1.

12 Healing Factors associated with GAI

Step 3:
Provide validation and test results that GAI healing factors from Step 2 are shown to be effective.

Step 4:
Identify recent technology shown to be (or likely to be) GAI healing factors but not evidenced in the GAI literature

GAI Methods Factors (See Chapter V.)

GAI Effectiveness Factors – Appendix C

GAI Neurological Factors – Appendix D

Figure 2. Research Question Two Approach.
Figure 3. European and American Literature Produced.

Shown in Figure 4. are “Methods Factors” by authors who have each published at least nine articles on GAI theory and methods. Authors, whose names appear on the lines
between method factors, effectiveness factors, and neurological factors, have influenced multiple aspects of GAI research. Researchers in the green area are earlier pioneers but not psychotherapeutically inclined.

First, all of the authors in the methods segment are European. Their contribution to GAI methods has been the keystone to GAI implementation in practice. Through their influence, GAI has become a recognized form of deep psychotherapy in Europe. However, wide use of GAI is not the case in the United States.

![Figure 4. Primary Research Question Focus Areas and Authors.](image)
Secondly, GAI effectiveness must be supported by acceptance of its application to therapy. The effectiveness studies of this analysis provide support for GAI utility in practice as a therapeutic intervention. The effectiveness studies are Appendix C. Data were collected by those authors from clinical trials to provide a form of validation of GAI effectiveness for certain types of disorders. These studies support the claim that GAI is an effective therapeutic intervention for the addressed disorders. The authors in the “Effectiveness Factors” are also all European.

The third major element of the Discussion Section describes recent inroads made in the new discipline of neuropsychotherapy. Grawe, in his 2007 English text version, has made the connection between neurology and the practice of psychotherapy much clearer for the practicing therapist. In contrast to the lack of American involvement with the GAI as a therapeutic intervention, American neuroscientists have made significant contributions to the understanding and interaction of such structures as the amygdala, hippocampus, and prefrontal cortex (PFC), and the role they are posited to play in the way emotions interpret the environment. The authors in the Neurological Factors i.e., J. LeDoux, R. Davidson, D. Hebb, and E. Kandel are American; the rest are European.

GAI therapists have been largely unaware, until very recently, that the skills they exercise during the course of the imagination phase has been a method to reach the patient’s emotional “context” as the basis of their dysfunction. The therapist facilitates the patient’s choice in the path to “flight or fight” especially during the time of “conflict confrontation” in order to bring about a change to the “primary process” pattern of behavior from which the patient has always reacted. Also, during the imagination post processing session, the therapist encourages the patient to begin to use his/her rational
“secondary process” in place of the “primary process.” This may be understood as an attempt to break the ruminating cycle by essentially rewiring the brain to react from the left PFC instead of the right PFC.

The Table 1. GAI Characterization Summary presents the viewpoint of this researcher after reviewing and evaluating all available European and US-produced GAI literature. The contrast between the literature produced on the two sides of the Atlantic is dramatic. This is evident by the widespread use of GAI in Europe in comparison to the paucity of literature in the US. The table shows that there is less interest to apply GAI techniques in the US. There is less professional vitality concerning the use of GAI in America. There are no GAI centers of excellence or training in the US at the present time. (The Bonny Foundation offered training sessions and certification in GIM until the past few years.) These are only available in Europe. There are no published newsletters, focused seminars, or colloquia on GAI subjects in the US.

Table 1. GAI Characterization Summary

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Definition</th>
<th>Method of Measurement</th>
<th>American Applications</th>
<th>European Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>How highly is GAI effectiveness regarded?</td>
<td>Does GAI show a high success rate when compared to other intervention treatment methods?</td>
<td>Metric: How many articles are published for GAI and do they report treatment successes / failures?</td>
<td>Not a high rate of article production. Not highly regarded as a major intervention technique in the US</td>
<td>High rate of article production. Highly regarded as intensive and deep intervention technique with major success rate compared to other interventions</td>
</tr>
<tr>
<td>GAI applications for Healing of</td>
<td>Mental conditions associated with Narcissism</td>
<td>Case studies for: Narcissism</td>
<td>Not widely accepted nor used as an</td>
<td>Accepted and used extensively in treatments for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic</td>
<td>Definition</td>
<td>Method of Measurement</td>
<td>American Applications</td>
<td>European Applications</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Psychosomatic Disorders</td>
<td>disturbed ego states</td>
<td>Depression Obsessive-Compulsive Disorder Somatic Disorders</td>
<td>intervention technique for these types of disorders. Other modalities are preferred</td>
<td>all indicated disorders</td>
</tr>
<tr>
<td>GAI applications to Healing</td>
<td>Physical dysfunction associated with the corporal body</td>
<td>Case studies for: Cancer Sexual Dysfunction Genetic Schizophrenia</td>
<td>Not used at all</td>
<td>Used for accommodation and relaxation of terminal cancer patients. GAI not attempted for genetically-related schizophrenia</td>
</tr>
<tr>
<td>Physical Disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAI applications for Healing</td>
<td>Processes of the psyche which result in voluntary or involuntary deleterious physical effects to one’s self</td>
<td>Case studies for: Colitis Self-mutilation Alcoholism Anorexia</td>
<td>Unknown, but likely infrequent use. No GAI publications for the past 10 years</td>
<td>Used widely for indicated disorders</td>
</tr>
<tr>
<td>Psycho-physical Disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAI applications in Socially</td>
<td>Processes of the psyche which result in isolation disorders in social settings</td>
<td>Case studies for: Social Anxiety Generalized Anxiety Disorder Low Self Esteem Test Anxiety</td>
<td>Infrequent and experimental use in the US. Spotty results reported</td>
<td>Used widely for treatment of social phobias and indicated disorders</td>
</tr>
<tr>
<td>Impaired</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psycho-social Disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is formal training sought?</td>
<td>Trained and certified in formal GAI methodology at recognized institution</td>
<td>Is there specialized formal training and certification for GAI?</td>
<td>No certification required. Training is purely voluntary. Treatment methods are inconsistent and results relating to</td>
<td>Training and certification is highly encouraged. Treatment methods are consistent as reported in case studies. Highly effective results are reported</td>
</tr>
<tr>
<td>What is the prevalence of GAI trained therapists?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic</td>
<td>Definition</td>
<td>Method of Measurement</td>
<td>American Applications</td>
<td>European Applications</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td>Has a formalized process been defined and applied?</td>
<td>Methods use known healing elements such as Resource Activation, Primary &amp; Secondary psyche accessibility</td>
<td>Are the methods universally used consistently?</td>
<td>No. Improper and inadequate procedures are observed. GAI effectiveness is not accepted</td>
<td>Yes. Process tends to be formalized and followed. GAI effectiveness is accepted</td>
</tr>
<tr>
<td>How well is symbology processed?</td>
<td>Symbols are post--processed for maximum therapeutic effect as secondary processing. It is shown that the meaning of symbols is related to repressed anxieties</td>
<td>Is there evidence that symbol processing has yielded positive results from associated behavior or perception changes?</td>
<td>Verbal post processing (secondary processing) is irregular. No formalized approach. Inconsistent correlation between results and presenting symptoms</td>
<td>Post processing is highly recommended to follow secondary process approach. High correlation of relief from presenting symptoms</td>
</tr>
<tr>
<td>Has GAI been institutionalized or regulated?</td>
<td>Institutionalization helps to maintain treatment uniformity and aids in consistent results</td>
<td>What academic or professional centers of excellence exist?</td>
<td>None. No formal society, institution or periodic colloquia providing certification, licensing, or updated training</td>
<td>Yes. AGBK institute in Germany and alliances in Switzerland, Austria, and Sweden. Newsletter. Training &amp; seminars</td>
</tr>
<tr>
<td>Are there differences in methodology or implementation?</td>
<td>Methodology is consistent with founding principles and not adapted to</td>
<td>What methods are used by the therapist to provide insight to the</td>
<td>Inappropriate and inconsistent therapist methods.</td>
<td>“By the book” treatment in modality, duration and frequency. German language</td>
</tr>
<tr>
<td>Characteristic</td>
<td>Definition</td>
<td>Method of Measurement</td>
<td>American Applications</td>
<td>European Applications</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>therapist’s understanding</td>
<td>patient?</td>
<td>Infrequent post-</td>
<td>barre to wide spread information dissemination to English-speaking countries</td>
<td></td>
</tr>
<tr>
<td>method of Measurement</td>
<td></td>
<td>processing. Incons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Applications</td>
<td></td>
<td>stent frequency and duration of GAI sessions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are new advances in GAI incorporated?</td>
<td>Currency and use of GAI is indicated when state-of –the-field technology is actively incorporated</td>
<td>Do methods reflect current technology?</td>
<td>No. Some American neurological work (LeDoux, Davidson) but unrelated to psychotherapy. No GAI publications for the past 10 years.</td>
<td>Yes. Grawe’s neuropsychotherapy practices are now beginning to be adopted for GAI use.</td>
</tr>
</tbody>
</table>

**Research Question Two Results**

This analysis sought to establish whether there are implicit features which make the GAI method of psychotherapy effective. The investigation drew upon existing literature to determine the healing factors. The investigation also showed that these factors do, in fact, facilitate healing. Question two of the analysis was focused on three elements: (a) what are the factors that facilitate the emergence of healing, (b) what validation is available to show that GAI intervention is effective, and (c) what neurological and physiological processes may be at work during the course of GAI treatment and possibly be correlated with permanence of behavioral change? Recent investigations into the field of neuropsychotherapy have yielded some of the most
intriguing potential ideas for the understanding and treatment of psychological disorders (Grawe, 2007).

Appendices A and B present the raw data collected by the analysis. Appendix A. contains the coding sheets for European literature and Appendix B. presents the coding sheets for American literature. The coding sheet columns show:

- Article/book title;
- Author;
- Type of study: either qualitative case study, quantitative clinical test, or tutorial;
- Number of subjects if the study involved clinical testing;
- Presenting symptoms if the study was a case study or involved clinical trials;
- Therapeutic outcome if the study was a case study or involved clinical trials;
- The therapist’s assessment of the effectiveness of the therapeutic approach as measured by reported symptom relief at the end of treatment with respect to presenting symptoms. The comparison of outcome to presenting symptoms was assigned values: very significant (++), significant (+), not significant (0), deleterious (-), very deleterious (--), or a statistical significance “p” value if testing reported such a value. Only case studies and clinical tests were scored. Tutorials were scored as zero.
- Intervention factors and process codes observed in the study. These are the prominent factors cited by each study which are implicated when relief from symptoms was reported by the patient and therapist. Results are reported as
positive if the results of the effectiveness were either +, ++, or significance of test correlations of p ≤ 0.05.

There were twelve persistent, i.e., more than one occurrence, intervention factors identified in the GAI literature that resulted in positive outcomes in the studies. These are:

1) Active Introjection
2) Catamnesis (after-treatment follow-up therapy)
3) Core Conflict Transformation
4) Coping and Mastering
5) Neurological Change
6) Problem Activation
7) Primary and Secondary Processing
8) Problem Clarification
9) Post Processing (after-imagery session secondary processing discussion)
10) Resource Activation
11) Symbol Interpretation and Processing
12) Transference and Countertransference

The following factor was also included as a process code to assist the researcher in isolating what other therapies may affect the results. This factor was used to eliminate the particular study because of the difficulty in isolating which therapy was the effective one providing a positive outcome:

13) Collateral or Adjunct Psychotherapy
Two additional process coding factors were used to assess GAI effectiveness of the twelve primary healing factors although they are not considered intervention factors in and of themselves:

14) Significant Somatic Change in Symptoms from presenting condition to treatment termination.

15) Test Instruments to Show Effectiveness.

A zero or negative score for effectiveness by the therapist means that the associated intervention factor was of no value as a healing factor in the therapy. Thus, the associated intervention was not considered as a healing factor unless the study was determined to be flawed. Two reported American studies used inappropriate or erroneous GAI procedures according to Leuner’s methodology. Consequently, the reported intervention factors of these studies were not eliminated from being possible healing factors on the basis of these flawed results. One American study reported a negative outcome symptomology compared to presenting symptoms. That study had none of the twelve intervention factors with positive effectiveness results found in the other studies. No European studies appeared to use inadequate GAI procedures when compared to Leuner’s methodology. There were no European studies which resulted in negative effectiveness outcomes.

Figure 5. presents the frequency of the twelve persistent intervention factors mentioned in the GAI literature which had positive results in therapeutic outcomes.
These intervention factors are potential healing factors. They are not yet proven to be healing. The perceived effectiveness may result from other hidden intervention processes occurring within the patient which are not reported by the literature. Or some of these factors may be misrepresented by the influence of uncontrolled variables outside of therapy affecting the results. Thus, in order to establish a correlation between an intervention and its purported effectiveness, there needs to be controlled clinical trials to

Figure 5. Frequency of Intervention Factors Mentioned in GAI Literature.
show the effectiveness of the individual intervention factors as actual healing factors. The effectiveness studies present clinical validation that the intervention factors are effective for healing to the extent that testing involving the intervention factors exists in literature available to the researcher.

**Essential GAI Factors**

As a result of the data collected and shown for the twelve intervention factors in Figure 5, there are seven major interventions listed most frequently and are among the essential elements present in GAI treatment outcome successes. In addition to these seven factors, the researcher believes there is an additional eighth intervention factor, neurological change, that is significant but not reported. It is cited only twice in the case studies. Neurological change is a recent discovery that has conclusively linked behavioral changes to altered neurological processes promoted through therapeutic intervention. Case studies have not revealed the connection of neurological change to behavior change because there was no linkage before 2004. Thus, the following eight factors are the primary intervention elements in GAI:

- Catamnesis
- Core Conflict Transformation
- Primary and Secondary Processing
- Post Processing
- Resource Activation
- Symbol Interpretation
- Neurological Change
• Transference/Countertransference

Within present-day theory, GAI intervention methods accommodate several of the factors in the figure which individually and sequentially are necessary for GAI to be effective. Bahrke and Nohr, 2005, have updated the original Leuner model to group together the processes associated with Symbolization Interpretation, Problem Clarification, Problem Activation, Coping/Mastering, Resource Activation, and Core Conflict Transformation. These factors are recognized to be necessary and sufficient in order for GAI to work. They are viewed as one completely linked, facilitating process, even though their individual frequencies are not consistently represented in the table as being so. This researcher believes that therapists did not represent symbolization, problem activation, coping/mastering, or problem clarification as frequently as resource activation or core-conflict transformation primarily because they are implicit features within the patient and not directly observed or reported by the therapist.

Negative transference on the part of the patient and countertransference on the part of the therapist are phenomena which can be viewed as impediments to the therapeutic process. They may serve to inhibit the trusted communication between patient and therapist when either of these is present. Therefore, the absence of these factors may be viewed as a positive influence to therapeutic outcome.

Active introjection is a stop gap measure to preclude anxious initial encounters with the patient’s core conflict. The presence of the therapist during imagery can actively intercede by offering a nurturing and calming environment for the patient at the moment of confrontation. Active introjection during imagery also makes possible the secondary processing within the patient by offering alternative courses of action that the patient may
pursue in dealing with the core conflict. Active introjection is therefore an essential facilitation for such moments.

Another key feature in GAI facilitation is the period of post processing of the imagery and the establishment of secondary processing reinforcement within the patient. Imagery post processing was mentioned repeatedly in conjunction with symbol interpretation. The post processing may be conceptualized as the activity of reinforcing the neural network pathways established initially by “second messengers” in the imagery stemming from the patient’s resource activation. Reinforcement of the neural pathways primarily is understood to happen through repeated dialog at a conscious level between therapist and patient. (The patient can also interact with others in new ways.)

The follow-up therapy sessions well after therapy is completed are called catamnesis. Although not a requirement, it is of benefit that the therapist review the progress the patient has made in order to view how well the patient has been able to cope with anxiety-producing material which formerly had affected the patient in daily life.

Primary and secondary processes were significantly observed in the case studies and clinical trials reported by the analysis. On the largest scale, the objective in GAI treatment is concerned with the inhibition of the primary process pathway in exchange for the more rational brain functioning from secondary procedural memory processing. Inhibition of the primary process is the proper term for it cannot be extinguished just as the anxiety which initially established the primary path cannot be extinguished. It makes a considerable difference in the treatment if the therapist seeks to remap neural pathways rather than trying to eliminate them. The amygdala doesn’t necessarily habituate if there
are alternate channels available to the conscious by which the individual can find relief from incongruency residing with the core conflict.

There were few neurological changes observed in patients from the coding sheets. The reason for this lack of response relates to the inability to actually determine what neurological change has taken place even if testing were possible. Besides not knowing what to test for, most of the clinical trials resulting in neurological change to the amygdala and other biochemical processes involved an imaging process or dissecting the brains of rats and monkeys rather than humans. But the American literature points to a new direction in treatment using neurological intervention during the course of psychotherapy.

With respect to differences and the frequency of themes in the PDE, i.e. healing factors between America and Europe, the evidence can be found in Figure 5. of the PDE that reflects the categorization of intervention factors of Appendices A and B. The review of American GAI literature of 12 articles showed a positive correlation to therapeutic outcome for:

- Core Conflict Transformation (1 occurrence)
- Post Processing (2 occurrences)
- Symbol Interpretation (3 occurrences)

The review of the European GAI literature of 111 articles and books showed a much more expansive list of major healing factors producing positive correlation to therapeutic outcome:

- Catamnesis (21 occurrences)
- Core Conflict Transformation (32 occurrences)
- Primary and Secondary Processing (39 occurrences)
- Post Processing (24 occurrences)
- Resource Activation (25 occurrences)
- Symbol Interpretation (44 occurrences)
- Transference/Countertransference (27 occurrences)

The conclusion to be drawn is that European therapists tend to have a much broader understanding of GAI and use the richness of the technique to produce a desired outcome.
Chapter Five: Discussion

Implications Regarding Theory

The use of GAI as a therapeutic modality has significant implications for psychotherapeutic theory. As highlighted in the Literature Review of this dissertation, the applications of GAI are varied. In this section, I have outlined and briefly described a few of the most salient factors uncovered in this analysis that show a congruence with the GAI literature. Likewise, I have noted that certain literature entries were, in fact, incongruent with the analysis outcome.

For example, in Appendix A, the first two European articles cite Primary and Secondary processing as a prominent intervention method. In the first study, I have annotated Primary and Secondary intervention as producing a strong positive (++) correlation to therapeutic outcome as reported by the author. The second article did so, as well. By the appearance of the Primary and Secondary intervention method, each of which are reported as positive outcome, then it may be said that there is a translation between these two articles in the sense that a common element for successful outcome is Primary and Secondary processing. If, on the other hand, had one study produced a negative outcome, while the other was positive, the translation would show a negative contrast and one must reject the hypothesis that there was a correlation between the two studies. As more positive translations occur in a particular healing factor, they strengthen the hypothesis that a positive correlation exists. The largest number of themes are reported in Figure 5. that represent the commonly reported healing factors and their frequency of occurrence reported in the studies.
The findings of this dissertation are consistent with what Leuner (1983) describes in the GAI process as a “synchronous change” phenomenon. It is based in the fact that, initially, a typical patient cannot allow difficult psychological issues to surface in the conscious realm; however, the issues that surface can be presented in a more casual way through the introduction of symbolic representations. As therapy continues, there is an unfolding change that can be reflected in the dynamics of imagery. For instance, in the beginning of therapy a motif of climbing a mountain may reveal a barren landscape with no signs of human life. (The landscape at the start of therapy often looks depressing.) After approximately 20 to 30 therapy sessions this may change to a more vibrant scene where people and animals are actively going about their daily routines, flowers are in bloom, and there is much life in the imagery. Similarly, in the current study, this synchronous conversion occurs in many different areas of the imaginative panorama of the landscape during the progress of the therapeutic process and can be interpreted as a definite sign of improvement. This clinically successful activity manifested regularly in the unfolding therapy images, supports two further hypotheses: seemingly unrelated variables, expressed through imaginative content can be used to pursue the therapeutic process; and all the motifs of the imagination are dynamically linked and influence each other. The purpose is to try to retrieve data belonging to the motif of the individual’s conflict memory (Leuner 1955a).

The results of this analysis concur with Paul Hägl’s (1980) observation that the GAI treatment results in a disappearance of the symptoms and a change in the neurotic personality structure. Under the protection and careful management of the therapist, the patient describes emerging imaginative fantasies and feelings as they continually develop
in an active dream-like world in which he or she is moving. By partially undermining the defenses, very quick and intensive unconscious conflicts arise. These may be therapeutically addressed with various intervention techniques (Leuner, et al., 1977). It was shown by this study that symbols and symbolic figures are sought to illustrate and foster comprehension of the meaning of psychic contents from the spontaneously emerging unconscious (Hälg, 1980). Leuner (1970) wrote of the 12 standard GAI situations and showed how they have symbolic meaning to the representation of different intrapsychical conflicts.

The analysis showed that the four distinct structuring factors utilized in GAI include: (a) the partitioning of the therapeutic space into an area of experience and one of reflection; (b) the use of imagination as a medium highly loaded with affect; (c) the use of relaxation and regression to support the ego; and (d) the parameters for applying guided affective imagery in accordance with the diagnosis of the patient, such as frequency, duration, motif, style of guidance, and management principles (Kottje-Birnbacher, 1992). The findings of this study indicated that the goal of therapy is to develop the personality of the patient in a self-reflective, understanding, and analyzing process. The therapeutic imagery sessions are meant to illustrate the internal situation of the patient. The nature of the motif design by the therapist and the patient’s images can illuminate structural features in a symbolically encrypted form. Patient and therapist reflect back to examine the inner world of primary process images of the patient and relate the structural characteristics to his or her developmental history and current reality (Kottje-Birnbacher, 1992).
The results of this study also highlight that, with the introduction of the KB in the context of psychodynamically oriented therapy, two levels of communication are established: the level of imagination with dominance of the emotional experience; and the level of the conversation with the dominance of the cognitive processing (Kottje-Birnbacher & Sachsse 1986, Kottje-Birnbacher 1992). Patient and therapist collaborate in a cognitively-oriented relationship to understand the emotions, what is produced in the imagination, and the implications this has on waking life situations. The GAI environment can create a space where the imagination can develop into a sheltering and comforting environment. The patient is in a state of relaxation, accompanied by a caring and trusted therapist whose guidance is assisting the imaginal process. This type of monitoring in a tension-relieving environment allows for the strengthening of the patient’s ego-structures (Ullmann, 1988).

In this analysis it was found that it takes time for clarification and processing of the inner conflict situations and to try out new ways of interacting in waking life. GAI gives impetus to these new ways of being. In addition to being perceptive of the situation in terms of interpretation (how the patient behaves, what she/he avoids, ascertaining what previous experiences may mean), the therapist may also put it into a development task framework, where the patient emerges with new coping techniques (Kottje-Birnbacher, 1992).

Consistent with the findings of this study, the activation of patient resources during the course of imagination is a way of enhancing ego-strength and improving the working alliance. This dimension has always been an important principle of GAI (Leuner, 1985; Lang, 1997). Thus, one can even go back into the developmental history.
of the patient’s past by means of imagery to see what is yet to be and involve the deep and symbolic level of the working alliance (Rosenberg, 1996).

From the results of this dissertation it was found that the response of all sensory qualities is an important factor in allowing the vividness of imagery to unfold. These qualities are often neglected although, if acknowledged and encouraged, they can introduce the patient to their richness. In addition to the intensification of seeing and hearing, there are the “lower” senses like smell, touch, temperature sensation, and kinesthetic feelings. These are called vibratory sensations that have a more direct connection to the limbic system and thalamic areas of the brain. They are especially important in the strengthening of the physiological experience because feelings are deeper than physical correlates (Rosenberg, 1996).

Aligned with the findings of this analysis is the work of Franz Sedlak (1995) who describes the primary and secondary processes as the dynamic elements central to GAI psychotherapy. The construct of primary process has evolved from the original Freudian concept of a primitive, regressive mode of mental functioning to one that continues to develop throughout the whole of life (Frick, 2008). The primary and secondary processes work in a parallel and complementary way in everyone (Holt, 2005; Noy, 1989). GAI is neither a purely verbal process-oriented psychotherapy, nor a purely imaginative method. Rather, it occupies a middle position, as imagination and technique of the therapeutic dialogue are combined through the process of GAI in specific ways. In contrast to other imagery methods, the GAI process includes both therapist and patient in direct conversation with one another during the imagery. Similar to the findings of this study, the communication in the imagination phase is determined by the fact that two processes,
namely imagination and verbalization of imagination that are linked together, take place at different levels of consciousness. One can imagine these two processes as two opposite poles; a tension is created by linking the two fields. This tension is inherent in the procedure of GAI imagery and cannot be eliminated. We therefore need to combine the imagination (primary process) and the verbalization (secondary process) as harmoniously as possible to reduce much the tension (Sedlak, 1995).

Similar to the current study, the link between imagination and the verbalization process is initially difficult for the patient to juggle. After all, there is imagery production and imagery conversation going on at the same time. However, the therapist observes from the outside and steers the client via skillful interventions. The observation of the dream is only possible through the communication of the client and this explains why the communication between therapist and client is so essential in the imagination phase (Sedlak, 1995).

This study reinforces one of the basic assumptions of psychodynamic theory and its implementation. The implementation is the use of imagery, particularly involving the principle of symbolic representation. As part of a formal controlled regression to the level of primary process thinking and experiencing, there is a pictorial representation of inner conflicts and repressed or separated object relationships. This analysis showed that disturbances are treatable on the neurotic level without major structural modifications by the standard KIP technique:

1. A developed defense guarantees a sufficient separation between primary and secondary processes. It allows the patients to slide into the imagery knowing that any anxiety experienced can be managed. The patient is clearly able to
quit at any time and is fully aware of the differences between fantasy and reality.

2. The neurotic ego controls have considerable ego strength. Emotions can be admitted and unconditionally accepted. When fear arises in the imagination, it can, with the assistance of the therapist, almost always be endured.

3. Neurotic patients usually have a mature symbol development ability and symbol use capacity. The emerging images and symbol characters can be used and therefore be described as helpful symbols, and act as a protective measure.

4. The neurotic structure is characterized by the predominance of structural conflicts and the resulting ambivalence tensions can be endured (Dieter-Facharzt, 2000).

Findings of the current study have indicated that the dimensions of the KIP described by Leuner (1994b) apply (conflict management, satisfaction of archaic needs, and promotion of creativity). Until a few years ago, however, borderline disorders as a contraindication to treatment were the subject of guided imagery psychotherapy. Today, the assessment fundamentally has changed.

GAI has shown to be a deep psychological treatment method, proven to work for severe personality disorders and often superior to other methods that have failed. It was similarly shown in this analysis that the GAI method helps the patient to a controlled regression in the therapeutic process (i.e., the risk of malignant regression is minimized) and thereby optimally focuses the vital adaptation of the therapy process and the therapist behavior so he or she can perform at a functioning level (Sachsse, 1989; Dieter-Facharzt,
This study concurs that the main advantage of KIP lies in the possibility that it is entirely aimed at the integration of the split between self and object representations on a vivid sensory-specific experience-based level. The reality of the patient is dramatically improved; his identity and the diffusion empathy disorder for himself and others are improved and the ability to solve previous individuation and autonomy conflicts and thus to experience holistic-satisfactory object relationships can significantly increase (Dieter-Facharzt, 2000).

The findings of this analysis indicate that current emotional dysfunctions and central relationship conflicts are symbolically represented in the dream imaginary images, and thus made accessible for processing (Kottje-Birnbacher, 2001a). Similarly, this study found that these images occur spontaneously and are grounded in the human ability to represent unconscious, intrapsychic states in symbolic and pictorial involuntary form (Bahrke, 1997a). Using these images can evoke unconscious motivations, fantasies, conflicts, defenses, relationships, and transference of resistance and be illustrated at the symbolic level as well as in verbal dialogue (Kottje-Birnbacher, 2001a). In addition to the goal of gaining insight into one’s personality, KIP can identify and assist with conflict clarification and processing at the symbolic level (Bahrke, 1999). By processing an image problem on the level associated with its problem, schemas are activated in a much less threatening way (Stigler & Pokorny, 2001). The symbolic nature of the image leads to a shift from negative feelings to positive emotions. The KIP processing allows the symbolic representations to be interpreted and new patterns of thinking and feeling to occur (Ihme & Salzer, 2005). Symbol formation creates the ability to make important communications intrapsychically and interpersonally (Bahrke, 2005b).
The analysis confirms that the Core Conflictual Relationship Theme (CCRT) (Luborsky & Crits-Christoph, 1998) method works within a psychodynamic framework and was developed to assess the relationship patterns, the internalized relationship schemes, and central relationship conflicts. It is based on the analysis of the relationship episodes extracted from the client’s narrations during the psychotherapeutic settings. The application of the CCRT method in the research of guided affective imagery psychotherapy enables the therapists to recover not only the central relationship conflict theme of changes during the psychotherapy, but also those aspects of others relating to the patient that are elusive in verbal settings, due to the primary process mode processing during the imagery. CCRT identifies an internalized relationship diagram, the central relationship conflict, as well as features and persistent patterns of relating to others. These are extracted from relational episodes such as short stories (narrative sequences) generated during psychotherapy (Knížová, 2006). Consistent with this study, positive relationship episodes in the imagery can be explained through a symbolic shift from non-human objects (landscape, objects), through the living objects (plants, animals), to human beings, which leads to a more powerful symbolic shift, and allows one to create more positive relationships in the imaginal realm (Stigler, Pokorny, 2002, Stigler, 2006).

Similar to the findings of this analysis, Kächele (2006) pointed out in his lecture given at the International Congress of Applied Psychotherapy of ÖGATAP in Vienna that the most significant factor in all psychotherapies is the psychotherapeutic relationship. At the start of therapy, the initial contact of patient and therapist must cultivate an environment of authenticity and openness that will serve to shape the alliance. The importance of a good therapeutic relationship can be regarded as the most reliable
therapy outcome determinant (Orlinsky, et al., 1994). The current study results confirm that if the patient’s relationship is not seen as a positive resource, the likelihood of a positive outcome is rare. It has been empirically proven that if the therapeutic relationship is too intense and focuses primarily on problem solutions, the therapeutic outcome will be unfavorable (Henry et al., 1994; Crits-Christoph, 1997). By its nature, the first part of therapy is to define the client’s problems. In light of this, it is of great importance that the activation of resources begin immediately. If the therapist points out the client’s strengths and positive aspects and implicitly shows respect to the client, it offers him something that is most needed. Resource statements from the therapist need not always have a declarative form. The therapist may also make passing expressions, offer concepts, content, and images and incorporate them into his speech so that they have a positive significance for the objectives of the patient. This can be accomplished without having them explicitly stated. Resource activation is a pervasive principle. It runs through the whole therapy process. The analysis results show that resource activation requires a resource-perception and thinking on the part of the therapist (Grawe, 1998).

The findings of this study are consistent with Wilfried Dieter (2006) who outlined two areas for future development in KIP. First, the newly acquired knowledge from allied disciplines of psychoanalysis and neuroscience technology must be integrated into the theory the KIP technology. Second, a deeper investigation is needed that revolves around the question of the specific importance of imagination for the psychodynamically oriented treatment process with the KIP. Likewise, this analysis indicates a similar concept stated by J. Walter Roth (1993) in his article entitled, “The GAI as
spiritual/transpersonal therapy,” that takes a strong stance in support of incorporating humanistic-spiritual-transpersonal psychological philosophies into the practice of GAI. The results of this current study align with his belief that GAI can be even more effective and have broader implications if such a spiritual approach were utilized as GAI continues to develop.

Within the literature there were a few noted incongruences. It was found in the analysis and stated in various articles (e.g., Klinger, 1987; Birnbacher & Kottje-Birnbacher, 1995, 1996) that GAI is a major therapeutic modality in northern and central Europe with national organizations offering training conferences and seminars, training manuals, an involved training curriculum, and a carefully monitored certification process for GAI therapists (Klinger, 1987). The Birnbachers (1995) addressed the issue of the ethical aspects of psychotherapy as it pertains to the training of therapists. Inconsistent with the findings of this study is the fact that, within the American literature, the issue of GAI training was not addressed. No mention of GAI proficiency on the part of the researchers or therapists was cited. Similar to the findings of the analysis, this is incongruent with the European attentiveness to adequate and rigorous GAI training for therapists who work with clients in these psychotherapeutically in-depth imagery sessions.

Findings of the current study confirm that GAI, although found to be effective in many situations, is not always an efficacious modality for certain presenting problems. An American article addressing the use of GAI with alcohol problems (Klinger, 1987) found GAI to have no effectiveness. Likewise and consistent with the analysis, the implementation of GAI techniques have not been shown to be effective with genetically-
related schizophrenia. However, there is no indication in the literature that states the twelve factors are inconsistent with the findings of this analysis.

Two Carl G. Jung quotes from his *Collected Works* and another from the newly released *The Red Book* are of particular relevance to GAI and the findings evoked from this analysis. These are:

“Only what is really oneself has the power to heal” (CW 7: 258).

“If attention is directed to the unconscious, the unconscious will yield up its contents, and these in turn will fructify the conscious like a fountain of living water. For consciousness is just as arid as the unconscious if the two halves of our psychic life are separated” (CW 14: Mysterium Coniunctionis, p. 193, p. 163).


**Implications Regarding Practice**

Consistent with the findings of the current analysis on the topic of GAI, I have synthesized all the essential healing factors into a single illustration of the dynamic, interactive process which takes place between patient, therapist, and the underlying traumatic event. The integrated process is portrayed in Figure 6. It depicts the central discovery of this dissertation. The arrows indicate the direction of the activity taking place between the source of the process and the object or destination of the process.

To illustrate the integrated process, the following hypothetical vignette exemplifies how all the major healing factors associated with GAI can be applied in practice. The reader is encouraged to consult the glossary in Chapter I. to understand the meaning of the terms used in Figure 6. representing the roadmap of the integrated GAI process.
**Figure 6.** Roadmap of the Therapist – Patient – Trauma Relationship in Guided Affective Imagery Therapy.
A patient goes to a therapist seeking ways to overcome repeated and involuntary reactions to certain life events. Such unwanted reactions have persisted for many years. Incongruity has emerged as a result of not being able to reach the patient’s motivational goals. Due to the core conflict between a trauma event in early childhood and the way the unconscious implicit memory has perceived the event and seeks to avoid the potential of its recurrence, the patient has placed a barrier between him/herself and the achievement of motivational goals. The findings of this study show that this self-reinforcing process continually thwarts goal attainment and manifests itself in avoidance behavior which exacerbates the situation. The incongruence disrupts mental processes that would otherwise have allowed for the attainment of such goals. Patient anxiety and depression result. The therapist recognizes that the anxiety is likely due to some repressed event or events in the patient’s early childhood. Indeed, the therapist recognizes that the patient’s current impulsive behavior reactions to current events result from the deeply-ingrained primary process operating from implicit memory in the patient’s unconscious. The therapist further may posit that reactions observed in the patient’s behavior take place today because of an earlier neurological mapping occurring in the amygdala many years ago. Over the years, the hippocampus has been unable to control cortisol levels triggered by the amygdala as the patient experiences events similar to those that initiated the original trauma. The patient reacts to these situations in the same way each and every time. It is this behavioral response that the patient seeks to change. In addition, the patient’s stress level is heightened whenever a situation is perceived to be like the initial threatening event. As the current study results indicate, high levels of stress trigger the right Prefrontal Cortex where avoidance goals and
negative emotions are posited to “reside.” The right Prefrontal Cortex becomes dominant. Concomitantly, the high stress levels from the cortisol release repress the patient’s ability to operate from the more logical left Prefrontal Cortex where approach goals and positive emotions reside. Therefore, a more rational reaction to the perceived event is not possible.

The therapist proceeds with a treatment plan involving the use of GAI to reach the core conflict. Consistent with the findings of the analysis, GAI is chosen because of its ability to reach both the primary and secondary process levels in patients. Theorizing that the patient’s reactions come from the primary processing with its origins in the patient’s amygdala having access to the implicit memory, the therapist begins treatment. The clinical objective is to utilize regressive guided imagery to reach a place within the patient where the implicit memory can be accessed, processed, and altered.

From the initial GAI therapy sessions, the patient has had a good rapport with the therapist. Fortunately, the patient has no negative transference issues with respect to the therapist which might otherwise hinder the ability of the patient to enter the imaginal plane. Similarly, the therapist has no negative countertransference issues with respect to the patient which might interfere with the ability of the therapist to provide comforting and appropriate coping strategies. During the process of the first regressive imagery session, the patient often becomes extremely anxious about confronting the fearsome imaginal entity that exists at the edge of the woods. The patient may react with intense fear and begin to panic. Similar to the current study findings, the therapist actively introjects him/herself into the patient’s imagery, offering reassurance by suggesting various coping strategies.
As indicated in the dissertation findings, after several more GAI imagination sessions, the patient goes to deeper levels of imagery that evoke the psychic core conflict. Eventually, the patient is able to confront the imaginal source of the traumatic event as it is symbolically evoked and represented in the implicit memory. Consistent with this analysis, since the implicit memory has no verbal expression and can only operate at a symbolic level, the evoked symbol must be brought to the conscious level. Here, the symbol can be linguistically expressed, dealt with rationally, thereby permitting the opportunity to remap the experience to explicit memory. This must occur if the patient is to overcome the persistent core conflict and the ruminating responses that cause him/her to react in dysfunctional ways.

The fundamental and essential “evoking” process posed by this dissertation is that the patient reaches the source of the traumatic event through the above process called contextualization. It is facilitated by the guided imagery. Contextualization happens when a patient is able to reach an experience plane which is similar to the one that existed at the time of the initial trauma. The therapist, through the patient’s imagery, attempts to support the most realistic environment for the traumatic images to emerge and be confronted. The experience is similar to a person reliving a fearful carnival ride from early childhood which becomes revived by the smell of cotton candy. Consistent with this analysis, the use of GAI and the symbolism in the image are the means of bringing to view the traumatic event in the same way that the smell of cotton candy evokes the reliving of the frightening carnival ride.

Similar to the findings of the current study, there is some point in the imagination process where the patient is encouraged to confront and deal with the symbolic “creature”
that represents the source of his/her trauma. During this confrontation the therapist can make a very valuable contribution. The therapist encourages the patient by suggesting alternative options that utilize existing skills that the patient already possesses. These suggestions, once enacted, can subdue the “creature” and offer needed ego strength to the patient. These resources are activated in the patient as positive potentialities that the patient is particularly adept at, such as good interpersonal skills, or other characteristics/abilities that can enhance the self-esteem.

In consonance with this study’s findings at the neuronal level, the repeated activation of resources may be understood to bring about a reinforcement of the neural path in explicit memory that eventually may displace the precedent primary process which was associated with the traumatic event in the implicit memory. An important factor is that the resource activation can only be initiated at the conscious level. The neurological remapping has occurred in conjunction with the involuntary cascading of “second messenger” events without the use of drugs.

The activation of resources takes place at a conscious level in conjunction with the dialog between patient and therapist. Similar to the results of the analysis, the patient’s emotionally charged and impulsive reactionary responses that previously existed only in implicit memory have been neurologically remapped to respond from explicit memory at a consciously controllable, rational level. This occurred as the result of resource activation from the conscious secondary processing that was facilitated by the dialog on the verbal plane. With the ability to evoke the symbol from the unconscious and process it on the verbalization plane, the therapist has been able to clarify the
underlying problem to the patient. The secondary process has thereby replaced the primary process in all aspects with regard to the traumatic event.

At this point the continued reinforcement of the neuronal pathways in the secondary process way of functioning may be seen as crucial. Shown in the findings of this study, GAI provides a therapeutic tool to assist in this process. The follow-up post processing period after completion of the imagery session supplies the mechanism for encouraging the patient-therapist dialog which will strengthen the new neural pathways. The post processing is always required to ensure that the remapping is in place and the patient reacts from the secondary process path in daily life. Finally, catamnesis follow-up therapy is recommended to check how successful the patient has been in implementing the secondary process way of thinking.

As brought out in the literature and summarized here, there is evidence from the model that GAI activation seeks:

- To immediately manage anxiety with Coping strategies
- To reach a Context for the patient to re-experience the traumatic event at an unconscious level through symbolic representation and process the dynamics on a conscious level via verbalization
- To Clarify the source of trauma in the patient
- To approach the Core Conflict through Confronting and Mastering
- To inhibit Primary Process neurological functioning and reinforce Secondary Process functioning on a permanent basis
- To Activate patient Resources to enable a remapping of neurological pathways away from Implicit Memory processes and toward Explicit Memory processing
• To encourage Post Processing to reinforce Secondary Process pathways

**What makes an effective psychotherapeutic practice?**

There were aspects revealed as a result of the analysis that have implications for the practice of psychotherapy. They refer to the qualities necessary for a therapist to be effective and the guidelines for an effective therapeutic process.

The findings of this analysis concur with Grawe (2007) who states that in order for a therapist to be effective he/she needs to convey a warm-hearted, optimistic, extroverted, and confident nature. Although Grawe indicates that ideally these qualities would be best inherent in the therapist, he also explains that they can be learned (neurologically remapped) through adequate supervision and repeated processing. He goes on to say that much of what transpires to make therapy effective happens in the implicit mode of functioning. For instance, the therapist’s posture and vocal tone subtly communicate the level of empathic concern which in turn are significant components of a positive attachment relationship. The findings of this current study likewise align with Harrigan and Rosenthal (1986) who indicate that therapists who lean slightly toward the patient, with arms open rather than crossed, hands relaxed on their lap, nod repeatedly, and when talking use lively gestures are evaluated more positively than those who don’t. The therapist’s voice should be warm, free from fear, and professionally competent (Grawe, 2007). Male therapists are advised to cultivate warmth in their voices, whereas it is suggested that female therapists convey confidence in their tone (Blank, Rosenthal, & Vannicelli, 1986). These voice aspects convey, again, characteristics important for
positive attachment relationships and can be volitionally altered with proper training (Robbins, 1979).

Similar to this study’s findings, the guidelines for an effective therapeutic process involve the enumerated items briefly described below (Grawe, 2007):

1) Explore what implicit perceptions the patient is currently experiencing and the significance of these to his/her needs and goals. This can be accomplished by the therapist shifting from the content level to the process level.

2) Think carefully about how to structure what is said and done.

3) Remember that it is imperative to have positive attachment experiences between patient and therapist. This occurs primarily on the (nonverbal) implicit mode of functioning. The therapist attends fully to the patient with their implicit and explicit message with confidence, warmth, and competence. The therapist helps the patient to be willing to take the necessary action in order for the patient to reach the targeted therapeutic goals.

4) Create opportunities for the patient to experience a number of positive perceptions around his/her need for control. Involve the patient by encouraging him/her to make decisions regarding the fulfillment of important goals and needs.

5) Purposely create an environment where the patient experiences self-esteem enhancing perceptions. Think of ways to authentically convey respect to the patient.
6) Make every attempt to ensure that the patient experiences positive and enjoyable times in therapy. This can be accomplished through laughing together or expressing delight in a success. The goal is to have as many positive emotions expressed in each session as possible.

7) Have a clear focus for each therapy session. Try to avoid moving back and forth from one problem to another. The changes necessary on a neuronal (synaptic) level take place as a result of lasting and repeated activation. For implicit learning to occur there must be intensive and repeated facilitation.

8) When processing a problem that is relevant to the therapeutic goals, focus on the change that is possible. This can involve outlining how to better cope with or master various difficulties. Problem activation needs to progress quickly to specific mastery techniques or clarification processing.

9) Before the discussion involving the problem activation or clarification it is important to engage in approach priming. This involves an approach modality that activates positive goals and emotions.

10) Engage only in motivational goals that have significant relevance to the patient.

11) As much as possible ensure that the new neurological learning will be activated in the normal living situations. This daily reinforcement is crucial for a successful remapping in the explicit mode of functioning (Grawe, 2007).
An actual therapeutic application of GAI in service to the needs of the dying

The literature written about KIP therapy often addresses psychotherapeutic and somatic conditions such as anxiety disorders, narcissistic personality disorder, dermatological conditions, phobias, and depression. KIP can also be a venue to prepare one for dying. A case vignette of unique interest is highlighted in an article by René Schramböck entitled, “Im weißen Kleid mit dem weißen Schiff ins weiße Dorf. Sterbebegleitung mit KIP” [In a white dress with a white ship into the white village. Dying with KIP.] Briefly, it is a poignant account of a 55 year-old woman, Mrs. G, who was given a poor prognosis after chemotherapy following breast cancer surgery. Mrs. G studied at an art college and was an avid painter. She expressed her feelings and thoughts in pictures and after being diagnosed, was drawn to the idea of KIP and entered therapy. The psychotherapy centered on issues involving the disease process, body image disturbance, autonomy, and problems in her marital relationship.

The KIP sessions began by dealing with symbolic reconciliation and separation represented in imagery where she envisioned herself a marine animal. Over many sessions, she experienced a positive change in her marriage and a shift in perception of the disease she had. During a relaxation trance involving magical oil, she saw herself surrounded by soft cushions which later she would need in waking life as a support for her tender body. Four days before her passing she had an imagery motif, foretelling of her death, of a “meadow and ship” where she saw a lush green meadow. In the meadow, she was wearing a white dress and walked across the meadow where she lay in the grass and enjoyed the soothing calm. Initially, she looked at the sky and then her eyes drifted
toward the shore where she saw a medium-sized white cruise ship. After a time, she climbed aboard the white ship. She stood in a white dress at the railing on the upper deck where the wind fluttered her dress as the ship sailed along the coastline. She enjoyed the wind and the ride in the big white ship. The imagery then moved to a village with white houses which reminded her of a Greek village she once knew. She got off the ship and walked among the white houses. She felt remarkably peaceful in the white village. Mrs. G. had a premonition that she would soon be leaving this world. Four days later while her husband was calling the doctor from her hospice room, she died peacefully in her sleep. He then sprinkled rose petals on the white nightgown she was wearing.

Over the next 14 days, the therapist thought of the patient at least once a day, but her death left the therapist in no way feeling burned-out or empty. Quite the contrary, the therapist had a good feeling because Mrs. G. had reconciled with her family and her self. She died with a smile on her face. Conventional/alternative medicine or psychotherapy cannot prevent cancer, but the manner in which she died was how Mrs. G. imagined it. Among other things, the therapist had remembered how Mrs. G. had several premonitions in her imagery of what the future would hold for her.

A post script by the author relays a story of another instance where Hanscarl Leuner lovingly cared for his colleague/friend, Mrs. Eibach, at her deathbed where he said to her: "It is a pity that we, with the KB, have created nothing for this situation ...": questioning the value of KIP if it has no use for the dying. The author further states that Hanscarl Leuner was not aware at the time of how well the KIP was suited for the dying. The author goes on to say how she would love, now, to shout up to him, “Professor, we’ve got something!”
Limitations of the current study

One significant limitation of this study was the absence of English language literature on GAI. This reflects a lack of dissemination of GAI information worldwide. All but 15 of the 465 GAI articles were in a foreign language. This resulted in numerous translated versions for each article because of idiomatic differences and multiple word meanings. Main concepts were understood, but there were subtle nuances that were not captured.

Another limitation was the availability factor of locating the articles once the titles were known. This required efforts on the part of several librarians in the United States and Europe where many items were simply not found or available.

There exist only a limited number of controlled studies involving discrete healing factor variables. There have been only a few research grants or corporately funded studies in Europe to confirm the effectiveness of GAI as a healing intervention.

The fact that American therapists are not engaged in or writing about the practice of GAI as a primary therapeutic endeavor limited potential insights that could have added richness to the comparison and contrasted the segments of the research question. GAI is not widely respected in the US as being an effective therapeutic technique.

The neurological/biochemical aspect of behavior change is relatively new on the horizon of psychotherapy and, as a result, quantitative measurement of neurological changes as they affect behavior has not been undertaken to this point in time. Most of the reported neurological influences were conducted with rats and monkeys. The verification has limited the applicability to human beings.
Recomendations for future research

Future research in the area of GAI might include more clinically-controlled studies involving the twelve coding factors used in this analysis. Future investigation might also address quantitative measurement of the neurological changes that occur as a result of GAI. Research needs to reveal the neurological foundation of contextualization and resource activation and how outcomes result from the GAI technique at a neurological level. This will enhance the efficacy of GAI. Further research should be focused on the neurological underpinnings of GAI especially in defining what processes are at work and how contextualization contributes to the promotion of secondary processing. Other proposed research studies could investigate the use of GAI involving individuals with sensory deprivation or other sensory dysfunctions. The joint involvement and coordination of American and European therapist/researcher exchanges in GAI could promote more interaction between the continents and inspire a flow of valuable interchange on this important topic.
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Appendix A. European Literature Meta-analysis Coding

*NOTE: Titles with **bold text** are presented separately in GAI Effectiveness Studies, Appendix C.*

### Table A-1. Quick Look Coding Sheet of European GAI Literature

<table>
<thead>
<tr>
<th>Title * (German &amp; English)</th>
<th>Author</th>
<th>Type (Qual., Quan., Tutorial, Case Study)</th>
<th>Subjects</th>
<th>Presenting Symptoms</th>
<th>Therapeutic Outcome</th>
<th>Reported Effectiveness (+, +, 0, –, – or p-value)</th>
<th>Intervention Factors &amp; Process Codes**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Zur kombinierten Behandlung eines 12-Jährigen mit dem Sceno-Material und dem Katathymen Bilderleben [The combined treatment of a 12-year-old with sceno material (toys) and GAI.]</td>
<td>Otto Glanzer</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Anxiety manifested in refusing to talk, school anxiety, over sensitivity, fear of authority, strong dependence on mother, poor school performance</td>
<td>Anxiety eliminated, verbal ability normal, less sensitive, comfortable with authority, independence from mother, improved school performance</td>
<td>++</td>
<td>CoreCnflt-Trans, Cat, Pri/Sec, SymInterp, TI,</td>
</tr>
<tr>
<td>2. Therapeutisch Arbeit mit Symbolen: Über die behandlung eines narzisstisch gestörten jungen mit dem katathymen bilderleben [Therapeutic work with symbols: About the treatment of a narcissistic boy with guided affective imagery]</td>
<td>Doris Voss-Coxhead</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Narcissistic personality disorder, inability to concentrate, poor school performance, motor restlessness, aggressiveness</td>
<td>Strengthened juvenile ego structure, improved concentration and school performance, calmer, decreased aggression</td>
<td>++</td>
<td>Cat, SymInterp, Pri/Sec, TI,</td>
</tr>
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| Title *  
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<tr>
<td>(German &amp; English)</td>
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<tr>
<td>Author</td>
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<td>Subjects</td>
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<td>Therapeutic Outcome</td>
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<td>Reported Effectiveness (+, +, 0, −, -- or p-value)</td>
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<tr>
<td>Intervention Factors &amp; Process Codes**</td>
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<tr>
<td>3. Symbolik und verlauf in der therapie eines dreizehnjährigen stotterers mit den katathymen bildereien [Symbolism and process in the therapy of a thirteen year-old stutterer using guided affective imagery]</td>
</tr>
<tr>
<td>Paul Hülgl</td>
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<tr>
<td>Qualitative Case Study</td>
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<tr>
<td>1</td>
</tr>
<tr>
<td>Stuttering, poor school performance, eye tic, compulsive nail biting, motor restlessness, test anxiety</td>
</tr>
<tr>
<td>Stuttering eliminated, improved school performance, more confident and spontaneous in personal and school-related interactions, more relaxed</td>
</tr>
<tr>
<td>++</td>
</tr>
<tr>
<td>SymInterp, TI</td>
</tr>
<tr>
<td>4. Konfliktbearbeitung und Ressourcenaktivierung: Die katathym-imaginative Psychotherapie als tiefenpsychologisch-systemisch fundierte Therapie [Conflict and resource activation: The KIP as systemically psychodynamically-informed therapy]</td>
</tr>
<tr>
<td>Leonore Kottje-Birnbach</td>
</tr>
<tr>
<td>Qualitative Tutorial with Case Study</td>
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<tr>
<td>1</td>
</tr>
<tr>
<td>Suicidal crisis, depression, aggressive, overly responsible, emotionally distant, impatient</td>
</tr>
<tr>
<td>No suicidal ideation, more patient, depressive feelings under control, enjoying a healthy intimate relationship, relaxed sense of responsibility</td>
</tr>
<tr>
<td>++</td>
</tr>
<tr>
<td>SymInterp</td>
</tr>
<tr>
<td>5. Katathym-imaginative psychotherapie bei borderlinestörungen [Guided-affective imagery in borderline disorders]</td>
</tr>
<tr>
<td>Wilfried Dieter-Facharzt</td>
</tr>
<tr>
<td>Qualitative Tutorial with Case Study</td>
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<tr>
<td>2</td>
</tr>
<tr>
<td>Chronic depression, suicidal thoughts, psychosomatic complaints, marital discord</td>
</tr>
<tr>
<td>The two vignettes showed the difference in two patients with borderline disorders and their available resources and symbol capabilities</td>
</tr>
<tr>
<td>+</td>
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<tr>
<td>SymInterp, Pri/Sec, ResAct, PostProc, CorConTrans, Transf/Ctransf</td>
</tr>
<tr>
<td>6. Ergebnisse der katathym-imaginativen psychotherapie: Die effektivität der katathym-imaginativen psychotherapie in einer ambulanten längsschnittstudie [Results of guided-affective imagery psychotherapy: The effectiveness of the kathathym-imaginative psychotherapy in a longitudinal outpatient study]</td>
</tr>
<tr>
<td>Jörn von Wietersheim, Eberhard Wilke, Markus Röser, and Gerhard Meder</td>
</tr>
<tr>
<td>Quantitative</td>
</tr>
<tr>
<td>66</td>
</tr>
<tr>
<td>Neurotic disorders many with dysthmia</td>
</tr>
<tr>
<td>Effect sizes were larger than 0.8 in somatic symptoms, mood, depression, and life satisfaction</td>
</tr>
<tr>
<td>++</td>
</tr>
<tr>
<td>Cat, TI</td>
</tr>
<tr>
<td>7. Die effizienz einer 20-stündigen C. Kalessa</td>
</tr>
<tr>
<td>Quantitative</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>Exhaustion, sexual</td>
</tr>
<tr>
<td>Improved energy level,</td>
</tr>
<tr>
<td>++</td>
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<td>TI, Som</td>
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</table>
| Title *  
(German & English) | Author | Type (Qual., Quan., Tutorial, Case Study) | Subjects | Presenting Symptoms | Therapeutic Outcome | Reported Effectiveness (++, +, 0, -, -- or p-value) | Intervention Factors & Process Codes** |
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<tbody>
<tr>
<td>Kurzpsychotherapie mit dem katathymen bilderleben: Eine testpsychologische untersuchung [The efficacy of a 20 hour brief psychotherapy with guided affective imagery: A psychological test investigation]</td>
<td>and F. Jung</td>
<td>Qualitative Tutorial, Case Study</td>
<td>1</td>
<td>dysfunction, insomnia, phobias, anxiety, depression, heart palpitations</td>
<td>no insomnia, increased libido, reduction of psychosomatic disorders, increased interpersonal contact, greater emotional stability, depression reduced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Die katathym-imaginative psychotherapie: Ein erweiterter psychodynamischer behandlungsansatz am beispiel einer kolitisbehandlung [The guided-affective imagery: An extended form of psychodynamic treatment exemplified by colitis therapy]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Qualitative Tutorial with Case Study</td>
<td>1</td>
<td>Chronic colitis, low self-esteem, minimal social interaction, unassertive, dysfunctional intimate relationship</td>
<td>More realistic, satisfying intimate relationship, more assertive, greater self-esteem, colitis not evident for the last six months of therapy, able to accurately identify emotions</td>
<td>++</td>
<td>SymInterp, Som</td>
</tr>
<tr>
<td>9. Emotions and primary process in guided imagery psychotherapy: Computerized text-analytic measures</td>
<td>Michael Stigler and Dan Pokorny</td>
<td>Quantitative Case Study</td>
<td>1</td>
<td>Panic attacks</td>
<td>Measurement support hypothesis that guided-affective imagery psychotherapy mobilizes emotions, primary process, and referential activity</td>
<td>++</td>
<td>TI, Pri/Sec, SymInterp, Cat</td>
</tr>
<tr>
<td>10. Psychotherapie und Katathymes Bilderleben bei einer Patientin mit kutaner Sarkoidose des Gesichtes [Psychotherapy and GAI in a patient with cutaneous sarcoidosis of the face]</td>
<td>C. H. Höring</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Cutaneous sarcoidosis on right cheek. Underlying issues included depression, anxiety, insomnia, socially isolated, lonely, fearful of colleagues, low self esteem, hopeless</td>
<td>Depression greatly lessened, improved self esteem, confident in social situations, hopeful, the physical condition of the cutaneous sarcoidosis greatly improved</td>
<td>++</td>
<td>CoreCnft-Trans, Pri/Sec, Sym</td>
</tr>
<tr>
<td>11. Erfahrungen mit Heinz</td>
<td>Tutorial</td>
<td>Adolescents</td>
<td>A stronger</td>
<td>+</td>
<td>CoreCnft</td>
<td></td>
<td></td>
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<tr>
<td>Title * (German &amp; English)</td>
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<tr>
<td>dem Katathymen Bilderleben als Gruppentherapie bei Jugendlichen [Experience with the GAI as group therapy in adolescents]</td>
<td>Hennig</td>
<td>Qualitative</td>
<td>with psychogenic and psychosomatic disorders</td>
<td>ego strength occurs for participants. A reshaping of interpersonal relations reflecting the ego integrity of the adolescent.</td>
<td>Trans, SymInterp, Pri/Sec, Transf/Ctransf, CoreCnflt-Trans, ResAct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Metoda témy centrálného vzťahového konfliktu v katatýmne-imaginatívnej psychoterapii [The core conflictual relationship theme in guided affective imagery psychotherapy]</td>
<td>K. Knížová</td>
<td>Tutorial</td>
<td>Relationship issues involving early life, parents and relatives, current relationships, and the therapeutic relationship</td>
<td>Change in relationship patterns, increase in positive reactions, more realistic desires and reactions to others</td>
<td>+</td>
<td>Pri/Sec, CoreCnflt-Trans, Transf/Ctransf, PostProc, ResAct</td>
<td></td>
</tr>
<tr>
<td>13. Das Katathyme Bilderleben in der Behandlung von Sexual störungen und gynäkologisch-psychosomatischen Symptomen [KB in the treatment of disorders of sexual and gynecological and psychosomatic symptoms]</td>
<td>Jörg Walter Roth</td>
<td>Quantitative</td>
<td>65</td>
<td>Sexual disorders and psychosomatic gynecological symptoms. Underlying issues included neurotic disorders and psychosomatic vegetative symptoms</td>
<td>Women: sexual disorders and psychosomatic gynecological symptoms improved or eliminated 80.9%; neurotic disorders and psychovegetative symptoms by 83.1% Men: sexual disorders success rate of 71.9%; neurotic disorders and psychovegetative symptoms by 75.4%</td>
<td>++</td>
<td>T1, Cat, Som</td>
</tr>
<tr>
<td>14. Primárny a sekundárny proces v katatýmne imaginatívnej psychoterapii [Primary and secondary process in GAI]</td>
<td>E. D. Uhroyá</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, PostProc, Neuro</td>
<td></td>
</tr>
<tr>
<td>15. Die dimension des leibes und ihre bildung im katathymen bilderleben: Hinweise</td>
<td>Jörg Walter Roth</td>
<td>Qualitative</td>
<td>8</td>
<td>Hypochondriacal symptoms</td>
<td>Five of the eight patients reported being satisfied with the results;</td>
<td>+</td>
<td>SymInterp, Som</td>
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<tbody>
<tr>
<td>zur therapeutischen anwendung am beispiel der hypochondrie [The dimension of the body and its importance in guided affective imagery: Notes for therapeutic applications using the example of hypochondria]</td>
<td>Hanscarl Leuner</td>
<td>Qualitative Tutorial Case Study</td>
<td>3</td>
<td>however, there were times of temporary sickness though not as severe or lengthy as before.</td>
</tr>
<tr>
<td>16. Grundlinien des Katathymen Bilderlebens (KB) aus neuerer Sicht [Outlines of GAI in a more recent view]</td>
<td>Leonore Kottje-Birnbacker</td>
<td>Tutorial</td>
<td>n/a</td>
<td>0</td>
</tr>
<tr>
<td>18. Strukturierende faktoren des katathymen bilderlebens [Structuring factors in affective guided imagery]</td>
<td>Rene Schrambö</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Poor prognosis</td>
</tr>
</tbody>
</table>

**Intervention Factors & Process Codes**

- CoreCnflt-Trans
- SymInterp
- Pri/Sec, Cat, Som
- Pri/Sec, ResAct, SymInterp, CoreCnflt-Trans, PostProc
- Pri/Sec, ResAct,
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<tr>
<td>Schiff ins weiße Dorf. Sterbebegleitung mit KIP [In a white dress with a white ship into the white village. Dying with KIP]</td>
<td>ck</td>
<td>Qualitative Case Study</td>
<td></td>
<td>after breast surgery for breast cancer, marital discord, body image disturbance, narcissistic personality structure</td>
<td>with her husband, deep, spiritual connection with her children, significant GAI symbolization prior to death</td>
<td>+</td>
<td>SymInterp, PostProc, CoreCnflT-Trans, Transf/Ctransf</td>
</tr>
<tr>
<td>20. Kurztherapie einer zwangstrukturierten Neurose mit dem katathymen Bilderleben [Short-term therapy of an obsessive compulsive neurosis with guided affective imagery]</td>
<td>W. Koch</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Severe character disorder with obsessional ideas, work productivity hampered, social inhibitions</td>
<td>Character structure transformation, improved social adaptation, advanced career position</td>
<td>+</td>
<td>Pri/Sec, ResAct, Transf/Ctransf, SymInterp, CoreCnflT-Trans, Cat</td>
</tr>
<tr>
<td>22. Stationäre psychosomatische Therapie in der Curtius-Klinik in Bad Malente-Grensmühlen Zur Integration körper therapeutischer, imaginativer und verbaler Zugänge zum Patienten im Rahmen eines psychodynamischen Therapiekonzeptes [Psychosomatic inpatient therapy in the Curtius-Klinik in Bad Malente-Grensmühlen to integrate physical therapeutic, imaginative and verbal approaches to the patient as part of a psychodynamic therapeutic approach]</td>
<td>Eberhard Wilke</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Chronic pain after sexual abuse, low self-esteem, guilt, non-verbalization of trauma</td>
<td>A bridge was built between overwhelming emotions and verbal processing and understanding</td>
<td>+</td>
<td>Coll/Adj Psy, Pri/Sec, CoreCnflT-Trans, PostProc, Transf/Ctransf, SymInterp</td>
</tr>
<tr>
<td>23. Katathymes Bilderleben als</td>
<td>J. W. Roth</td>
<td>Quantitative Case</td>
<td>15</td>
<td>Secondary amenorrhea</td>
<td>Cured/Improved: ++</td>
<td>TI, Pri/Sec, Cat,</td>
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<th>Intervention Factors &amp; Process Codes**</th>
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<tr>
<td>Kurzpsychotherapie in der psychosomatischen Gynäkologie [GAI as short psychotherapy in psychosomatic gynecology]</td>
<td>Study</td>
<td>(1), Premenstrual dytonis (8), Dysmenorrhoea (6), Dyspareunia (6), Orgasm difficulties (12), Low sexual desire (3)</td>
<td>Secondary amenorrhea (1), Premenstrual dytonia (6), Dysmenorrhoea (6), Dyspareunia (4), Orgasm difficulties (8), Low sexual desire (2)</td>
<td>Relaxation phase decreases heart rate (HR), increases systolic blood pressure (SBP), lowers diastolic blood pressure (DBP). Increased blood pressure and pulse rate associated with imagery and verbalization. Imagery reveals higher blood pressure, higher pulse rate, higher activation in spontaneous EEG (alpha band) primarily in the left occipital area. Imagined physical performance shows an increase of SBP and DBP, while HR is low.</td>
<td>CoreCnfl-Trans, ResAct, Som</td>
<td></td>
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<tr>
<td>**</td>
<td>Quantitative Case Study</td>
<td>2</td>
<td>Measuring heart rate and blood pressure during the KB, especially for imagined physical exertion</td>
<td>Alpha activity in the EEG during KB</td>
<td>++</td>
<td>TI, Som</td>
<td></td>
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<tr>
<td>**</td>
<td>Gerhard Tuschy</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, PostProc, ResAct,</td>
<td></td>
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24. Blutdruck, Herzfrequenz und EEG im Verlauf des KIPs [Blood pressure, heart rate and EEG during the course of GAI]
<table>
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<tr>
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<th>Intervention Factors &amp; Process Codes**</th>
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<tbody>
<tr>
<td>in der Psychotherapie Die Einbeziehung von Wachtraum techniken in die analytische und tiefenpsychologisch fundierte [The healing power of inner images and their use in psychotherapy: The inclusion of waking dream in the analytic techniques and psychodynamic psychotherapy]</td>
<td>Michael Stigler</td>
<td>Quantitative</td>
<td>44</td>
<td>a)12 subjects in training b) one subject panic disorder c) one subject depression, separation anxiety d) one subject test anxiety e) 29 subjects with bone marrow cancer</td>
<td>Positivity Index showed high correlation of primary process during imagination phase.</td>
<td>++</td>
<td>SymInterp, CoreCnflt-Trans, Transf/Ctransf</td>
</tr>
<tr>
<td>26. Forschung Zur KIP: Ist KIP wirksam? Wenn ja – wodurch wirkt sie? [Research to KIP: Is KIP effective? If so - making it work?]</td>
<td>Helene Lytwyn</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Narcissistic personality disorder, social phobia, temporary depression</td>
<td>Improved self-confidence, more able to meet needs and wishes, great congruence within self, improved interpersonal relationships, better understanding with improved family dynamics, social phobia eliminated.</td>
<td>+</td>
<td>Pri/Sec, CoreCnflt-Trans, ResAct, SymInterp, Transf/Ctransf</td>
</tr>
<tr>
<td>27. Vom tagtraumhelden zur lebendigen realität mit hilfe der katathym imaginativen psychotherapie (kip) [From the daydream hero to the living reality with help of KIP]</td>
<td>Marianne Martin and Franz Sedlak</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp, Transf/Ctransf, CoreCnflt-Trans, ResAct, PostProc</td>
</tr>
<tr>
<td>28. Guided Affective Imagery Psychotherapy (GAI): Notes on Diagnostics in Guided Affective Imagery Psychotherapy.</td>
<td>Eckhard Frick, Michael Stigler, Hildegun de Georg.</td>
<td>Quantitative Case Study</td>
<td>29</td>
<td>Tumor patients after autologous blood stem cell transplantation</td>
<td>GAI was able to enhance the psychotherapy process by activating the</td>
<td>++</td>
<td>TI, Pri/Sec</td>
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<td>Subjects</td>
<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (+++, ++, +, 0, -, or p-value)</td>
<td>Intervention Factors &amp; Process Codes**</td>
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<td>primary process and positive emotions?</td>
<td>Norbert Fischer, Irmgard Bumeder, and Dan Pokorny</td>
<td>Qualitative Case Studies</td>
<td>3</td>
<td>Anorexia nervosa</td>
<td>primary process, decreasing anxiety, increasing referential activity. Positive emotional outcome regardless of oncological severity.</td>
<td>++</td>
<td>Coll/Adj Psy, Pri/Sec, SymInterp, ResAct, CoreCnfl-Trans, PostProc</td>
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</table>
| 31. Anwendungsmöglich keiten des katathymen bilderlebens (KB) bei kindern im rahmen der erziehungsberatung [Applicability of guided affective imagery (KB) to children in connection with educational counseling] | Günther Horn | Qualitative Tutorial, Case Studies | 2 | a) bronchial asthma, depressed with hysterical traits  
b) persistent marital problems of the parents, nocturnal wetting, gastritis, anxiety dreams, school anxiety | a) bronchial asthma disappeared, other symptoms have largely subsided.  
b) all initial symptoms disappeared. | + | Coll/Adj Psy, CoreCnfl-Trans, Pri/Sec, Transf/Ctransf, Som |
| 32. Kraftquellen und Ressourcen in der KB-Therapie [Sources of power and resources in KB-Therapy] | Lutz Rosenberg | Tutorial | n/a | n/a | 0 | ResAct, SymInterp, PostProc, Transf/Ctransf |
| 33. Der geistig-spirituelle Aspekt in der Traumatherapie mit der KiP [The mental-spiritual aspect of trauma therapy with GAI] | Klaus Krippner | Tutorial | n/a | n/a | 0 | ResAct, PostProc, Pri/Sec, SymInterp |
| 34. Suggestive und analytische Elemente der KiP oder KiP zwischen Malerei und Bildhauerei [Suggestive and | Sylvia Zwettler-Otte | Tutorial | n/a | n/a | 0 | Transf/Ctransf, PostProc, SymInterp, Pri/Sec, |
| Title *  
(German & English) | Author | Type (Qual., Quan., Tutorial, Case Study) | Subjects | Presenting Symptoms | Therapeutic Outcome | Reported Effectiveness (++, +, 0, -, or p-value) | Intervention Factors & Process Codes** |
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<tr>
<td>analytical elements of GAI or GAI between painting and sculpture</td>
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<tr>
<td>35. Vom Spiel mit Metaphern in der Katathym-imaginativen Psychotherapie [From playing with metaphors in the Katathym-imaginative Psychotherapy]</td>
<td>Harald Ullmann and Peter Teichmann</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Pri/Sec, PostProc</td>
<td></td>
</tr>
<tr>
<td>36. Integriertes Bilderleben in der Therapie der Psychosen (Integrated Imagery in therapy of psychosis]</td>
<td>Gaetano Benedetti and Maurizio Peciccia</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>CoreCnflt-Trans, SymInterp, ResAct, Pri/Sec, Coll/Adj Psy</td>
<td></td>
</tr>
<tr>
<td>37. Psychotraumatisierungen bei der Schizophrenie und die Möglichkeiten der KiP [Psychotrauma in schizophrenia and the possibility of GAI]</td>
<td>J. Hašto</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>ResAct, Pri/Sec, CoreCnflt-Trans, SymInterp</td>
<td></td>
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<tr>
<td>38. Katathym-imaginative Psychotherapie bei Essstörungen und Strukturdefiziten - multimodales Vorgehen bei einer Patientin mit Bulimia nervosa auf der Basis einer Ich-strukturellen Störung [Katathym-imaginative psychotherapy of psychosomatic eating disorders and structural deficiencies, a multimodal approach in a patient with bulimia nervosa on the basis of an ego-structural failure]</td>
<td>Erdmuthe Fikentscher and Antje Henze</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Coll/Adj Psy, SymInterp, CoreCnflt-Trans, Pri/Sec, Transf/Ctransf, PostProc</td>
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</tr>
<tr>
<td>39. Katathym-imaginative Psychotherapie bei einem Patienten mit schwerer Urtikaria</td>
<td>Hermann Feder-schmidt</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Severe depression, severe urticaria (a skin disease</td>
<td>Mentally and physically improved significantly, No urticaria</td>
<td>+</td>
<td>Cat, Pri/Sec, PostProc, ResAct, CoreCnflt-Trans,</td>
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<tr>
<td>Title * (German &amp; English)</td>
<td>Author</td>
<td>Type (Qual., Quan., Tutorial, Case Study)</td>
<td>Subjects</td>
<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (++, +, 0, -, or p-value)</td>
<td>Intervention Factors &amp; Process Codes **</td>
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<tr>
<td>und an Selbstwertproblem- tik</td>
<td>Beate Steiner</td>
<td>Tutorial</td>
<td>n/a</td>
<td>with lesions, intense itching and hives, tinnitus, dizziness, palpitations, nocturnal bitter taste and burning sensation in the mouth, nightmares, fear of death.</td>
<td>evident.</td>
<td></td>
<td>Transf/Ctransf; SymInterp, Som</td>
</tr>
<tr>
<td>40. Aspekte der Behandlung mit der KIP bei Krebspatienten</td>
<td>Ulrich Bahrke and Karin Nohr</td>
<td>Tutorial</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
<td>Pri/Sec, CoreCnflt-Trans, SymInterp, Transf/Ctransf</td>
</tr>
<tr>
<td>41. Katathym Imaginative Psychotherapie: Eine Positionsbestimmung</td>
<td>Horst Neubauer</td>
<td>Tutorial</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
<td>Pri/Sec, CoreCnflt-Trans, Transf/Ctransf, PostProc, ResAct</td>
</tr>
<tr>
<td>42. Krankheitsverarbeitung bei Krebspatienten mit der KIP am Beispiel von Hodentumorpatienten</td>
<td>J. B. Greene</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Anxiety-panic attacks, shortness of breath, rapid heart rate, pressure and tightness in the chest, bronchial asthma, depression, apathy, fear of a heart attack, insomnia, symbiosis with husband.</td>
<td>Significant reduction in her symptoms, noticeable improvement in her wellbeing, much less worried about her heart, felt much calmer, depression eliminated, anxiety and shortness of breath rarely occurred. Insomnia and</td>
<td></td>
<td>Pri/Sec, PostProc, ResAct, CoreCnflt-Trans, SymInterp, Som</td>
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<tr>
<td>Title * (German &amp; English)</td>
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<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (+++, +, 0, −, or p-value)</td>
<td>Intervention Factors &amp; Process Codes**</td>
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<tr>
<td>44. Kathathym-imaginative Psychotherapie und Krisenintervention – ein Fallbericht [KIP and crisis intervention - a case report]</td>
<td>Harald Käster and Erdmuthe Fikentscher</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Acute episode of depression with anxiety personality</td>
<td>Depression and anxiety reduced, transference cure, Patient referred for continued psychoanalytic long term therapy.</td>
<td>+</td>
<td>Coll/Adj Psy, Pri/Sec, Trans/Ctransf, ResAct, SymInterp, CoreCnfl-Tans, PostProc</td>
</tr>
<tr>
<td>45. Umgang mit Kränkungen, die aus der Beziehung zum Lebenspartner stammen - Möglichkeiten der Klärung und Aufarbeitung mit KIP [Dealing with injuries that come from the relationship with a partner - opportunities for clarification and processing with KIP]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Qualitative Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>PostProc, Pri/Sec, ResAct, SymInterp, CoreCnfl-Tans, Trans/Ctransf</td>
<td></td>
</tr>
<tr>
<td>46. Möglichkeiten und Grenzen der Trauerverarbeitung mit der Kathathym-imaginativen Psychotherapie [Possibilities and limits of the mourning process with KIP]</td>
<td>Elizabeth Schmidt</td>
<td>Qualitative Tutorial, Case Study</td>
<td>4</td>
<td>Angina pain, headache, unfeeling, indifferent, difficulty engaging social contact</td>
<td>Physical symptoms alleviated, more normal feelings returned, engaged in social interaction</td>
<td>+</td>
<td>Coll/Adj Psy, Pri/Sec, PostProc, SymInterp, CoreCnfl-Tans, Trans/Ctransf, ResAct, Som</td>
</tr>
<tr>
<td>47. Imagination in der Hypnosetherapie im Verleich zur KIP [Imagination in hypnosis therapy compared to the GA1]</td>
<td>Hans Kanitschwar</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>PostProc, SymInterp, CoreCnfl-Tans, ActIntro, ResAct, Trans/Ctransf, Pri/Sec</td>
<td></td>
</tr>
<tr>
<td>48. Die Kathathym-imaginative Psychotherapie in der Praxis des Kinder- und Jugendpsychiaters mit einem kasuistischen Beitrag zur tiefenpsychologische n Psychotherapie bei einem Patienten mit schwerer</td>
<td>Renate Sannwald</td>
<td>Qualitative Tutorial with Case Study</td>
<td>1</td>
<td>Aneurysm caused cerebral infarction and developed a severe spastic hemiparesis (weakness on one side of the body). Poor academic</td>
<td>Good school performance, engaged in sports with friends, has a girlfriend, a more realistic, better-integrated self and body image.</td>
<td>+</td>
<td>ResAct, Pri/Sec, PostProc, CoreCnfl-Tans, SymInterp, Trans/Ctransf</td>
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<tr>
<td>Körperbehinderung [The Katathym-Imaginative Psychotherapy in the practice of child and adolescent psychiatry with a casuistic contribution to the deep psychological psychotherapy in a patient with severe physical disability]</td>
<td></td>
<td></td>
<td></td>
<td>performance, lost only friend, headaches, poor social interaction</td>
<td></td>
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<tr>
<td>49. Zum Übertragungs- und Gegenübertragungsprozess in der Katathym-Imaginativen Psychotherapie [The transference and counter transference process in KIP]</td>
<td>Heinz Hennig</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
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<tr>
<td>50. Ausgesetzt auf den Bergen des Herzens – Überlegungen zur Symbolik des Motivs Berg in der KIP [Exposed on the mountains of the Heart - Reflections on the symbolism of the mountain motif in KIP]</td>
<td>Barbara Hauler</td>
<td>Tutorial with Case Study</td>
<td>3</td>
<td>a) Withdrew from relationships, constantly brooded, guilt over mother’s emotional illness. b) Severe depression after a stroke, low self-esteem due to poor motor skills. c) Post traumatic stress disorder after a serious car accident</td>
<td>In all three case studies the imagery of a mountain signified steps of change that affected the inner self. The changes often had the quality of a new beginning occurring in the here and now. Old habits and commitments altered thereby changing the affect. The symbol of the mountain represented a transformational object. A key dimension of the imagery is that it encourages and enables emotional maturity and spiritual development.</td>
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<tr>
<td>51. Die Katathym-imaginative Psychotherapie einer Renate Sanwald</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Suicidal thoughts and binge eating. Binge eating completely stopped,</td>
<td></td>
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</tbody>
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**Transf/Ctransf, Pri/Sec, SymInterp, CoreCnfl-Trans, PostProc, ResAct**
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<thead>
<tr>
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<th>Reported Effectiveness (+, +, 0, −, −− or p-value)</th>
<th>Intervention Factors &amp; Process Codes**</th>
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<tr>
<td>Binge Eating Disorder - eine Falldarstellung [KIP of a Binge Eating Disorder - a case presentation]</td>
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<td>Qual., Quan., Tutorial, Case Study</td>
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<td>CoreCnflt-Trans, SymInterp, Transf/Ctransf, Cat</td>
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<tr>
<td>52. Die Kommunikation im KB – eine Kombination von Therapiegespräch und Traumakommunikation [Communication in the KB – A combination of talk therapy and dream communications]</td>
<td>Maria Sedlak</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp, PostProc</td>
<td></td>
</tr>
<tr>
<td>53. KIP als tiefenpsychologisches Verfahren oder Die rote Kappe des Bahnhofs vorstands. Eine konstruktive Kritik [KIP deep-seated psychological processes or as the red cap of the railway station director: A constructive criticism]</td>
<td>Silvia Zwettler-Otte</td>
<td>Tutoral</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp, CoreCnflt-Trans, Transf/Ctransf</td>
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<tr>
<td>54. KIP in Beratung und Coaching [KIP in consulting and coaching]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>ResAct, Pri/Sec, PostProc, SymInterp, CoreCnflt-Trans, Coll/Adj Psy</td>
<td></td>
</tr>
<tr>
<td>55. Zur Förderung der Symbolisierungsfähigkeit im Behandlungsspektrum der Katathym Imaginativen Psychotherapie [In order to promote symbolization ability in the treatment spectrum of Katathym imaginative psychotherapy]</td>
<td>Ulrich Bahrke</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp</td>
<td></td>
</tr>
<tr>
<td>56. Bindungsforschung und ihre Bedeutung für die Katathym Imaginative Psychotherapie</td>
<td>Jadranka Dieter</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Transf/Ctransf, CoreCnflt-Trans, PostProc, ResAct,</td>
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<td>Title * (German &amp; English)</td>
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<tr>
<td>[Attachment research and its importance for Katathym Imaginative Psychotherapy]</td>
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<tr>
<td>57. Die Katathym-imaginative Psychotherapie als tiefenpsychologisch-systemische Therapie [The Katathym-imaginative psychotherapy as psychodynamically-systemic therapy]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>CoreCnflt-Trans, SymInterp, ResAct, Transf/Ctransf, PostProc</td>
<td></td>
</tr>
<tr>
<td>58. Katathym-imaginative Psychotherapie bei depressiven Störungen [KIP of depressive disorders]</td>
<td>Wilfried Dieter</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Transf/Ctransf, SymInterp, Pri/Sec, ResAct, CoreCnflt-Trans, PostProc</td>
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<tr>
<td>59. Beitrag der Katathym-imaginativen Psychotherapie zu einer progressionsorientierten, psychoanalytisch-systemischen Psychotherapie [The contribution of KIP to progression-oriented, psychoanalytic systemic psychotherapy]</td>
<td>Hanscarl Leuner</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
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<td>ResAct, PostProc, Pri/Sec, SymInterp, CoreCnflt-Trans, Transf/Ctransf</td>
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<tr>
<td>60. Über die Bedeutung von Deckerinnerungen in der KIP [About the importance of screening memories in the KIP]</td>
<td>Sylvia Zwettler-Otte</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp, Transf/Ctransf, PostProc, CoreCnflt-Trans,</td>
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<tr>
<td>61. Die Übertragung in der Kip und in der TFP. Oder: braucht die KIP die TFP? [The transference in the KIP and in the TFP (Transference Focused Psychotherapy): Or does the KIP need the TFP?]</td>
<td>Bernhard Brömmel</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Transf/Ctransf</td>
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<tr>
<td>62. Autogene Psychotherapie (Autogenes Training) – Katathym</td>
<td>Franz Sedlak</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Pri/Sec, PostProc, ResAct,</td>
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<tr>
<td>Imaginative Psychotherapy – Hypnose – Wissenschaftliche Grundlagen, wesentliche Kriterien, Konzepte der Therapieführung [Autogenic Psychotherapy (Autogenic Training) - KIP - Hypnosis - Scientific principles, core criteria, concepts of therapy management]</td>
<td>Karin Nohr</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td></td>
<td>Transf/Ctransf,</td>
</tr>
<tr>
<td>63. „Meine Seele hört im Sehen.“ Zum szenischen Charakter des therapeutischen Umgangs mit katathymen Imaginationen [&quot;My soul is in seeing.&quot;] Back to the scenic character of the therapeutic management of catathymic imaginations]</td>
<td>Elfriede M. Fidal</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, PostProc, Transf/Ctransf, ResAct</td>
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<tr>
<td>64. Psychoanalytische Betrachtungen zur Verneinung im Rahmen der Therapie mit dem Katathymen Bilderleben [Psychoanalytic considerations to denial in the context of therapy with GAI]</td>
<td>Veronika Oependeure</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp</td>
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<tr>
<td>66. Zwischen den Bildern. Überlegungen zum</td>
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<td>n/a</td>
<td>n/a</td>
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<td>CoreCntl-Trans, SymInterp</td>
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<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (+++, +, 0, -, or p-value)</td>
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<td>therapeutischen Prozess in der KIP [Between the pictures. Reflections on the therapeutic process in the KIP]</td>
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<tr>
<td>68. Märchen als KIP-Motive in der Behandlung narzisstischer Persönlichkeitsstörungen [Folktales as KIP motifs in the treatment of narcissistic personality disorder]</td>
<td>Berta Pixner</td>
<td>Tutorial with Case Study</td>
<td>2</td>
<td>a) Narcissistic borderline personality disorder, paranoid psychosis b) Severe depressive mood, separation anxiety, narcissistic personality disorder</td>
<td>a) Better able to distance herself emotionally from mother, developed better strategies for self-complacency and self-assurance. b) Improved autonomy, better able to process and deal with aggression, more self-accepting.</td>
<td>+</td>
<td>Pri/Sec, ResAct, SymInterp, CoreCnfl-Trans, PostProc, Trans/Ctransf</td>
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<td>Title *</td>
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<tr>
<td>71. Märchenmotive – ein Versuch neuer zusätzlicher Standardmotive für die KIP [Fairy tale motifs - an attempt of new additional standard motives for KIP]</td>
<td>Berta Pixner</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Pri/Sec, SymInterp, CoreCnfl-Trans, Transf/Ctransf</td>
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</tr>
<tr>
<td>72. Archetypen der griechischen Mythologie in einer KIP-Therapie [Archetypes of Greek mythology in a KIP therapy]</td>
<td>Brigitte Schopflin and Norbert Arlt</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Transf/Ctransf, ResAct, PostProc</td>
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<tr>
<td>73. Aspekte der Behandlung mit der KIP bei Krebspatienten [Aspects of treatment with KIP in cancer patients]</td>
<td>Beate Steiner</td>
<td>Tutorial</td>
<td>1</td>
<td>Gastric carcinoma</td>
<td>Resolved past core conflictual theme with father, living in the here and now, bought a red sports car and vacationed in Tuscany with his wife</td>
<td>+</td>
<td>CoreCnfl-Trans, ResAct, SymInterp, PostProc, Transf/Ctransf, Pri/Sec</td>
</tr>
<tr>
<td>74. Imagination, Phantasie und Traum: Die Entwicklung des Imaginationsraumes und der Dialog mit dem Selbst [Imagination, fantasy, and dreams: The development of the imagination, space and dialogue with the self]</td>
<td>Monika Schnell</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Pri/Sec, CoreCnfl-Trans, Transf/Ctransf</td>
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</tr>
<tr>
<td>75. Arbeit an der Paarbeziehung in Einzeltherapien mit KIP [Work on the couple relationship in individual therapy with GAI]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>+</td>
<td>ProbClar, Transf/Ctransf, ResAct, CoreCnfl-Trans, SymInterp,</td>
<td></td>
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<tr>
<td>76. KIP und Kino. Zur Dynamik unbewusster Prozesse [KIP and cinema. On the dynamics of unconscious processes]</td>
<td>Josef Bittner</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Transf/Ctransf, CoreCnflTrans</td>
<td></td>
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<tr>
<td>77. Multikultur und Imagination – Sprachliche und soziokulturelle</td>
<td>Monika Bürgi-Kraus</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, ResAct, Transf/Ctransf</td>
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<td>Title <em>(German &amp; English)</em></td>
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<tr>
<td>Determinationen in der KIP [Multiculture and imagination - Linguistic and socio-cultural determinations in the KIP]</td>
<td>Harald Ullmann</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp</td>
<td></td>
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<tr>
<td>78. Die narrative Dimension der katathym imaginativen Psychotherapie [The narrative dimension of KIP]</td>
<td>Klaus Krippner</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>CoreCnfl-Trans, SymInterp, ResAct, PostProc, Transf/Ctransf</td>
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<tr>
<td>80. Die Heilkraft im Schlangensymbol – Eine KB-spezifische Kreativität [The healing power of the serpent symbol - a KB-specific creativity]</td>
<td>Hannelore Eibach</td>
<td>Tutorial with Case Study</td>
<td>3</td>
<td>c)</td>
<td>+</td>
<td>Pri/Sec, SymInterp, ResAct, CoreCnfl-Trans, Transf/Ctransf, PostProc</td>
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<tr>
<td><strong>81. Emotionales Erleben und Angstbewältigung: Zwei psychotherapeutisch Wirksfaktoren im Vergleich</strong></td>
<td>W. Tress</td>
<td>Quantitative</td>
<td>15</td>
<td>Phobic anxiety</td>
<td>Positive outcome for systematic desensitization and GAI. No change for autogenic training.</td>
<td>++</td>
<td>TI</td>
</tr>
<tr>
<td><strong>82. Die tiefenpsychologische einstellgrösse einer leerhypnose, gemessen am diagnostischen Katathym Bilderleben (nach H. Leuner)</strong></td>
<td>Siegfried Stamm</td>
<td>Quantitative</td>
<td>15</td>
<td>Psychosomatic and neurotic symptoms</td>
<td>Manifest anxiety improved, Neurotic tendency improved, Rigidity not significant, Introversion/extroversion not significant</td>
<td>Anxiety: P&lt;0.0 Neuroticism: P&lt;0.01</td>
<td>TI, Coll/Adj Psy</td>
</tr>
<tr>
<td><strong>83. Symbol, Vermittlung von Sinnlichkeit und Bewußtsein [Symbol, mediation of sensibility and consciousness]</strong></td>
<td>Alfred Lorenzer</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Pri/Sec, CoreCnfl-Trans</td>
<td></td>
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<tr>
<td><strong>84. Zur psychoanalytischen Theorie des Katathymes Bilderlebens [To the psychoanalytic theory of Guided Affective]</strong></td>
<td>Hanscarl Leuner</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Pri/Sec, CoreCnfl-Trans, Transf/Ctransf</td>
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<tr>
<td>85. Kurztherapie nach 15 Sitzungen mit dem Katathymen Bilderleben (eine kontrollierte Studie) [Short-term therapy after 15 sessions with the GAI (a controlled study)]</td>
<td>H. M. Wächter and V. Pudel</td>
<td>Quantitative</td>
<td>15</td>
<td>Neurotic and psychosomatic disorders</td>
<td>8 Patients improved to good or very good 4 Patients unaffected, 1 Patient deteriorated</td>
<td>P&lt;0.05</td>
<td>TI</td>
</tr>
<tr>
<td>86. Das Katathyme Bilderleben bei der konservativen Behandlung der Colitis ulcerosa (eine kontrollierte Studie) [The GAI life in the conservative treatment of ulcerative colitis (a controlled study)]</td>
<td>Eberhard Wilke</td>
<td>Quantitative</td>
<td>23</td>
<td>Ulcerative colitis</td>
<td>11 Patients without relapse 9 Patients with low residual inflammatory findings 3 Patients with two or more severe recurrences</td>
<td>++</td>
<td>TI, Coll/Adj Psy, Cat, Som</td>
</tr>
<tr>
<td>87. Die imaginative Anwendung des Wassers im KIP [The imaginative use of water in the GAI]</td>
<td>Andreas Pszywyj</td>
<td>Qualitative</td>
<td>3</td>
<td>a) Rheumatism and profuse sweating b) Chronic urticaria (hives) c) Drug addiction</td>
<td>All patients reported greatly improved</td>
<td>++</td>
<td>Coll/Adj Psy</td>
</tr>
<tr>
<td>88. Ergebnisse einer Katathym Imaginativen Psychotherapie bei Prüfungsangst: Ressourcen und Bewältigung, Problemarktualisierung und Klärung [Results of a katathym imaginative psychotherapy of test anxiety: Resources and coping, problem updating and clarification]</td>
<td>D. Ihme and N. Salzer</td>
<td>Quantitative and Qualitative Case Study</td>
<td>1</td>
<td>Test anxiety and somatic disorders</td>
<td>Clinically significant symptom reduction</td>
<td>++</td>
<td>Coll/Adj Psy, Pri/Sec, ResAct, PostProc, ProbAct, ProbClar, Cope/Mast, Som, TI</td>
</tr>
<tr>
<td>89. Über die Bedeutung der introspektiven Imagination des Katathyme Bilderlebens, dargestellt am</td>
<td>J. W. Roth</td>
<td>Quantitative</td>
<td>12</td>
<td>Tension headaches</td>
<td>6 Patients free of headaches 5 Patients improved/ temporarily free of headaches</td>
<td>++</td>
<td>TI, Som</td>
</tr>
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<tr>
<td>Beispiel des Spannungskopfschmerzes [On the significance of the introspective imagination of GAI, exemplified by the tension headache]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Patient no improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90. Persönliche Erfahrungen mit dem Katathymen Bild erleben in Schweden [Personal experience with the GAI life in Sweden]</td>
<td>Ake Sellberg</td>
<td>Qualitative</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>Coll/Adj Psy, SymInterp</td>
<td></td>
</tr>
<tr>
<td>91. Sterbehilfe mit dem Katathymen Bild erleben [Euthanasia with the GAI]</td>
<td>Erika Landau</td>
<td>Qualitative</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, PostProc</td>
</tr>
</tbody>
</table>
| 92. Trauerarbeit mit dem Katathymen Bild erleben [Grief work with the GAI] | Gerhard Szonn | Qualitative with Case Study | 2 | a) Grief, headaches, heart palpitations, depression, feelings of inferiority  
b) Depression | a) Happily re-married, depression and headaches do not occur  
b) Able to express emotions, slightly anxious now, but not depressed, greater self-esteem | ++ | Cat, SymInterp, Som |
<p>| 93. Erste Ergebnisse der Paartherapie mit dem Katathymen Bild erleben [First results of couples therapy with the GAI] | Leonore Kottje-Bimbacher | Qualitative with Case Study | 1 | Relationship dysfunction, depression, anger | Improved relationship, depression eliminated, anger dealt with and diminished | ++ | SymInterp, PostProc, Trans/Ctransf, CoreCnfl-Trans, ResAct, Pri/Sec |
| 94. Wechselwirkung von KIP und kreativem Prozeß bei einem Fall von Enteritis regionalis (Morbus Crohn) [Interaction of GAI and creative process in a case of Regional Enteritis (Crohn's disease)] | Heinrich Simmet | Qualitative with Case Study | 1 | Crohn’s disease, depression, cancer phobia | Improved to the point of practically well, more active involvement with family, pursuing hobby as an amateur painter, enhanced marital | ++ | SymInterp, CoreCnfl-Trans, Pri/Sec, ResAct, Coll/Adj Psy, Som |</p>
<table>
<thead>
<tr>
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<th>Intervention Factors &amp; Process Codes**</th>
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</thead>
<tbody>
<tr>
<td>95. Die Wirksamkeit der GAI Konfrontation in der Behandlung von Phobien Kindheit [The effectiveness of GAI confrontation in the treatment of childhood phobias]</td>
<td>Inge Sommer</td>
<td>Qualitative with Case Study</td>
<td>3</td>
<td>a) Pyrophobia b) School phobia c) Achievement disorder</td>
<td>Phobias in all three cases were eliminated</td>
<td>++</td>
<td>SymInterp, Cat,</td>
</tr>
<tr>
<td>96. Katathymes Bilderleben in der Gruppe bei jüngeren Drogen-konsumenten [Guided Affective Imagery in a group of younger drug users]</td>
<td>Edda Klessmann</td>
<td>Qualitative with Case Study</td>
<td>1</td>
<td>Drug use</td>
<td>Drug free with no relapse</td>
<td>++</td>
<td>SymInterp, Cat, Coll/Adj Psy, Transf/Ctransf</td>
</tr>
<tr>
<td>97. Kurzpsychotherapie eines Rauschmittelusers mit dem Katathymen Bilderleben [Guided affective imagery in the short-term psychotherapy of a drug user]</td>
<td>Hans-Martin Wächter and Hanscarl Leuner</td>
<td>Qualitative with Case Study</td>
<td>1</td>
<td>Hard-drug user, depression, dejectedness, fatigue, sleep disorders, work and school related concentrative disorder</td>
<td>Improved mood, occasional mild depression, more self confident, desire for drugs is gone, decrease in anxiety, improved ego strength, improved school performance, sleep disorders eliminated.</td>
<td>++</td>
<td>Cat, SymInterp, Transf/Ctransf, Pri/Sec,</td>
</tr>
<tr>
<td>98. Guided affective imagery in the therapy of a severely disturbed adolescent</td>
<td>Günther Horn</td>
<td>Case Study</td>
<td>1</td>
<td>Anxiety neurosis, massive father issues, depression, aggressive, suicidal thoughts, teeth-gnashing, headaches, diarrhea</td>
<td>Decrease in depression and aggression, anxieties no longer present, suicidal thoughts disappeared, no teeth-gnashing, headaches and diarrhea eliminated, relationship with father significantly improved</td>
<td>++</td>
<td>Cat, SymInterp, Transf/Ctransf, PostProc, Som</td>
</tr>
<tr>
<td>99. Guided affective imagery in the treatment of an eight-year old neurotic boy</td>
<td>Günther Horn</td>
<td>Case Study</td>
<td>1</td>
<td>Extremely aggressive outbursts at home, excessive motor impulses,</td>
<td>School achievement was satisfactory, all other symptoms were</td>
<td>++</td>
<td>Cat, Coll/Adj Psy, SymInterp, Pri/Sec, Transf/Ctransf</td>
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<td>Reported Effectiveness (+, +, 0, −, or p-value)</td>
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<td>100. Guided affective imagery in the short-term therapy of an eyelid tic.</td>
<td>Inge Klemperer</td>
<td>Case Study</td>
<td>1</td>
<td>Eyelid tic</td>
<td>Free of symptoms</td>
<td>++</td>
<td>SymInterp, Cat, Pri/Sec</td>
</tr>
<tr>
<td>101. Kevin: Die Katathym Imaginative Kindertherapie eines 8-jährigen Jungen mit Trennungsangst [Kevin: The katathym imaginative child therapy in an 8-year-old boy with separation anxiety]</td>
<td>Franz Wienand</td>
<td>Qualitative Case Study</td>
<td>1</td>
<td>Emotional nail biting and separation anxiety</td>
<td>Nail biting only in stressful situations, acts more assertively regarding his needs, good performance at school, more secure in his appearance, excitement and fear are controlled much more effectively, self-confident, better relationship with parents</td>
<td>++</td>
<td>Cat, Transf/-Ctransf, SymInterp, PostProc, ResAct</td>
</tr>
<tr>
<td>102. Nena: Die Katathym Imaginative Kurzzeitpsychotherapie einer 11-jährigen Patientin [Nena: The short-term katathyme imaginative psychotherapy of an eleven year-old patient]</td>
<td>Günther Horn</td>
<td>Case Study</td>
<td>1</td>
<td>Desire not to live, depression, crying, little contact with other children, nail biting, fear of ghosts and witches, destroyed property</td>
<td>Relative improvement in all areas, prognosis for the future is guarded.</td>
<td>+</td>
<td>Transf/Ctransf, SymInterp, Pri/Sec</td>
</tr>
<tr>
<td>103. Frederik: Die Katathym Imaginative Kurzzeitpsychotherapie eines schwer somatisch erkrankten Jugendlichen [Frederik: The KIP Short-term psychotherapy of</td>
<td>Renate Sannwald</td>
<td>Case Study</td>
<td>1</td>
<td>Trauma due to previous severe acne conglobata with vasculitis (blood vessel inflammation associated with acne), poor school</td>
<td>Through imagery he showed great creativity which is used as a resource for him in dealing with conflict resolution for</td>
<td>++</td>
<td>SymInterp, Transf/Ctransf, Pri/Sec, CoreCnfl-Trans</td>
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<td>severely ill young Somali</td>
<td></td>
<td></td>
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<td>performance, drug usage, studied Satanism</td>
<td>his internal schema, involved with a girl friend who does not use or like drugs, increased self confidence</td>
<td></td>
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<tr>
<td>104. Katathymes Bilderleben bei alternden Patienten [KIP in aging patients]</td>
<td>Albert Erlanger</td>
<td>Case Study</td>
<td>3</td>
<td>a) Impotence, b) Stuporous, very anxious, depressed, c) Depressive state due to retirement, chronic marital and family conflict, sciatica</td>
<td>a) Potency disorder cured, b) Dealt with fear of husband dying, reconnected with her immediate family, discussed issues with husband and them, symptoms abated, c) Depression alleviated, dealing with emotions more openly, joyously involved with creative processes in his workshop, improvement in his marital and family relationships</td>
<td>++</td>
<td>SymInterp, Cat, PostProc, CoreCnfl-Trans, Pri/Sec</td>
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<tr>
<td>105. Zur Indikation des KIP bei Suchtpatienten [For indications of KIP in addicted patients]</td>
<td>Christoph Stettler</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Sym, ActIntro</td>
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<tr>
<td>106. Zur Interventionstechnik beim Dyaden-KB [Intervention technique with dyads-KB]</td>
<td>Leonore Kottje-Birnbacher</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, Trans/Ctransf, CoreCnfl-Trans, ResAct, PostProc</td>
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<tr>
<td>107. Symbolgestalten in der Gruppenimagination [Symbolic figures in the group imagination]</td>
<td>Ulrich Sachsse</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp, PostProc, Pri/Sec, CoreCnfl-Trans, Trans/Ctransf,</td>
<td></td>
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<tr>
<td>108. Möglichkeiten des KIPs in der Behandlung psychosomatischer Krankheiten [GAI possibilities in the</td>
<td>Hans-Martin Wächter</td>
<td>Qualitative Tutoral Case Study</td>
<td>Drug-resistant acne, spastic upper colon, gall bladder problems</td>
<td>Patient reported feeling calm and relaxed, spastic upper abdomen</td>
<td>++</td>
<td>Cat, SymInterp, PostProc, CoreCnfl-Trans, Som</td>
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<td>treatment of psychosomatic illnesses</td>
<td>Eberhard Wilke Tutorial</td>
<td>n/a n/a</td>
<td>sleep disorders, symptoms related to pre-menstrual syndrome, obsessional thoughts of dying</td>
<td>gall bladder problems no longer existed, obsessional thoughts had disappeared, sleep disorder significantly improved, pre-menstrual syndrome symptoms greatly lessened, acne regressed partially.</td>
<td>SymInterp, CoreCnfl-Trans, PostProc,</td>
<td></td>
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<tr>
<td>109. Möglichkeiten und Grenzen des Katathymen Bilderlebens in der Therapie des Asthma bronchiale [Possibilities and limitations of GAI in the treatment of bronchial asthma]</td>
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<tr>
<td>110. Der Umgang mit der Grundstörung im Katathymen Bilderleben [Dealing with the basic disturbance in the GAI]</td>
<td>Guenther Bartl Tutorial</td>
<td>n/a n/a</td>
<td></td>
<td></td>
<td>Pri/Sec, PostProc, ResAc, Trans/Ctransf, SymInterp, CoreCnfl-Trans,</td>
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<tr>
<td>111. Das Katathyme Bilderleben als spirituelle / transpersonale Therapie [The GAI as spiritual / transpersonal therapy]</td>
<td>Walter Roth Tutorial</td>
<td>n/a n/a</td>
<td></td>
<td></td>
<td>SymInterp, Pri/Sec</td>
<td></td>
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<tr>
<td>112. The Work of Alfred Lorenzer: An Introduction</td>
<td>Tobias Schaffrik Tutorial</td>
<td>n/a n/a</td>
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<td></td>
<td>Neuro</td>
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<tr>
<td>113. Common Changes in Cerebral Blood Flow in Patients With Social Phobia Treated With Citalopram ® or Cognitive-Behavioral Therapy</td>
<td>Tomas Furrmark, Maria Tillfors, Ina Marteinsdotter, Håkan Fischer, Anna Pissiota, Bengt Längström, and Mats Fredriksson Quantitative</td>
<td>18 Social phobia</td>
<td>Activity sites common for Citalopram ® and cognitive-behavioral treatment of social anxiety were observed in the amygdala, hippocampus, and neighboring cortical areas, i.e., brain regions</td>
<td>++</td>
<td>Neuro, TI</td>
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<tr>
<td>114. Willensfreiheit und Schuldfähigkeit aus Sicht der Hirnforschung [Free will and criminal responsibility from the perspective of brain research]</td>
<td>Gerhard Roth</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
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<tr>
<td>115. Fühlen, Denken, Handeln Wie das Gehirn unser Verhalten steuert Neue, vollständig überarbeitete Ausgabe [Feeling, thinking, acting: How the brain controls our behavior]</td>
<td>Gerhard Roth</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>116. KIP und Hypnose in Konkurrenz - Gemeinsamkeiten und Unterschiede. Die tiefenpsychologische Fundierung der KIP [KIP and hypnosis in competition -- similarities and differences: The deep psychological foundation of the KIP]</td>
<td>Harald Ullmann</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>117. Social fobi: Effektiv hjälpen med kognitiv betendetertapi [Social phobia: Effective use of cognitive behavioral therapy].</td>
<td>Tomas Furmark</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B. American Literature Meta-analysis Coding

*Table B-1.* Quick Look Coding Sheet of American GAI Literature.

<table>
<thead>
<tr>
<th>* Intervention Factors and Process Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ActIntro: Active Introjection</td>
</tr>
<tr>
<td>Cat: Catamnesis (after-therapy follow-up treatment)</td>
</tr>
<tr>
<td>CorCnfltTrans: Core Conflict Transformation</td>
</tr>
<tr>
<td>Coll/Adj Psy: Collateral / Adjunct Psychotherapy</td>
</tr>
<tr>
<td>Cope/Mast: Coping / Mastering</td>
</tr>
<tr>
<td>Neuro: Neurological Change</td>
</tr>
<tr>
<td>ProbAct: Problem Activation</td>
</tr>
<tr>
<td>Pri/Sec: Primary &amp; Secondary Processing</td>
</tr>
<tr>
<td>ProbClar: Problem Clarification</td>
</tr>
<tr>
<td>PostProc: Post Processing</td>
</tr>
<tr>
<td>ResAct: Resource Activation</td>
</tr>
<tr>
<td>Som: Somatic Changes</td>
</tr>
<tr>
<td>SymInterp: Symbol Interpretation &amp; Processing</td>
</tr>
<tr>
<td>Transf/Ctransf: Transference / Countertransference</td>
</tr>
<tr>
<td>TI: Test Instruments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Type (Qual., Quan., Tutorial)</th>
<th>Subjects</th>
<th>Presenting Symptoms</th>
<th>Therapeutic Outcome</th>
<th>Reported Effectiveness (+++, +, 0, -, -- or p-value)</th>
<th>Intervention Factors &amp; Process Codes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assessment of guided affective imagery: Methods for extracting quantitative and categorical variables from imagery sequences.</td>
<td>Jutta Bott and Eric Klinger</td>
<td>Quantitative</td>
<td>12</td>
<td>Volunteer subjects (symptoms were not revealed)</td>
<td>Study purpose: to validate test instruments, not treat symptoms-No therapeutic value</td>
<td>0</td>
<td>TI, Improper GAI methods employed</td>
</tr>
<tr>
<td>2. On images and pure light: Integration of east and west</td>
<td>Roland Fischer</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp</td>
<td></td>
</tr>
<tr>
<td>3. Guided affective and cognitive imagery to enhance self-esteem among Hawaiian children</td>
<td>Michael M. Omizo, Sharon A. Omizo, and Sean K. Kitaoka</td>
<td>Quantitative</td>
<td>60</td>
<td>Testing for self esteem in Hawaiian children using GAI and “cognitive imagery”</td>
<td>Reported favorable improvements to General, Social, Academic, and Parent/Home Self Esteem</td>
<td>0 (no conclusion) However, researchers reported positive results</td>
<td>SymInterp, Coll/Adj Psy, Inadequate GAI methods employed</td>
</tr>
<tr>
<td>4. Tell Me a Story: The Therapeutic metaphor in the Practice of Pediatric Occupational Therapy</td>
<td>Linda S. Fazio</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp</td>
<td></td>
</tr>
<tr>
<td>5. Imagery: An overview with suggested application</td>
<td>Jeannette M. Gagan</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SymInterp</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Type (Qual., Quan., Tutorial)</td>
<td>Subjects</td>
<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (++, +, 0, -, -- or p-value)</td>
<td>Intervention Factors &amp; Process Codes*</td>
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<tr>
<td>for nursing</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Body image changes during guided affective imagery</td>
<td>Stephen J. Rojcewicz, Jr.</td>
<td>Qualitative</td>
<td></td>
<td>Unable to feel any emotions</td>
<td>Self-confident, able to express emotions, capable of genuine human experiences</td>
<td>++</td>
<td>SymInterp, PostProc, CoreCnflt-Trans,</td>
</tr>
<tr>
<td>7. Grief-resolution therapy in a pastoral context</td>
<td>Timothy L. Ingram, E.C. Hurley, and Mary Tom Riley</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>0</td>
<td>SymInterp</td>
</tr>
<tr>
<td>8. Imagery Techniques in Play Therapy with Children</td>
<td>Dorothy G. Singer</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>0</td>
<td>SymInterp</td>
</tr>
<tr>
<td>9. Symbolic assertive training through guided affective imagery in hypnosis</td>
<td>Thomas Yarnell</td>
<td>Qualitative Case Study</td>
<td>l</td>
<td>Excessively inhibited</td>
<td>Patient had moved from a &quot;neurotic introvert&quot; on the EPI to within normal limits on both the neuroticism and introversion-extroversion dimensions. On the Bernreuter Self-Sufficiency Inventory his score increased from a 24 to 32, well within the normal range for assertive behavior</td>
<td>++</td>
<td>TI, SymInterp</td>
</tr>
<tr>
<td>10. Imagination and healing: A theoretical exploration of the use of imagery in three models of psychotherapy</td>
<td>Anastasia Anagnostopoulou</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>0</td>
<td>SymInterp</td>
</tr>
<tr>
<td>11 A study of male-female intimate nonsexual friendships in the workplace</td>
<td>Paul J. Strop</td>
<td>Qualitative</td>
<td>8</td>
<td>Volunteer subjects (recruited to answer questions regarding their workplace friendship)</td>
<td>Results showed that friendship had a positive impact on work related activities and was important for individual growth and development</td>
<td>+</td>
<td>TI, SymInterp, PostProc</td>
</tr>
<tr>
<td>12. Imagery and Logotherapeutic Techniques in Psychotherapy: Clinical Experiences and Promise for Application to Alcohol</td>
<td>Eric Klinger</td>
<td>Qualitative</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>-</td>
<td>Coll/Adj Psy</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Type</td>
<td>Subjects</td>
<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (++, +, 0, -, -- or p-value)</td>
<td>Intervention Factors &amp; Process Codes*</td>
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<tr>
<td>Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The amygdala: Vigilance and emotion</td>
<td>M Davis and PJ Whalen</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>14. Affective style, psychopathology, and resilience: Brain mechanisms and plasticity</td>
<td>Richard J. Davidson</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>15. Emotion, plasticity, context, and regulation: perspectives from affective neuroscience</td>
<td>Richard J. Davidson, Daren C. Jackson, and Ned H. Kalin</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>16. A new intellectual framework for psychiatry</td>
<td>Eric R. Kandel</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>17. Biology and the future of psychoanalysis: A new intellectual framework for psychiatry revisited</td>
<td>Eric R. Kandel</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>18. Depression: Perspectives from affective neuroscience</td>
<td>Richard J. Davidson, Diego Pizzagalli, Jack B. Nitschke, and Katherine Putnam</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>19. Regional brain activity in anxiety and depression, cognition/emotion interaction, and emotion regulation</td>
<td>Wendy Heller, Nancy S. Koven, and Gregory A. Miller</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>Neuro</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Type (Qual., Quan., Tutorial)</td>
<td>Subjects</td>
<td>Presenting Symptoms</td>
<td>Therapeutic Outcome</td>
<td>Reported Effectiveness (+++, +, 0, -, -- or p-value)</td>
<td>Intervention Factors &amp; Process Codes*</td>
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</tr>
<tr>
<td>20. Stress and Coping: Asymmetry of dopamine efferents within the prefrontal cortex</td>
<td>Craig W. Berridge, Rodrigo A. España, and Thomas A. Stalnaker</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>21. Affective neuroscience: The foundations of human and animal emotions</td>
<td>Jaak Panksepp</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>22. Contributions of the amygdala to emotion processing: From animal models to human behavior</td>
<td>Elizabeth A. Phelps and Joseph E. LeDoux</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>23. Learning and memory: Explicit and implicit memory</td>
<td>Eric R. Kandel, Irving Kupfermann, and Susan Iversen</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>24. Parsing the subcomponents of emotion and disorders of emotion: Perspectives from affective neuroscience</td>
<td>Richard J. Davidson, Diego Pizzagalli, Jack B. Nitschke, and Ned H. Kalin</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>25. The amygdala and the neural pathways of fear</td>
<td>Jacek Debiec and Joseph LeDoux</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>26. A biobehavioral perspective on developmental psychopathology: Excessive aggression and serotonergic dysfunction in monkeys</td>
<td>Stephen J. Suomi</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
<tr>
<td>27. The emotional brain: The mysterious underpinnings of emotional life, 1998, Simon &amp; Schuster</td>
<td>Joseph LeDoux</td>
<td>Tutorial</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>Neuro</td>
</tr>
</tbody>
</table>
Appendix C. GAI Effectiveness Studies

This Appendix presents existing test data to show that the Chapter IV. GAI intervention factors can be associated with patient healing. The objective of this section is to cite qualitative case study assessments and quantified results involving multiple subjects when GAI was properly used in therapy.

The tests and validation studies presented in this section are translated and paraphrased from the original German or Slovakian. Hopefully, this translation has made this information more widely accessible to the United States, the United Kingdom, and other English-speaking countries so that they may benefit from the landmark work being done in Europe in the field of Guided Affective Imagery.

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1. The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

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3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

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Effectiveness Study 1. Is GAI Effective?

The following study was reported by Stigler (2006) as a summation of several other experimental studies conducted by therapists trained in the use of GAI.

Is KIP an effective method of psychotherapy?

A sophisticated design study was conducted under the direction of E. Wilke. There were a total of 67 patients, mostly women, with a majority of depressive symptoms, GAI imagery was conducted periodically from the third hour of treatment up to the 50th hour of treatment. Imagery took place, on average, about every third or fourth hour. In all the questionnaires used (Complaint List-being scale, depression and anxiety questionnaire, Freiburg Personality Inventory), there were significant changes observed in patients, some going from the pathological to the normal range. There was also catamnesis after the end of treatment 18 months after treatment stopped. These were all positive changes with some very striking in scientific significance. Some in the Waiting (control) group became dissatisfied because they received no therapy, and so they finally left the experiment. The results, therefore, must be tempered, somewhat, due to problems in the realization of randomized Waiting group statistics that emerged from the defection of such a high percentage of some individuals. This altered the a statistical analysis of comparison with nearly half of the residual Wait group leaving and therefore omitted. Despite this methodological limitation, there were substantial improvements in the patients that were studied, primarily in the areas of physical symptoms, mood, depression, life satisfaction, emotionalability.
**Conclusion:** KIP is effective for the KIP effect sizes found correspond to those of others, found to be effective psychotherapy methods (see effect sizes in Grawe et al., 1994).

**What does KIP do?**

From the theoretical postulates, specific hypotheses were tested for specific active elements of KIP:

1. It was demonstrated that **primary process** takes place during the imagination and that there was **displacement**. [Definition: Displacement. In Freud, “displacement” is a technique of dreams: dreams shift emotional emphasis from important to unimportant objects. Intense emotion is thus “cathected” from its actual inspiration to an object that stands in for it, that “displaces” it, in order to conceal it from the conscious mind the source of anxiety (or desire, desire being normally the cause of anxiety in Freud). Neurosis does the same thing: the emotion causing the neurosis is “displaced” from its real object to things that are irrelevant or connected by some chain of association.]

2. There were demonstrated shift **from negative to more positive emotions**.

3. The interactions with the symbolic objects of the displacement, i.e. the **interactions occurring in the imagination brought about positive interactions in everyday life**, as the patient enters the purely verbal settings in the outer world.

**Ten questions were posed to five groups of subjects:**

**Non-clinical Group:**

a) Twelve Swiss psychotherapists in training: 4 f, 8 m
Clinical Groups (Stigler & Pokorny 1995; Meier, Stigler, Pokorny 2004; Meier 2005):

b) Patient aged 34, panic disorder, 19 hours (6 Imag.) (Stigler & Pokorny, 2001)

c) Patient aged 20, depr., separation problems, 35 hours (6 Imag.) (Stigler & Pokorny, 2003)

d) Patient 22 years, test anxiety, 6 hours after treatment Method Krippner / Ihme (Ihme, Salzer, 2005)

e) Twenty-nine cancer patients with bone marrow transplantation, 2 of each KIP meetings (meadow, house) (Frick et al., in review)

1) Are relationship episodes in the imagination of a positive nature compared to those in everyday life? Instrument: CCRT - Core Conflictual Relationship Theme (Luborsky & Crits-Christoph, 1998). **Bold** font indicates higher relevance to favorable outcome.

Non-clinical Group (a):

<table>
<thead>
<tr>
<th>CCRT State</th>
<th>Imagination</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO-pos/neg</td>
<td><strong>53.4 / 46.6</strong></td>
<td>36.9 / 63.1</td>
</tr>
<tr>
<td>RS-pos/neg</td>
<td><strong>52.0 / 48.0</strong></td>
<td>20.1 / 79.8</td>
</tr>
</tbody>
</table>

*Table C-1-1. Group a. CCRT Positive and Negative Scores for Imagination and Discussion Phases*
Clinical Group (b):

<table>
<thead>
<tr>
<th>CCRT</th>
<th>Verbalization</th>
<th>Imagination</th>
<th>Post-performance Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO Positivity Index</td>
<td>36%</td>
<td>79%</td>
<td>44%</td>
</tr>
<tr>
<td>p/(p + n)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS Positivity Index</td>
<td>43%</td>
<td>78%</td>
<td>43%</td>
</tr>
<tr>
<td>p/(p + n)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table C-1-2. Group b. CCRT Positive and Negative Scores for Imagination and Discussion Phases

Conclusion: Both in the non-clinical sample and in the clinical case samples, the relationship episodes, as measured by the reactions of the object (RO) and subject (RS) in the imagery, were significantly more positive than in the purely verbalization or discussion sessions and higher than in the post-performance discussion (immediately following the imagery session).

2) In the imagination phase, were more primary process vocabulary words used?

(Instrument: RID = Regressive Imagery Dictionary, Martindale)

<table>
<thead>
<tr>
<th>Group</th>
<th>Verbal Interview</th>
<th>Imagination Phase</th>
<th>Post-Performance Discussion Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Clinical Group (a)</td>
<td>n.a.</td>
<td>13.6 %</td>
<td>9.0 %</td>
</tr>
<tr>
<td>Clinical Group (b)</td>
<td>2.8 %</td>
<td>13.4 %</td>
<td>4.4 %</td>
</tr>
<tr>
<td>Clinical Group (d)</td>
<td>2.4 %</td>
<td>11.1 %</td>
<td>3.6 %</td>
</tr>
</tbody>
</table>
Conclusion: The word density achieved in the imagination phase using primary process vocabulary were highest in the non-clinical group (Group a.). During Imagination Phase, groups (a) through (e) had tests that were the same and the highest ever so far recorded in the RID literature (even higher than even when Psilocybin® was used). The imaginations portion of the KIP therefore causes, in a specific way, a very important mobilization of the primary process mode. This is a verification of the hypothesis that the imagination phase compared to the verbal stages shows a shift that primary processes are taking place.

3) Are there more positive emotions and less negative emotions verbalized in the imagination phase and post processing than in the interview and pre-imagery verbal phase?

(Instrument: ADU = Affective Dictionary Ulm, Hölzer et al.)

Non-clinical Group (a):

ADU-Positivity Index: Imagination = 56% vs. post-performance discussion = 37%
**Clinical Group (b):**

<table>
<thead>
<tr>
<th></th>
<th>Verbalization</th>
<th>Imagination</th>
<th>Post-performance Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivity Index</td>
<td>28%</td>
<td>70%</td>
<td>34%</td>
</tr>
</tbody>
</table>

*Table C-1-4. Group b. ADU Positivity Index for Emotions during Verbalization, Imagination and Post Performance Discussion*

**Clinical Group (d):**

<table>
<thead>
<tr>
<th></th>
<th>Preliminary Interview</th>
<th>Imagination</th>
<th>Post-performance Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of positive words</td>
<td>0.3%</td>
<td>1.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Proportion of negative words</td>
<td>1.2%</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

*Table C-1-5. Group d. Proportions of Positive and Negative Words during Preliminary Interview, Imagination, and Post Performance Discussion*

**Clinical Group (e):**

<table>
<thead>
<tr>
<th></th>
<th>Preliminary Interview</th>
<th>Imagination</th>
<th>Post-performance Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of positive words</td>
<td>0.7%</td>
<td>1.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Proportion of negative words</td>
<td>0.7%</td>
<td>0.4%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

*Table C-1-6. Group e. Proportions of Positive and Negative Words during Preliminary Interview, Imagination, and Post Performance Discussion*
**Conclusion:** The significant increase in the Positivity Indexes of emotions during the imagination supports the represented hypothesis supported by the positivity and thus the effect of conflict displacement (including compaction) symbolization.

4) **Did patient and therapist come to an agreement as to a more frequent use of primary process language during the imagination phase?**

**Clinical Group (b):**

Using Primary process index (RID) p/(p + s):

- Therapist 31.60%
- Patient 31.46 %

**Clinical Group (d):**

Using Primary Process index:

- Patient 8.1 (Verbal Group 2.4, Post Performance Group 3.6)
- Primary Process Therapist 5.7 (Verbal Group 2.8, Post Performance Group 4.1)

**Conclusion:** The advantage of the therapeutic work in the primary process mode will only be fully realized if the patient and therapist deal with it really in the same mode. In the pure KIP therapy Group (b) there is a virtually identical primary process activation viewed by the patient and the therapist, with the combined methods Group (d) to an approximation of the primary process values.
5) What degree of positivity in the Core Conflictual Relationship Theme (CCRT) episodes are human and non-human object forms seen in the imagery?

Non-clinical Group (a):

<table>
<thead>
<tr>
<th></th>
<th>Human Objects</th>
<th>Non-Human Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO-positivity in %</td>
<td>44.7</td>
<td>68.8</td>
</tr>
<tr>
<td>RS-positivity in %</td>
<td>43.1</td>
<td>62.9</td>
</tr>
</tbody>
</table>

*Table C-1-7. Group a. RO and RS CCRT Positivity for Human and Non-Human Objects*

**Positivity seen among groups of object forms:**

- **Plants, landscape** > Animals > imaginary people, mythical creatures > real people

**Conclusion:** It is chiefly the positivity of relationship episodes and emotions in the imagery when there is a predominance of non-human objects (animals, plants, landscape) than on human objects in the imaginative scenarios. That is, the greater the symbolic (non-human object) movement, the more positive relationships can shape themselves.

6) To what degree are positive CCRT Positivity Index values assigned to daydream imagery, to night dreams sequences and to verbal processes?

**Clinical Group (c):**

<table>
<thead>
<tr>
<th></th>
<th>Verbal</th>
<th>Night Dream</th>
<th>Imagination</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS (reaction of the objects on the subject)</td>
<td>34</td>
<td>27</td>
<td>52</td>
</tr>
</tbody>
</table>
Table C-1-8. CCRT Positivity Index for Verbal, Night Dreams and Imagination Phases

<table>
<thead>
<tr>
<th>Reaction of the Subject on the Objects</th>
<th>Verbal</th>
<th>Night Dream</th>
<th>Imagination</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSO</td>
<td>21</td>
<td>50</td>
<td>56</td>
</tr>
</tbody>
</table>

**Conclusion:** The Positivity Index for both reactions during night dreams and verbalization are below 50%, those are in the negative domain of emotional reaction. The Night Dream index increased for the RSO reaction of the subject to 50%. In the Imagination, the index was about 50% for both ROS and RSO reactions, positive reaction in both areas.

The explanation for the difference of ROS to RSO (i.e., no change between ROS and RSO in the Imagination vs. the increase shown in the Night Dreams) is predominately the positive change of the Night Dream in going from ROS reactions because human objects are acting upon the subject in the imagery versus the more positive RSO reaction where the subject is acting upon the object be it human or non-human. In the Imagination, the object is non human in both ROS and RSO states. Question 5 points out that the Imagination has higher positivity with non-human objects than for Night Dreams with human objects. The fact that in the Night Dream as in the imagination, the ROS reactions become much more positive, provides an understanding of the primary process that would agree with Noy’s (1969) premise that the primary process conflict-like phenomena promotes self integration.
7) Does KIP improve the primary process and positive emotions even when it is psychologically difficult to reach cancer patients with bone marrow transplantation?

Answer: Yes. See, respectively, Clinical Group (e) for questions 2 and 3 above. It was also proven that the degree of physical impairment led to no differences in the mobilization of primary process and emotions.

8) Was the patient’s imagining, or was the style of the therapist’s intervention responsible for the degree of activation of the primary process?

Clinical Group (d):

Ihme/Krippner Test Anxiety Method (Ihme & Selzer, 2005): six standardized meetings with imaginations, including three imaginations in classic KIP method and three inspired by psycho-synthesis (with frequent call for verbal communications among the imagined objects or figures) (also see Effectiveness study 10. for more complete report of this study).

<table>
<thead>
<tr>
<th></th>
<th>KIP- Imagination</th>
<th>Psychosynthesis Imagination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient’s Primary Process</td>
<td>11.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Therapist’s Primary Process</td>
<td>7.1</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Table C-1-9. Patient and Therapist Primary Process Activation during KIP and Psychosynthesis
Conclusion: The various interventions (both KIP and Psycho-synthesis) employed by the therapists are heavily responsible for the magnitude of primary process activation, not just the basic factors, such as relaxation, regressive and getting to the outside/inside core conflict situation.

9) Does the choice of motif play a role to the extent of activation of the primary process?

Clinical Group (e):

E. Frick, et al. (2008) suggested patients select either the motif of the “finished home” or the other motif of a “newly constructed house” to tumor patients. There was a significantly higher activation in the primary process – for the finished home (where you make yourself comfortable) than in the unfinished house (which needs to be planned and organized).

Conclusion: Different motif types can and do activate primary processes differently.

10) Where in the KIP will be found the 4 modes of action of Grawe (1998) (resource activation, problem updating, clarification, problem solving)?

Clinical Group (d)

- Resource activation is lowest in the verbal group and highest in the post performance group (imagination group is in the middle). They correlated positively with the number of positive emotion words.
- **Clarification** is highest in the post performance group, followed by the verbal group, but virtually absent in imagination group.

- **Problem updating** is found in the imagination group significantly greater rather than in verbal group and post performance group. They correlated positively with the number of negative emotion words.

– **Problem Solving** is in the post processing group slightly higher than in imagination group and in the verbal group only minimally present.
Effectiveness Study 2. The Effectiveness of GAI in an Outpatient Longitudinal Study.

The goal of this study by von Wietersheim, J., Wilke, E., Röser, M. & Meder, G. (2003) was to examine the effect of guided affective imagery therapy in an outpatient setting. At first, 140 patients were recruited. Unfortunately, there were many drop-outs at the beginning of the study as well as at later assessments. The data of 66 patients could be evaluated. The patients were assessed at the beginning of the therapy, after 25 sessions, at the end of the therapy and 18 months after the end of the therapy. Because of too many drop-outs, the originally planned waiting-control-design was realized only to some extent. [In this study the “Wait” group is also the “Control” group. The “wait” group must wait for 6 months after therapy starts for the therapy group before their treatment could begin.] The diagnoses of the patients consisted mainly of neurotic disorders, many of them with a dysthymia. Data were gathered by standardized questionnaires. There were marked improvement effects of the therapies at the end of the treatments and also at the follow-up evaluation. Effect sizes were larger than 0.8 in somatic symptoms, mood, depression and life satisfaction. On the one hand, therefore, these therapies had been very effective. On the other hand, it became obvious during the course of the study how difficult it is to conduct such a design with many therapists in a private practice and without financial support.

To date, many KIP is casuistry [Definition: Casuistry. Specious or excessively subtle reasoning intended to rationalize or mislead, or, the determination of right and wrong in questions of conduct or conscience by analyzing cases that illustrate general
ethical rules] and descriptions of its use appear in different application areas (Leuner, 1994). So far, however, there are few controlled studies investigating the effectiveness of the GAI procedure (Kulessa and Jung 1980; Wächter and Pudel 1980; Wilke 1982; Esplen et al. 1998). In particular are lacking investigations into therapies lasting more than 25 hr duration. In the time frame of the development of the Act of Psychotherapists [in German-speaking countries] and the general development of psychotherapy, an expectation increasingly emerged that would empirically examine and prove that the different therapy forms could exhibit their special effectiveness (Grawe et al. 1994). This resulted at the German Society for Katathym-imaginative Psychotherapie (DGKIP) in a planned study whereby established psychotherapists investigated the KIP for their applications. The design of this study was developed by J. Koch, E. Wilke, W. Dieter and H. Leuner. The implementation was done in collaboration with the DGKIP. The Department of Psychosomatic Medicine and Psychotherapy at the University of Ulm is responsible for signing up for the evaluation of the study. The aim of this investigation was that most experienced therapists should bring KIP patients into the study, which by coincidence into a control group, followed by subsequent psychotherapy or directly to group therapy. The main question was whether this particular form of psychotherapy in the outpatient area is helpful. Other questions concerned the influence of therapy on different diagnostic groups and the changes in the catamnesis period [Definition: Catamnesis. The follow-up history of a patient after he is discharged from treatment].
Results from testing

Table C-2-1. presents the results of BL, BfS, depression and anxiety questionnaires.

In all the questionnaires (except for the anxiety questionnaire) it is clear to see the effects of therapy. The values are initially pathological and change over time until the end of treatment ending in the healthy (normal) field. By the end of treatment to Catamnesis [T4] further improvements take place. The depression initial values reflect the high proportion of depressive patients in the sample. They will improve significantly under the treatment. The median of 35.5 for a healthy test subject sample is not reached, however. In the anxiety inventory, slighter variations are to be observed, moreover, the values from the outset are within the normal range and remain there. In the current [or momentary] anxiety (state) the values increase slightly, while anxiety “in general” (trait), the values decrease slightly. This finding is difficult to interpret, possibly, a few patients with anxiety through the therapy generally feel a little less anxious. It should be stressed that these values are not pathological and/or striking. Almost all other scales found significant improvements from the initial values to healthy values, i.e. the patients under treatment clearly changed.
Table C-2-1. Changes in Mean Values of the Scales Therapy

<table>
<thead>
<tr>
<th>Test Type</th>
<th>KIP Group Mean Values@</th>
<th>Friedman Test of KIP Group (T0 to T4)</th>
<th>Waiting Control Pre to Followup Effect Strength</th>
<th>Waiting Control Friedman Test</th>
<th>Waiting Control Group U-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TO</td>
<td>T1</td>
<td>T2</td>
<td>T3</td>
<td>T4</td>
</tr>
<tr>
<td>Beschwerdeliste (BL) [Complaints List]</td>
<td>33,7</td>
<td>29,9</td>
<td>24,4</td>
<td>17,9</td>
<td>16,7</td>
</tr>
<tr>
<td>Befindlichkeitsskala (BfS) [Mood Scale BfS [pre]]</td>
<td>27,3</td>
<td>32,8</td>
<td>24,3</td>
<td>16,5</td>
<td>12,8</td>
</tr>
<tr>
<td>Befindlichkeitsskala (BfS’) [Mood Scale BfS’ [post]]</td>
<td>28,2</td>
<td>32,0</td>
<td>24,6</td>
<td>16,3</td>
<td>13,2</td>
</tr>
<tr>
<td>Test zur Erfassung der Schwere [Test for the measurement of Depression (TSD)]</td>
<td>66,6</td>
<td>67,4</td>
<td>58,6</td>
<td>52,2</td>
<td>48,2</td>
</tr>
<tr>
<td>Momentane Angst (STAI-X1) [Current Anxiety]</td>
<td>42,5</td>
<td>41,2</td>
<td>43,8</td>
<td>43,5</td>
<td>44,1</td>
</tr>
<tr>
<td>Allgemeine Angst (STAI-X2) [Generalized Anxiety]</td>
<td>46,8</td>
<td>47,0</td>
<td>45,4</td>
<td>43,7</td>
<td>43,5</td>
</tr>
</tbody>
</table>

T0 is 6 months before treatment (only for waiting [control] group),
T1 is the start of treatment,
T2 after 25 hr into Therapy,
T3 Therapy Ends,
T4 Catamnesis at 18 months after the end of treatment,
Values in italics [and underlined] are within the normal range of the scale. [commas are decimals]
Friedman test and effect strength calculation refers to the comparison T0 to T4.
* = p ≤ 0.05, [a 5% chance of this outcome, given the null hypothesis]
** = p ≤ 0.01, [a 1% chance of this outcome, given the null hypothesis]
ns = not significant,
K0-3 = Friedman test for waiting control group from T0 to T3,
U0-1 = U-test for waiting control group T0 to T1,
U1-3 = U-test for waiting control group from T1 to T3.

[Definition: “p” value. In statistical hypothesis testing, the p-value is the probability of obtaining a result at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. The fact that p-values are based on this assumption is crucial to their correct interpretation. The lower the p-value, the less likely the result, assuming the null hypothesis, so the more “significant” the result, in the sense of statistical significance – one often uses p-values of 0.05 or 0.01, corresponding to a 5% chance or 1% of an outcome that extreme, given the null hypothesis.]

[Definition: Mann-Whitney U test. In statistics, the Mann–Whitney U test (also called the Mann–Whitney–Wilcoxon (MWW), Wilcoxon rank-sum test, or Wilcoxon–Mann–Whitney test) is a non-parametric test for assessing whether two independent samples of observations come from the same distribution. It is one of the best-known non-parametric significance tests. Though it is commonly stated that the MWW test tests for differences in medians, this is not strictly true. Rather this test is for chances of obtaining greater observations in one population versus the other. The null hypothesis in the Mann–Whitney test is that the two samples are drawn from a single population, and therefore that their probability distributions are equal.]

Table C-2-2. displays the results of the FPI-R. Here also are observed some very significant scale effects. Changes of previously divergent values to values within the
norm instead can be found particularly in the scales of life satisfaction, performance orientation, inhibitions, physical complaints, and emotionality (neuroticism). Despite significant improvements, there remains the tendency to be more excitable than the norm sample.

Table C-2-2. Changes in the Average Scale of the FPI-R over the Course of Therapy

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>KIP Group Stanine Scores@</th>
<th>KIP Group Friedman-Test [T0 to t4]</th>
<th>KIP Group Effect Strength Pre- to Followup</th>
<th>Waiting Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebenschzufriedenheit</td>
<td>2,94</td>
<td>2,53</td>
<td>0,001</td>
<td>**</td>
</tr>
<tr>
<td>[Life satisfaction]</td>
<td></td>
<td>2,92</td>
<td>3,69</td>
<td>4,68</td>
</tr>
<tr>
<td>Soziale Orientierung</td>
<td>5,88</td>
<td>6,19</td>
<td>ns.</td>
<td>ns</td>
</tr>
<tr>
<td>[Social Orientation]</td>
<td></td>
<td>6,15</td>
<td>5,93</td>
<td>5,95</td>
</tr>
<tr>
<td>Leistungsorientierung</td>
<td>3,56</td>
<td>3,20</td>
<td>0,023</td>
<td>**</td>
</tr>
<tr>
<td>[Performance Orientation]</td>
<td></td>
<td>3,64</td>
<td>3,64</td>
<td>4,37</td>
</tr>
<tr>
<td>Gehemmtheit</td>
<td>7,31</td>
<td>7,03</td>
<td>0,000</td>
<td>**</td>
</tr>
<tr>
<td>[Inhibited]</td>
<td></td>
<td>6,63</td>
<td>6,48</td>
<td>5,90</td>
</tr>
<tr>
<td>Erregbarkeit</td>
<td>6,81</td>
<td>7,20</td>
<td>0,003</td>
<td>**</td>
</tr>
<tr>
<td>[Excitability]</td>
<td></td>
<td>6,98</td>
<td>6,39</td>
<td>6,02</td>
</tr>
<tr>
<td>Aggressivität</td>
<td>4,44</td>
<td>4,42</td>
<td>n.s.</td>
<td>ns</td>
</tr>
<tr>
<td>[Aggression]</td>
<td></td>
<td>4,59</td>
<td>4,57</td>
<td>4,54</td>
</tr>
<tr>
<td>Beanspruchung</td>
<td>6,50</td>
<td>6,25</td>
<td>n.s.</td>
<td>**</td>
</tr>
<tr>
<td>[Stress]</td>
<td></td>
<td>6,20</td>
<td>5,33</td>
<td>5,29</td>
</tr>
</tbody>
</table>

Table C-2-2: Changes in the Average Scale of the FPI-R over the Course of Therapy.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>KIP Group Stanine Scores@</th>
<th>KIP Group ( \text{Friedman-Test} ) [T0 to t4]</th>
<th>KIP Group ( \text{Effect Strength Pre- to Followup} )</th>
<th>Waiting Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( p \leq ) [ES =]</td>
<td>Friedman Test</td>
<td>U Test</td>
</tr>
<tr>
<td>Körperliche Beschwerden [Sonatic Complants]</td>
<td>7,00 6,52 5,85 5,26 5,10</td>
<td>0,002</td>
<td>0,444 [medium-weak]</td>
<td>** ns **</td>
</tr>
<tr>
<td>Gesundheitssorgen [Health Concerns]</td>
<td>5,13 4,91 4,78 4,89 5,88</td>
<td>n.s.</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Offenheit [Openness, Candor]</td>
<td>5,19 5,28 5,56 5,51 4,85</td>
<td>n.s.</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Extraversion [Extaversion]</td>
<td>3,13 2,92 3,30 3,28 3,69</td>
<td>n.s.</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Emotionalität [Emotionality]</td>
<td>7,38 7,22 6,98 5,98 5,29</td>
<td>0,001</td>
<td>0,776 [strong-medium]</td>
<td>ns</td>
</tr>
</tbody>
</table>

T0 is 6 months before treatment (only for waiting control group),
T1 is the start of treatment,
T2 after 25 h into Therapy,
T3 Therapy Ends,
T4 Catamnesis at 18 months after the end of treatment,

Values in italics [and underlined] are within the normal range of the scale. [commas are decimals]

Friedman test and effect strength calculation refers to the comparison T0 to T4.
- * = \( p < 0.05 \), [a 5% chance of this outcome, given the null hypothesis]
- ** = \( p < 0.01 \), [a 1% chance of this outcome, given the null hypothesis]
- ns = not significant,

K0-3 = Friedman test for waiting control group from T0 to T3,
U0-1 = U-test for waiting control group T0 to T1,
U1-3 = U-test for waiting control group from T1 to T3.

[@ Definition: Stanine. A stanine is a type of scaled score used in many norm-referenced standardized tests. There are nine stanine units (the term is short for “standard nine-point scale”), ranging from 9 to 1. Typically, stanine scores are interpreted as above]
average (9, 8, 7), average (6, 5, 4), and below average (3, 2, 1). Using only nine
numbers, stanine scoring is usually easier to understand than other scoring models.
Stanine scores are useful in comparing a student’s performance across different content
areas. For example, a 6 in Mathematics and an 8 in Reading generally indicate a
meaningful difference in a student’s learning for the two respective content areas. While
stanine scores are good at signifying broad differences in performance, they should be
used cautiously when making any finer distinctions about performance. ]
Despite the small sample and high drop-out rate from the beginning to the end of therapy
and the waiting control group that were supplemented by periods without treatment, [the
groups were] compared to each other. The calculated significance are also given in
Tables 1 and 2 (Friedman test and subsequent Mann-Whitney U-test). It turns out that
the Friedman test in about half of the scales, despite small sample, is significant. The U-
tests [of the control group] showed no significant changes from the inclusion in the study
until the beginning of treatment 6 months later (waiting time) [T0 to T1], but many
changes from the start of treatment to end of treatment [T1 to T3]. It can therefore be
concluded that the no [changes occurred for the] waiting group, but under the treatment,
significant changes took place.

In addition, effect strength was examined whether the comparisons between the
start of treatment to the end of treatment that could distinguish between therapy start and
Catamnthesis time. As shown from the questionnaire values, the effects until Catamnthesis
time in almost all comparisons [were] the larger ones. Accordingly, the patient values
improved after the therapy even further; psychopathological abnormalities reduced
further. A drop-out analysis showed that this effect is not by changed by the sample [size].

Moreover, it was investigated whether the various diagnoses have an influence. Due to the small sample, only the depressive patients (n = 41) against a mixed group of patients with other diagnoses (n = 24) [were] examined. This showed that the mixed group [had] significantly higher ES in almost all questionnaire scales [which] showed that the depressed patients are less changed than the others. This can be explained most probably through the frequently placed diagnosis of a neurotic depression (Dysthymia) state, which by definition has to have been rather long-term and characterized by little change.

The content analysis of therapist reports (details in Röser, 2003) showed that many positive changes have been described in dealing with conflicts and in the delineation of the self from others. More often mentioned were more positive self-improvement by the patients, increased efficiency and a more active group behavior, receiving more responsibility. Even physical symptoms were significantly positively affected. Responses, based on deterioration in the patients were rarely mentioned. A therapeutic effect can be illustrated by the therapist’s summarized comments on a broad level.

**Discussion**

In the context of the increasingly required quality testing and assurance, it is also necessary to verify the process used for its concrete application in the form of field studies. Simultaneously, the previously published studies on psychotherapy are mainly “laboratory studies,” i.e., focus on short-term therapy in specialized centers with specially
trained, supervised psychotherapists and paid for by the study. The study presented here sought in the form of a field study a review of specific variant of psychotherapy. The course of the study, the reduction of the sample as well as the partial withdrawal of therapists from the study shows how many problems prepares [one for] such an investigation, despite initially high motivation of the participating therapists.

Therefore, methodological problems limit the meaningfulness of this very actively planned study. So the waiting control design is only partially valuable because [there are] too few data from patients from the waiting [control] group. Many of the patients because of the wait time jumped and turned to other psychotherapists presumably. But beside that, therapists were reported to be under increasing amount of professional competition which meant that [their] patients could not wait to leave and therefore they did not register for the study. Also, the realization of a study in the field (to established therapists in everyday practice) does not seem [to be] without a frequent remembrance that controlling the therapist is not easy. It should be emphasized that it is a study with no external financial support and, accordingly, hardly [any] means for a study center.

It would have been desirable if the therapists had been recalled regularly in this study and possibly rewarded for the relevant data and also for the extra work. Ultimately, these problems led to very small samples. Also, the heterogeneity of the sample, particularly in terms of diagnoses [weighed] heavily in the interpretation of the results. Because of missing records, it was not possible to expect further analysis of the drop-out (e.g., compared with patients registered patients of whom data on therapy are available). The therapy had significantly more hours than originally planned. The proportion of hours in which there has been active images, on the other hand, stood in the middle of
expectations (about every 3rd hour). Because these therapies have been carried out as imaginative psychotherapy by experienced psychotherapists, it would be a significant question as to how many pictures, in general, in such a therapy would need to be carried out. Also, the delineation of deep psychological psychotherapy is present to discuss the question of when to apply a KIP-therapy.

The presented results show significant effects of the therapies in the questionnaire scales. The patients were, in terms of physical symptoms and psychological mood, much better, and the values from the initial pathology changed [to] normal values. Also, the effect strengths correspond to those found in other psychotherapy studies. So reported effect strength (ES) was medium following: psychodynamic therapy ES = 0.69, client-treatment therapy ES = 0.62, for cognitive-behavioral therapy ES = 1.13 (quoted from Grawe, et al., 1994). However, ES of the strong value [1.13] has dependency on survey instruments used. The therapist comments on the development of their patients also reported significant positive changes in their content (better handling of conflicts, more positive self-evaluations, slighter body complaints) fit well with the questionnaire collected data.

The finding that the after end of treatment at the catamnesis time, 18 months later, specific treatments still improve, speaks to the sustainability of the therapy. Because of the small sample of the exploratory analysis carried out only in the waiting control group confirms the expectations: During the waiting time confirmed that no significant improvement changes took place, however, under the therapy [there were] very significant improvements. The exit values of the waiting control group correspond to, at its height, to those of the psychotherapy group. If these values shown would be
representative for the whole group, including the drop-outs (this is not known) it could be a very significant expected effect of the psychotherapies (KIP).

This study shows how difficult it is to integrate an accompanying research into the everyday life of the established psychotherapist. At the same time, but it is precisely such studies needed to complete the clinical reality carried out to evaluate therapies. Desirable in terms of quality would be the routine use of standardized questionnaires. However, these benefits of the therapists should also be rewarded.

For further studies of the effectiveness of KIP it would be advisable to focus on only one disease image, and for this, only a special, symptom-oriented questionnaire. The wait control design was, in principle, not feasible probably because of the waiting period for most patients, their acute treatment would be too long. Also, the random assignment in waiting and therapy groups seems more trouble than to have benefit. Possibly, it would be meaningful if all patients had a shorter time to wait, e.g. 3 months. This period also corresponds to the real wait time for psychotherapy and is certainly easier to convey to patients. You may also be focused, to apply supplementary qualitative and process-oriented therapy methods [for the interim]. These could be researched particularly in patients with imaginative processes and indexed to what the effects of therapy in the imagination process are. Possibly, one can also develop special survey instruments that have special references to the imagination ability, emotion, or creativity of the patients.

**Conclusion for Practice**

The KIP is the framework of the study carried out as effectively as other similar forms of psychotherapy. An active imagination is, on average, every 3-4 hour, so that a
larger proportion of time is required for the processing of the imagination as well as responding to recent reports of the patients. It is shown by the large drop-out rate that it is very difficult to carry out a methodologically sophisticated analysis in the everyday practice of the established therapists without external funding procedures. Such studies are, however, needed.
Effectiveness Study 3. Efficiency of a 20-hour GAI a in Short Psychotherapy.

Kulessa and Jung (1983) examine the KB is a day dream procedure of psychotherapy that stems out of the experimental extension of the verification of deep psychological symbolism (Leuner, 1954). Leuner developed the Katathyme picture life systematically to an independent, psychoanalytically oriented short therapy for the treatment of predominantly neurotic disturbances (Leuner, 1955a, 1957, 1970a). The procedure is divided into three stages: the basic level, an intermediate and advanced. On the first level, typical conflict areas are aimed brought with the help of standard subjects to the imagination representation. In a meaningful direction of the patient driven by its imagination, unconscious material can be activated to the preparation of the creative conflict. The therapeutic work on the middle school opens further subjects and sets the control of the associative leadership of style of the therapist ahead (Leuner, 1955b, 1964). On the higher level, psychoanalytical strategies win wide room. By means of additional administration principles, the therapist can drive the dynamics released by special subjects (Leuner, 1970a, 1974a). This system in the didactic arrangement and use caused Singer to note, “It would appear to be the best organized and systematic of the current methods” under the daydream technologies (Singer, 1974).

Earlier investigations to the effectiveness of the KB procedure

The use of the procedure increasing distribution found in the last years. The therapy was expanded to children and youth (Leuner, 1970b; Specht & Leuner, 1965). The KB is carried out however also as a group therapy (Kreische, 1977; Kulessa, 1975b). The supplementary use of music (Leuner, 1974a) wins special meaning. More than 50
works document the effectiveness of the procedure in individual cases (Beck, 1968; Koch, 1969; Kulessa, 1975a; Holfeld and Leuner, 1969; Klessmann, E. & Klessman, H., 1975; Wächter and Leuner, 1974). However, there exists previously only a few systematic investigations of the effectiveness of the KB at a series of single treatment patients in- action. Roth (1976) reports over results with 14 patients with psychosomatic gynecological troubles. The singles therapy with the KB covered 6 up to 50 sessions. Collectively Roth assesses that he had forgone statistical analysis based on the small random samples. Let the technology of the KB be one treatment for gynecological disorders and especially suitable method for psychosomatic disorders Wächtter (1974) treated 14 patients out of predominantly academic milieu with 15 sessions in the KB on the first level over about 8 weeks. Eight of the 14 patients had improved themselves under the treatment until they were very well. These results were not compared to a untreated control group (maintenance control group). In the related psychological test (Gießener and Göttinger Trouble list, E-N-NR, MAS, MMPI), Wächtter found variations statistically significant in collaboration with Pudel in the psychosomatic troubles scales and manifest anxiety. The observed reduction of that neurotic tendency and rigidity the authors do not value as “with large uncertainty probability.” Wächtter interprets its results as a confirmation of the effectiveness of the KB as a short psychotherapy and considers it an improvement for the more exact neurotic indications and restriction on possibly less heavy syndromes.

**Objective of the current study**

The current study is a further development of the investigation extension of Wächtter (1974). The number of the treated patients was raised from 15 to 26 and the
therapy duration of 15 widened to 20 sessions. The hypothesis stands behind both
measures that through a extension of the therapeutic offering an intensification of the
therapy process takes place and increases so the probability to increase the quota of the
successfully treated and to register more distinct test psychological variations.

Methods

A series of selected patients were treated, who were referred by practicing
physicians (general practitioners, specialty physicians including nerve physicians) the
clinic of the psychiatric university clinic and from the division for psychotherapy and
psychosomatics. Following restrictions were undertaken: Age limitation on 18 to 50
years and existence of the indication of an outpatient psychotherapy.

The patients were included in sequence of their presentation at the time from
January 1976 until May 1976 into the treatment program. Accordingly the sex
distribution of the 26 patients was accidental: 15 women and 11 men.
Table C-3-1. Significant Correlations at the $p \leq 0.05$ level for Pre-test values

[ minus sign means negative correlation]

<table>
<thead>
<tr>
<th></th>
<th>Extraversion</th>
<th>Emot. Instability</th>
<th>Masculinity</th>
<th>Neuroticism</th>
<th>Extroversion</th>
<th>Rigidity</th>
<th>Anxiety</th>
<th>Sleep Disorders</th>
<th>Dominance</th>
<th>Control</th>
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<th>Porosity</th>
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</tbody>
</table>
Results

Assessment of methods of treatment was measured by the comparison of the exit measurement to the before treatment (pre-test) by means of the test results after conclusion of therapy (post services values). These pre-post service differences were obtained by the t test for dependent random samples of normally distributed data and/or with the Wilcoxon test distribution (Anderson, 1958; Hofstatter, 1974; Siegel 1975).

Variation in the E-N-NR and MAS questionnaire

For the E-N-NR-questionnaire and the shortened MAS questionnaire shown in Table C-3-2, the carried out pre- and post-service comparison.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-Mean</th>
<th>Post-Mean</th>
<th>Difference Value</th>
<th>PR₅₀</th>
<th>Std Dev</th>
<th>Probability of error*</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS (Anxiety)</td>
<td>15.8</td>
<td>11.7</td>
<td>4.1</td>
<td>8.5</td>
<td>5</td>
<td>p≤ 0.01</td>
</tr>
<tr>
<td>N = (Neuroticism)</td>
<td>25.7</td>
<td>19.5</td>
<td>6.2</td>
<td>19.0</td>
<td>10</td>
<td>p≤0.01</td>
</tr>
<tr>
<td>NR = (Rigidity)</td>
<td>16.2</td>
<td>12.8</td>
<td>3.4</td>
<td>20.0</td>
<td>7</td>
<td>p≤0.05</td>
</tr>
<tr>
<td>E = (Extraversion)</td>
<td>9.9</td>
<td>12.7</td>
<td>2.8</td>
<td>14.0</td>
<td>7</td>
<td>n. s.</td>
</tr>
</tbody>
</table>

* (T-test for dependent random samples)

Table C-3-2. Averages in the E-N-NR and MAS Test
Up to the extraversion factor significant variations are shown whereby the average Neuroticism value in the total group normalized itself most strongly.

For the Freiburg Personality Inventory, Figure C-3-1., KIP shows changes in individuals from the pre to post test measured for twelve character traits.

**Changes in the psychosomatic trouble picture**

For the detection of physical troubles, the Gießener trouble list was used. The analysis resulted in contact at a factor analysis carried out that suggests a summary of the single symptoms in six syndrome areas. The analysis of the pre-post service variations in these syndrome areas (t test for dependent random samples) is shown in the Table C-3-3.

<table>
<thead>
<tr>
<th>Syndrome nach Zenz, 1971</th>
<th>Average pre</th>
<th>T-Test T</th>
<th>Degrees of Freedom Df</th>
<th>p value p≤</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erschöpfungsneigung</td>
<td>7.08</td>
<td>2.50</td>
<td>2.8</td>
<td>25</td>
</tr>
<tr>
<td>Herz/Kreislaufbeschwerden</td>
<td>5.73</td>
<td>2.65</td>
<td>0.46</td>
<td>25</td>
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<tr>
<td>Magen/Darmbeschwerden</td>
<td>4.00</td>
<td>2.15</td>
<td>2.0</td>
<td>25</td>
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<tr>
<td>Schulter- und Nackenschmerzen</td>
<td>4.08</td>
<td>2.04</td>
<td>4.0</td>
<td>25</td>
</tr>
<tr>
<td>Vegetative Symptome</td>
<td>6.81</td>
<td>3.27</td>
<td>2.5</td>
<td>25</td>
</tr>
<tr>
<td>Sexualität und Schlafstörungen</td>
<td>2.58</td>
<td>0.96</td>
<td>3.7</td>
<td>25</td>
</tr>
</tbody>
</table>

*Table C-3-3. Variations of Psychosomatic Troubles in the Gießener Trouble List*
Answersheet: Freiburg Personality Inventory (FPI) A-B Halbform (semi-formal)

Pre [Entry] = solid line (M1)  post [eXit]= dotted line (M2)  * p ≤ 0.05  ** p ≤ 0.01

<table>
<thead>
<tr>
<th>Percent</th>
<th>4</th>
<th>7</th>
<th>12</th>
<th>17</th>
<th>20</th>
<th>17</th>
<th>12</th>
<th>7</th>
<th>4</th>
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<tbody>
<tr>
<td>Scale</td>
<td>Raw/Sigma</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Stanine: 54% of population

FPI 1 M1 6.6/1.9 **Nervosität** (Nervousness)
M2 5.3/1.9 psychosomatich (psychosomatic)
Gestört (disturbed)

FPI 2 M1 5.4/1.9 **Aggressivität** (Aggressiveness)
M2 4.9/1.7 spontan aggressiv.

FPI 3 M1 6.7/2.1 **Depressivität** (Depressive)
M2 5.4/2.2 Mißgestimmt (bad temper)
Selbstunsicher (avoidant)

FPI 4 M1 5.9/1.9 **Erregbarkeit** (irritability)
M2 5.1/1.6 Reizbar. Leicht (easy ir)

FPI 5 M1 4.1/2.2 **Geselligkeit** (sociable)
M2 5.5/1.6 Gesellig.

FPI 6 M1 2.7/1.4 **Gelassenheit** (composed)
M2 3.7/2.1 Selbstvertrauend (self confid.)

FPI 7 M1 4.0/1.6 **Dominanzstreben** (strives to dominate)
M2 4.1/1.7 Reaktiv aggressiv.

FPI 8 M1 6.6/2.1 **Gehemmtheit** (self consciousness)
M2 5.6/2.1 Gehemmtheit

FPI 9 M1 4.8/2.0 **Offenheit** (candor)
M2 4.7/1.8 Offenheit

FPI E M1 3.9/2.6 **Extraversion**
M2 4.6/1.8 Extravertiert

FPI N M1 6.6/2.0 **Emot. Labilität** (instability)
M2 5.3/2.5 Emotional Labilität

FPI M M1 2.5/2.6 **Maskulinität** (masculinity)
M2 4.2/2.3 typisch männliche
Selbstschilderung (manly self description)

FPI E M1 4.6/1.8 Extravertiert

FPI N M1 6.6/2.0 **Emot. Labilität** (instability)
M2 5.3/2.5 Emotional Labilität

FPI M M1 2.5/2.6 **Maskulinität** (masculinity)
M2 4.2/2.3 typisch männliche
Selbstschilderung (manly self description)

Figure C-3-1. Variations in the FPI Profile with 26 Psychotherapy Patients after a 20 hour KB Treatment
The variation of the physical troubles can be described through a decline of the exhausttion inclination, removal of insomnia, increase of the libido, removal of vegetative symptoms (headache, sweat outbreaks, etc.) and a reduction of pains in the shoulder and neck area. The improved syndrome areas, especially the distinct exhaustion inclination in increasing vegetative symptoms can be understood probably as a “vegetative exhaustion syndrome” in the frame of an available neurotic depressive irritation.

**Discussion**

In psychotherapy, it is frequently distinguished between process research and success research. In process research, one is more concerned with point-elevation with the goal, independent of the therapeutic process of controlling it, for example, in the interaction of patient and psychotherapist. The execution of process studies is tied, however, to certain prerequisites that were not given in the existing case.

To judge whether a therapeutic procedure leads to considerable successes, it suffices, first of all, a two-point-elevation with a pre-post service-design. A corresponding attempt plan raises some statistical problems, that shortly are going to be discussed. Each single measurement is marked with a fair mistake. This mistake variance of the difference values becomes doubly as large as the mistake variance of a single measurement. Thereto comes that the difference of its exit being dependent on its end value. Thorndike (1924) already has made us aware of the correlation between exit value and difference value. Patients with higher exit value have higher variations based alone on the statistical dependence of the difference values than patients with lower exit value. This statistical artifact can be corrected through partial correlation. Cattell (1966)
warned however, that before that, to turn off all connections between increase and exit status because therefrom also real treatment effects (true variance) are affected.

As a further source of mistakes, what one must reckon with is the specific attitude of the patients from the scientific investigation. The significance of this influence is designated as Hawthorn effect as it arises if the patients know that they are participating in a research study (Sommer, 1968). An aimed clarification of the patients deliberately was therefore avoided. Each open study with its complex conditions represents a compromise between possible and desirable conditions. Kiesler (1966) referred with correctness that proves that the hope for the definitive study, “The once and for all effectiveness of psychotherapy and its effectiveness in the process, is unrealistic.”

This finding should not lead to any operational diagnostic criteria for success in view, but rather to stimulate as many different criteria to evaluate success of the therapy.

The use of psycho diagnostic test is only one of many possibilities, but it has the advantage that it delivers, in the context of a standard population as a reference, reliable details about the immediate concerns. As for the methods used by us (FPI, MAS, E-N-NR, GT S) there are standardized values which allow a degree of variation in individuals or clinical groups to be reliably determined. In regard to the population norm, Borgatta (1959) omitted the use of a control group. Meltzoff (1970) points that out for about 30% of all treatment studies for monitoring psycho-diagnostic tests. For short treatment times, it can also be assumed that the spontaneous changes in control or waiting groups are insignificant. Eysenck (1952) indicates that time as an essential parameter for spontaneous remission. The remission rate is about, on the average, 30% after 2—3 years for neurotic patients after recent investigations of Bergin (1971).
In the study mentioned above already by Wächter (1974) showed that by a short psychotherapy with the Katathymen life images by 15 sessions objective therapeutic effects can be obtained, compared to the small changes of the waiting group.

The results of this investigation now with 20 treatment sessions confirm the therapeutic effect of the Leuner procedure developed for a large group of patients. With the extension of the therapy around 5 sessions, the size of the psychological test variations increased significantly in the patient group compared to the results of Wächter (1974).

For the sake of completeness, it should be mentioned that our study applied the therapeutic technique of Wächter but has been modified: instead of 2 meetings a week with the KB, we have a weekly meeting. The therapeutic process between the sessions that was promoted in the patients were stopped to represent at home 1—2 addressed contents of the day dream painting (Kulessa, 1975a). Because of the difference in the two treatment variables, our results only partially compare with those of Wächter. The advantage of the technology pursued by us seems to lie in that the therapeutic influence was expanded vis-à-vis a treatment duration of an average 7 weeks with Wächter to 20 weeks with ours. Without measurable loss at intensity of the therapeutic process, considerably more time was available for the patient for their personal further development — with only a slightly greater time available for the therapist.

After general clinical experience, a favorable influence can be seen therein on the character neurotic component of the disturbed. The success suggests a study aimed at the therapeutic influence of this technology through further investigations in practice.
Inspection of the exit values of the patients treated by us showed that the group was relatively heterogeneous. Seven patients (almost one in four) showed a psychological test, i.e., in their self-assessment in the FPI, “discreet” baseline values. They predominately have clinically defined symptoms or mono symptomatic. Their improvement was evident in the Giessen Complaints [Trouble] List and their subjective being. This group, it may be supposed, is from the large group of alexithymia psychosomatic disturbed category, on account of their low psychotherapeutic influence. A wider discussion arose (Cremerius, 1977; M’Uzan, 1977; Overbeck, 1977; & Brede, 1977) lately in the literature. An objectifying judgment of this subgroup is not possible because of the small sample. The clinical impression suggests that even these subjects with the KB, in a pragmatic sense, have been influenced.

Another observation, based on the internal validity of the therapeutic results, is yet worth mentioning. The treatment success is not dependent, most likely, on the severity of the pathological situations of the subjects, as described in the statistical point of view. Patients with an average degree of neurotic and / or psychosomatic disturbances showed obvious improvement.

The question of the duration of improvement is presented by a now completed investigation is yet to be answered.

Overall, it deserves to be noted that with a brief psychotherapy with the KB of 20 meetings with a group in which the symptoms were relieved in 18 of 26 subjects and remained so for longer than 5 years yields therapeutically relevant results.
Summary

Twenty-six non-selected out-patients of a psychiatric and psychotherapeutic clinic with psychoneurotic personality disorders and psychosomatic complaints were treated with the Guided Affective Imagery (GAI) during 20 sessions. Analysis of the psychodiagnostic tests prior to treatment showed that seven patients had insignificant psychopathological profiles although they felt badly and had diffuse psychosomatic complaints. Seven patients had neurotic disorders and sporadic psychosomatic complaints whereas 12 suffered from neurotical symptoms and severe psychosomatic disorders.

The rate of improvement was assessed by standardized tests. The GAI proved to be an effective short term treatment of depressive and inhibited patients. A significant rate of improvement of less neurotic and psychosomatic disorders was also found.

These results are still to be confirmed by katamnestic questionnaires in order to assure that the therapeutic changes are long lasting.
Effectiveness Study 4. The GAI Psychosomatic Sexual Disorders in Both Sexes.

In the following study by Roth (1990) results are presented for more than 10 years of continuous work in the use of GAI for sexual disorders in both sexes. Its goal was to compare the efficacy of GAI psychotherapy as a gynecological treatment for sexual disorders in women and sexually-related psychosomatic disorders in men. As a secondary objective of the study, the intention of the therapist can be considered to conceive of sexual disorders as ordinary neurotic disorders and treated as such. These disorders provide no particular difference from other disorders in significance for diagnosis or treatment.

Sexual disorders and psychosomatic-gynecological symptoms were the main symptoms which had led to patients in the therapy. In almost all cases, these symptoms were accompanied by other psychoneurotic and psycho-vegetative disorders. It was regarded as a prerequisite for entry into the study that patients had to have them carried out previously, by a general or specialist, investigations to exclude any somatic causes of their problems. Many of the patients had longer somatic and psychotherapeutic treatments behind him, before they came to us.

The treatments were carried out by a total of 12 therapists. Most of them worked initially at the Psychiatric University Clinic in Bern, and later, in part to other institutions or in their own practice. One half of the therapists had at the beginning of the study, a good to very good KB training, the other half, a beginner to medium experience. Almost all treatments were supervised by experienced therapists. Treatments were administered
until a patient or patient in accordance with the therapist, the therapy ended when
treatment was sufficiently successful or considered hopeless. Sufficiency was judged on
the basis of reports by successfully treated patients, which is compatible with the
treatment outcome after the disappearance or substantial mitigation of the symptoms.
The treated were 65 women, the average age was 32.2 years (between 19 and 53 years),
and 26 men at 34.1 years (between 24 and 51 years), both women and men came from all
social classes.

In the early days of the study, only the standard techniques of KB, as they are
described in the literature used (Leuner, 1985). Around the last quarter of the therapies,
however, increasingly the “Technique 2” was used in dealing with bodily sensations
during the KB, as it has been described by (Roth, 1984). This change in the technology
seems particularly for psychosomatic disorders induced a reinforcement of the therapy
effect of the KB.

Results

The study results are summarized in the following tables. Table C-4-1. gives an
overview of the symptoms and the number of treated sexual experience disruptions in the
65 women in terminology similar to Eicher (1977).

<table>
<thead>
<tr>
<th>Complaint/Symptoms</th>
<th>Total</th>
<th>Disappeared/Improved</th>
<th>Unchanged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libido disorder (sex desire inhibition)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Loss of libido</td>
<td>12</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>- Alibidimie (low sex appetite)</td>
<td>19</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Orgasm disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complaint/Symptoms</td>
<td>Total</td>
<td>Disappeared/Improved</td>
<td>Unchanged</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------</td>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>- Oligoorgasmie (multiple orgasms)</td>
<td>7</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>- (Prim.) Anorgasmia (no orgasm)</td>
<td>18</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>- Pseudoanorgasmie (false orgasm)</td>
<td>11</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Vaginismus (involuntary spasm of the muscles surrounding the vagina preventing penetration in any form)</td>
<td>4</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>Algopareunie (dyspareunia: painful sexual intercourse)</td>
<td>13</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Zwangsonanie (Perversions)</td>
<td>1</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>Total (Percent)</td>
<td>85 (100)</td>
<td>66 (77.6)</td>
<td>19 (23.4)</td>
</tr>
</tbody>
</table>

*Table C-4-1. Women Experiencing Sexual Problems Therapy Results*

For the sake of clarity, the symptoms of the women were divided into two groups. Table C-4-2. gives a picture of psychosomatic-gynecological symptoms and their treatment outcomes.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Total</th>
<th>Improved/Gone</th>
<th>Unchanged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary amenorrhea (absence or suppression of menstrual flow)</td>
<td>4</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>Dysmenorrhoea (painful menstruation)</td>
<td>21</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Symptoms</td>
<td>Total</td>
<td>Improved/Gone</td>
<td>Unchanged</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Premenstrual dystonia (constant muscle contractions)</td>
<td>28</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Mastodynia (pain in the breast)</td>
<td>3</td>
<td>3</td>
<td>--</td>
</tr>
<tr>
<td>Pelvipathie (pelvic pain)</td>
<td>4</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>Fluor genitalis (mucus discharge)</td>
<td>7</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Pruritus vulvae (itchy vulva)</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total (Percent)</strong></td>
<td>72 (100)</td>
<td>61 (84.7)</td>
<td>11 (15.3)</td>
</tr>
</tbody>
</table>

*Table C-4-2. Gynecologic-Psychosomatic Symptoms / Therapy Results*

The contraction of the values of the average treatment results of both groups of symptoms for the 65 women yields a success rate of 80.9%.

In the following session numbers of patients have been required: Total number of sessions, i.e., sessions, including the medical history and final meeting, from 4 to 64 sessions, average of 21.9 sessions.

Among men, Table C-4-3. summed up the success of men. The meetings range from 4 to 55, with an average of 27.5.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Total</th>
<th>Improved/Gone</th>
<th>Unchanged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libido problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Alibidimie (low sexual appetite)</td>
<td>4</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>Symptoms</td>
<td>Total</td>
<td>Improved/Gone</td>
<td>Unchanged</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------</td>
</tr>
<tr>
<td>- Loss of libido</td>
<td>10</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Erectile Dysfunction</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Premature ejaculation</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Latent homosexuality</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Zwangsonanie (perversions)</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total (Percent)</td>
<td>32 (100)</td>
<td>23 (71.9)</td>
<td>9 (28.1)</td>
</tr>
</tbody>
</table>

Table C-4-3. Disorders of Sexual Experience in Men, Therapy Results

Not published in this table are the results of three cases and patients with psychosomatic latency probably from more common disorder of the male pelvic floor, which as Prostatopathie, perineum pain, and another that cannot be described. Three such cases came into the KB-therapy, two of them were successfully treated.

The many accompanying psychoneurotic symptoms were complained about by both women and men who are not listed here in tabular form. Many of these symptoms have been improve just as easily and permanently as the sexual and psychosomatic-gynecological disorders. Table C-4-4. shows the percentage of improvement by the KB-therapy in these neurotic and psycho-vegetative monitoring and parallel symptoms is roughly in the same frame: 83.1% for women and for men 75.4%.
Symptoms include:

<table>
<thead>
<tr>
<th>WOMEN: problems with the ability to experience sexual gratification</th>
<th>Gone/Improved %</th>
<th>Unchanged/Worsened %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77.6</td>
<td>22.4</td>
</tr>
<tr>
<td>Gynecological and psychosomatic disorders</td>
<td>84.7</td>
<td>15.3</td>
</tr>
<tr>
<td>Other neurotic disorders</td>
<td>83.1</td>
<td>16.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEN: problems with the ability to experience sexual gratification</th>
<th>Gone/Improved %</th>
<th>Unchanged/Worsened %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71.9</td>
<td>28.1</td>
</tr>
<tr>
<td>Other neurotic disorders</td>
<td>75.4</td>
<td>24.6</td>
</tr>
</tbody>
</table>

Table C-4-4: Summary of Results for Sexual Issues for Women and Men

It is noticeable that the success rate is slightly higher in women than in men, although a higher average number of sessions for men (27.5 compared to 21.9 for women) was needed before the treatment results were satisfying.

True and lasting symptom deterioration or even a general deterioration of the mood of patients as a result of therapy never happened, though occasionally during the course of therapy old symptoms temporarily re-occurred anew for a short time came lightly, only to disappear again soon thereafter. Most frequently occurring was apparent ease of depression. The KB was used as single therapy. In no case was the (marital) partner treated. Only when threatened by the behavior of the partner did that patient seek a therapy meeting with the therapist to convey the necessary information about the course of therapy and so on.
Catamnesis

More than 60 persons are currently treated during catamnesis, all over a period of more than 2 years. In 5 cases, something more serious relapses occurred. A further therapy had to be taken up again with the help of the KB. Here were in all cases, only few additional meetings (needing up to 12) to achieve a renewed remission. It is also noteworthy that among these 5 patients, and patients to the group that had had little more therapy sessions, namely only between 6 and 19. It must be assumed that here the first therapy was terminated early. In the other cases examined, catamnestic success of therapy in 49 people was the same way as there had appeared at the end of therapy. This was followed up and they were still satisfied with the outcomes. The remaining 6 people had felt occasional recurrence of various symptoms, but they always either been felt completed or were themselves so satisfied with this new treatment not to return.

Discussion

This indicative study has the advantage that they come from the daily practice of psychotherapy and from a larger number of differently-trained therapists. The patients were selected solely for their symptoms from the group of patients who visited the practices of 12 therapists. The patients - as well as therapists - were subject to no pressure and there were no specific expectations of how they are linked to the success of the study.

As was shown earlier (Roth, 1980) and could be expected from the widespread use of the KB in the past few years, this study demonstrated again and expresses more clearly than before: The KB is an effective tool in the treatment of psychosomatic diseases of women and sexual dysfunction in men and women. The KB is applicable in
this indication area as a single therapy, and particularly, as a short-term therapy, providing very satisfactory results. A selection for symptoms and a therapeutic focusing on the conflict problems of the patient is not required. The KB is for use in these indications in the areas according to Leuner (1985) described methods. The modification of the technique by Roth (1984b) is a good complement.
Effectiveness Study 5. Emotions and Primary Process in GAI.

This single-case study by Stigler & Pokorny (2001) explored the therapeutic ingredients of a psychotherapy method using an imagery technique. From a 19-session psychodynamic psychotherapy, six sessions containing guided affective imagery were compared with the remaining 13 sessions, which did not contain imagery. The completely transcribed sessions were screened by three computerized text-analytic instruments: the Regressive Imagery Dictionary (RID), the Affective Dictionary Ulm (ADU), and computerized Referential Activity (cRA). We hypothesized that imagery will elicit more primary process (as indicated by RID), more (and in particular more positive) affects (as indicated by ADU), and more Referential Activity (as indicated by cRA). Results from all 3 vocabulary measures confirm these hypotheses. These results are of interest regarding how to access the domain of implicit (procedural) knowledge in psychotherapy and may contribute to the domain of dream research.

Method

The current single-case process study is based on the transcripts from a 19-session dynamic psychotherapy of a 34-old-German homemaker consulting for panic attacks resistant to several medical, psychological, and pharmacological treatments.

At the end of imagery psychotherapy, panic attacks had become very rare. When they did occur, the patient no longer considered them a problem. This favorable outcome proved stable throughout the 3-year follow-up and was also globally confirmed by the
patient’s Symptom Checklist 90-Revised (SCL-90-R; Derogatis, 1983) scores, with a General Severity Index (GSI) of .47 before therapy, .10 at termination, and .18 at 3-year follow-up.

Of the 19 therapy sessions, 13 were purely verbal sessions and 6 comprised 20 to 30 min of imagery and, for the remaining time of the hour, verbal elaboration of the imagery part. Guided affective imagery (Leuner, 1984) starts by a brief relaxation followed by the suggestion to imagine a human being, an animal, or part of a landscape (e.g., a meadow, a river, a house). The patient develops a dreamlike scenario in which she herself is moving, perceiving, acting, and interacting as the main person. Although in a state of substantial relaxation with altered consciousness, she is still able to talk to and understand the therapist. Hence, it is possible to audio record the dream material directly during the dreaming process, and the therapist can intervene directly at the primary process level of the dream scenario. After dreaming in a relaxed position, the patient returns to the usual psychotherapeutic face-to-face position with regard to the therapist for verbal elaboration of the imagery content. Depending on the dream material to be further discussed, one to two verbal sessions follow, which are structured according to the usual dynamic psychotherapy principles.

The therapist was a male psychiatrist with psychodynamic background and a member of the training staff of the Swiss Association for guided affective imagery.

Procedure

By the time of her intake interview at the outpatient clinic of the University of Ulm Department of Psychotherapy, the patient had already responded to the standard test battery that was sent to her upon her request for an appointment. An individual goal
attainment scale was established with the patient in Session 5. After each session (from Session 4 on), an alliance questionnaire was completed by both the patient and the therapist. Pre-therapy measures were repeated at therapy end and at 3-year follow-up.

The multimodal process investigation comprised manual rating methods for defense mechanisms, therapeutic interactions, and conflict patterns as well as computerized content analysis methods for emotions (ADU; Dahl et al., 1992; Hölder et al., 1992), primary process (RID; Martindale, 1975), and RA (Bucci, 1997). This paper focuses on the computerized content analysis methods for affects, primary process, and RA, comparing imagery sessions (and the following elaboration) with purely verbal sessions.

**Instruments**

The 19 psychotherapy sessions were transcribed from audiotapes adapting the German version of the transcription rules established by Mergenthaler and Stinson (1992). The category system underlying the ADU developed by Hölder et al. (1992) is derived from Dahl’s (1978) theory of emotions as appetites and messages and his classification of emotion words (Dahl & Stengel, 1978). The first dimension defines positive and negative emotions, the second dimension self-emotions (ME) and object emotions (IT), and the third dimension their passive or active character. The eight categories of ADU are Affection and Surprise (positive IT), Contentment and Joy (positive ME), Anger and Fear (negative IT), and Depression and Anxiety (negative ME). In a study using the non-computerized ADU, Hölder, Zimmermann, et al. (1996), Zimmermann (1995), and Pokorny, Hölder, and Zimmermann (1994) performed a content analysis of 279 dreams from a sample of 32 therapy reports on psychoanalytic
treatments of female patients and found a predominance of negative emotions over positive emotions.

The RID is a computerized content-analytic procedure screening therapeutic or literary texts for primary versus secondary process vocabulary on the basis of a dictionary elaborated by Martindale (1975). Primary process quality is attributed to words with connotations of drives (oral, anal, sex), sensations (touch, taste, odor, sound, vision), defensive symbolization (passivity, voyage, diffusion, chaos), regressive cognition (altered states of consciousness, timelessness), and “icarian imagery” (fire, water, ascend, descend, height, depth). Secondary process is connected to abstraction, instrumental behavior, social behavior, time, moral imperatives, order, and restraint. The German version of the RID (Delphendahl, 1985) works with more than 5,000 words reduced to their basic forms. As Reynes, Martindale, and Dahl (1984) reported, more primary than secondary process has been found in folktales of primitive as opposed to complex preliterate societies, in poetry of writers who exhibit signs of psychopathology as opposed to writers who do not show such signs, and in stories told by younger as opposed to older children.

The computerized RA (cRA) measure was developed as a computerized version of the manual RA rating (Bucci, 1993) by modeling empirically the scoring of expert judges. Like RA, cRA aims to seize the structure of narrative style independently of specific contents. The high-cRA list comprises 63 words used to describe narrative episodes: third-person singular pronouns, articles, direction and space indicators, mental and emotional states in the past tense, and others. The low-cRA list typically aims at instances of subjective rumination and vagueness and contains 118 words like
nonspecific quantifiers (e.g., any, more, most), nonspecific actions in the present tense (e.g., make, try), nonspecific objects (things, somebody), words expressing negation, assertion and uncertainty, and others. Together, these 181 words from the two lists accounted for virtually half of all words from the various texts used for developing and testing the lists (Mergenthaler & Bucci, 1999). These authors found significant correlations, ranging between .50 and .70, when comparing cRA and RA.

Computer-assisted content-analytic methods count word occurrences in a context-free way regardless of their actual meaning in the investigated text. The German word “lieber,” for instance, can have the meaning “lovely” (a lovely man) or “rather” (“I would rather like . . .”). The frequencies of alternative meanings as they generally appear in psychotherapeutic transcripts are taken into consideration during the development of the dictionary. However, substantial individual deviations can occur in some patients. For this reason, we supervised the initial vocabulary selection of the computerized procedures for ADU and RID to eliminate word items not expressing affects or primary or secondary process in the given context. Twelve items were excluded from ADU and 25 from RID. Results are based on modified vocabularies. There were no substantial differences in statistical results with original and modified dictionaries. It seems that the computerized context-free analysis of the words tapped the semantic contents in this single case study considerably well.

Statistics

For statistical comparison, the text material of the 19-session therapy was divided into 25 text units classified into three groups: 13 verbal sessions (V), six daydreaming parts of imagery sessions (I), and six elaboration parts of imagery sessions (E). Group E
was expected to lead to results in between those for Groups I and V because this phase of first clarifications and associations after imagery deals with imagery material but in a more abstract, logical, rather than narrative style. The sequence of the 19 sessions was as follows: Sessions 1 to 5, V; Session 6, I + E; Session 7, V; Session 8, I + E; Session 9, V; Session 10, I + E; Sessions 11 and 12, V; Session 13, I + E; Session 14, V; Session 15, I + E; Sessions 16 and 17, V; Session 18, I + E; and Session 19, V.

As dependent variables, relative frequencies of tokens in the corresponding content category (related to all tokens in a session) were considered. We report means of relative frequencies within the three investigated groups. Group differences are expressed as effect sizes based on arcsine-transformed relative frequencies. The arc-sine transformation, \( r \rightarrow \arcsin(Vr) \), was used for achieving normally distributed variables with stabilized variances.

**Results**

**Speech Proportion of Patient versus Therapist**

*Who speaks more?* (Table C-5-1.) The whole transcribed psychotherapy text has 95,780 tokens from which 31,611 were uttered by the therapist and 64,169 by the patient. Taking all settings together, the patient speaks twice as much as the therapist. However, patient’s and therapist’s speaking activities alter as a function of setting. Whereas the therapist’s contribution is lowest in verbal sessions (29.6%), he is more active in elaboration (42%) and speaks more than the patient during imagery (54.4%).
Table C-5-1. Speech Activity of Therapist and Patient

Who verbalizes more in primary/secondary process, more emotion, more RA?

(Table C-5-2). The relative proportion of patient and therapist RID vocabulary utterances over all 19 sessions is about the same. ADU indicates that, in this psychotherapy, the therapist expresses clearly more positive emotions than the patient. As shown by cRA, there is a higher input of both high and low RA on the patient’s part.

<table>
<thead>
<tr>
<th>Category</th>
<th>Therapist</th>
<th>Patient</th>
<th>Difference a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>σ</td>
<td>Mean</td>
</tr>
<tr>
<td>RID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary process b</td>
<td>4.63</td>
<td>2.90</td>
<td>4.16</td>
</tr>
<tr>
<td>Secondary process</td>
<td>9.27</td>
<td>1.52</td>
<td>8.85</td>
</tr>
<tr>
<td>Primary index</td>
<td>31-60</td>
<td>14.14</td>
<td>31.46</td>
</tr>
<tr>
<td>ADU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion</td>
<td>2.14</td>
<td>0.52</td>
<td>1.60</td>
</tr>
<tr>
<td>Positive emotion</td>
<td>1.13</td>
<td>0.51</td>
<td>0.55</td>
</tr>
</tbody>
</table>
### Table C-5-2. Verbalization of Content Categories by Therapist and Patient

The following results concern setting differences and time trends on the patient’s part.

**RID**

*Imagery vs. elaboration vs. verbal* (Table C-5-3. and Figure C-5-1.). RID shows that primary process vocabulary dominates the imagery condition; subcategories Icarian Imagery, Sensation, and Defensive Symbolization show impressive differences compared with the non-imagery conditions. Elaboration shows still significantly more primary process vocabulary than verbal, especially in subcategories Icarian Imagery and Defensive Symbolization. Secondary process vocabulary is inversely distributed: Verbal condition contains most of it, elaboration somewhat less, and imagery substantially less.
*Time trend.* The RID time trend from Session 1 to Session 19 (Table C-5-4.) indicates a significant rise of secondary process vocabulary in the verbal condition, together with a primary process tendency to diminish in the verbal condition.

<table>
<thead>
<tr>
<th>Category</th>
<th>Relative frequency</th>
<th>Effect size b</th>
<th>U tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V (n = 13)</td>
<td>E (n = 6)</td>
<td>I (w-6)</td>
</tr>
<tr>
<td>RID total</td>
<td>12.66</td>
<td>12.40</td>
<td>17.04</td>
</tr>
<tr>
<td>Primary process</td>
<td>2.80</td>
<td>4.44</td>
<td>13-39</td>
</tr>
<tr>
<td>Secondary process</td>
<td>9.86</td>
<td>7.97</td>
<td>3.65</td>
</tr>
<tr>
<td>Primary index c</td>
<td>22.24</td>
<td>35.71</td>
<td>78.35</td>
</tr>
</tbody>
</table>

**Primary**

- Icarian imagery
- Sensation
- Defensive symbol
- Regressive cognition
- Drives

**Secondary**

- Abstraction
- Behavior

*Note.* KW = Kruskal-Wallis $H$ test; $U =$ Mann-Whitney $U$ test; $E =$ elaboration; $V =$ verbal; $I =$ imagery. For $U$ tests, all $p$’s are two-tailed.

a Means per session.

b Based on arcsine-transformed relative frequencies.

c $100 \times$ primary/(primary + secondary).

~$p < 0.1$. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

Table C-5-3. Relative Frequencies and Effect Sizes for Regressive Imagery Dictionary (RID) (Patient) in the Verbal, Elaboration, and Imagery Settings
Figure C-5-1. Regressive Imagery Dictionary (RID) (patient): Primary process from Session 1 to Session 19.

\[
\begin{array}{ccc}
\text{Verbal} & \text{Elaboration} & \text{Imagery} \\
(n = 13) & (n = 6) & (n = 6) \\
\text{RID total} & .52^* & .14 & -.37 \\
\text{Primary process} & -.40 & .03 & -.09 \\
\text{Secondary process} & .63^* & .03 & -.31 \\
\text{Primary index}^a & -.52^* & .03 & -.03 \\
\end{array}
\]

Note. Values represent relative frequencies.
Table C-5-4. Spearman Correlations for Regressive Imagery Dictionary (Patient) Time Trend

[Definition: Spearman correlations. Spearman rank correlation is used when there are two measurement variables and one “hidden” nominal variable. The nominal variable groups the measurements into pairs; if the measured height and weight of a group of people, “individual name” is a nominal variable. When one wants to see whether the two measurement variables covary; whether, as one variable increases, the other variable tends to increase or decrease. It is the non-parametric alternative to correlation, and it is used when the data do not meet the assumptions about normality, homoscedasticity and linearity. Spearman rank correlation is also used when one or both of the variables consists of ranks.

There is rarely enough data in the own data set to test the normality and homoscedasticity assumptions of regression and correlation; the decision about whether to do linear regression and correlation or Spearman rank correlation will usually depend on your prior knowledge of whether the variables are likely to meet the assumptions.

Null hypothesis

The null hypothesis is that the ranks of one variable do not covary with the ranks of the other variable; in other words, as the ranks of one variable...
increase, the ranks of the other variable are not more likely to increase (or
decrease).

How the Spearman rank correlation test works

Spearman rank correlation works by converting each variable to ranks. Thus, if on is doing a Spearman rank correlation of blood pressure vs.
body weight, the lightest person would get a rank of 1, second-lightest a
rank of 2, etc. The lowest blood pressure would get a rank of 1, second
lowest a rank of 2, etc. If one or both variables is already ranks, they
remain unchanged, of course. When two or more observations are equal,
the average rank is used. For example, if two observations are tied for the
second-highest rank, they would get a rank of 2.5 (the average of 2 and 3).

Once the two variables are converted to ranks, a correlation analysis is
done on the ranks. The correlation coefficient is calculated for the two
columns of ranks, and the significance of this is tested in the same way as
the correlation coefficient for a regular correlation. (This Spearman’s
correlation coefficient is also called Spearman’s rho). The P-value from
the correlation of ranks is the P-value of the Spearman rank correlation.
The ranks are rarely graphed against each other, and a line is rarely used
for either predictive or illustrative purposes, so you don’t calculate a non-
parametric equivalent of the regression line. Source:
http://udel.edu/~mcdonald/statspearman.html]
ADU

Imagery vs. elaboration vs. verbal (Table C-5-5.). Imagery has the highest percentage of emotion words (2.52%); the difference is significant compared with the verbal condition (1.40%) but not with the elaboration (1.88%) condition.

Positive emotions taken together (Figure C-5-2.) prevail significantly in imagery (1.81%) over the elaboration (0.56%) and verbal (0.39%) conditions. The positive-negative index confirms this domination of positive emotions in imagery, whereas negative emotions (Figure 3) are expressed more frequently in the verbal and elaboration conditions than in imagery.

At the level of self (ME) and object (IT) emotions, the most striking finding is the domination of positive ME emotions (Contentment and Joy) in imagery (1.54%) compared with verbal (0.22%) and elaboration (0.42%). On the other side, negative IT emotions (Anger and Fear) have their strongest expression in elaboration (0.33%) followed by verbal (0.21%) and imagery (0.08%) conditions.

Time trend. A significant time trend was found only for the therapist: His positive emotion level increases in verbal sessions from the beginning to the end of the therapy, in particular for Category 4 (joy).

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Relative Frequency</th>
<th>Effect size, a</th>
<th>U Test</th>
<th>KW:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V (n = 13)</td>
<td>E (n = 6)</td>
<td>I (n = 6)</td>
<td>E-V</td>
</tr>
<tr>
<td>3 Contentment</td>
<td>1.40</td>
<td>1.88</td>
<td>2.52</td>
<td>0.89~</td>
</tr>
<tr>
<td>4 Joy</td>
<td>0.07</td>
<td>0.30</td>
<td>1.15</td>
<td>2.19**</td>
</tr>
<tr>
<td>1 Love</td>
<td>0.16</td>
<td>0.13</td>
<td>0.39</td>
<td>-0.53</td>
</tr>
<tr>
<td></td>
<td>0.07</td>
<td>0.06</td>
<td>0.20</td>
<td>-0.10</td>
</tr>
<tr>
<td>Category</td>
<td>Relative Frequency</td>
<td>Effect size, U Test</td>
<td>KW: I/E/V</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V (n = 13)</td>
<td>E (n = 6)</td>
<td>I (n = 6)</td>
<td>E-V</td>
</tr>
<tr>
<td>8 Anxiety</td>
<td>0.35</td>
<td>0.49</td>
<td>0.34</td>
<td>0.26</td>
</tr>
<tr>
<td>6 Fear</td>
<td>0.13</td>
<td>0.30</td>
<td>0.08</td>
<td>1.16</td>
</tr>
<tr>
<td>2 Surprise</td>
<td>0.10</td>
<td>0.08</td>
<td>0.07</td>
<td>-0.71</td>
</tr>
<tr>
<td>7 Depression</td>
<td>0.45</td>
<td>0.50</td>
<td>0.28</td>
<td>-0.03</td>
</tr>
<tr>
<td>5 Anger</td>
<td>0.08</td>
<td>0.03</td>
<td>0.00</td>
<td>-0.99~</td>
</tr>
<tr>
<td>3, 4 Positive ME</td>
<td>0.22</td>
<td>0.42</td>
<td>1.54</td>
<td>1.23*</td>
</tr>
<tr>
<td>1, 2 Positive IT</td>
<td>0.16</td>
<td>0.14</td>
<td>0.28</td>
<td>-0.63</td>
</tr>
<tr>
<td>7, 8 Negative ME</td>
<td>0.80</td>
<td>0.99</td>
<td>0.62</td>
<td>0.20</td>
</tr>
<tr>
<td>5, 6 Negative IT</td>
<td>0.21</td>
<td>0.33</td>
<td>0.08</td>
<td>0.81</td>
</tr>
<tr>
<td>3, 4, 7, 8 ME</td>
<td>1.03</td>
<td>1.42</td>
<td>2.16</td>
<td>0.77</td>
</tr>
<tr>
<td>1, 2, 5, 6 IT</td>
<td>0.37</td>
<td>0.47</td>
<td>0.36</td>
<td>0.83*</td>
</tr>
<tr>
<td>1-4 Positive</td>
<td>0.39</td>
<td>0.56</td>
<td>1.81</td>
<td>0.83</td>
</tr>
<tr>
<td>5-8 Negative</td>
<td>1.01</td>
<td>1.32</td>
<td>0.70</td>
<td>0.43</td>
</tr>
<tr>
<td>Positivity index b</td>
<td>27.91</td>
<td>34.27</td>
<td>70.11</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Note. Categories are sorted by effect size Verbal x Imagery. For U tests, p values are two-tailed. KW = Kruskal-Wallis H test; U = Mann-Whitney U test; V = verbal; E = elaboration; I = imagery; ME = self-emotions; IT = object emotions.

a Based on arcsine-transformed relative frequencies.

b 100 x positive/(positive + negative).

*p < .05. **p < .01. ***p < .001.

Table C-5-5. Mean Relative Frequencies and Effect Sizes for Affective Dictionary Ulm (Patient) in the Verbal, Elaboration, and Imagery Settings
Figure C-5-2. Affective Dictionary Ulm (ADU) (patient): Positive Emotions from Session 1 to Session 19.

cRA

High-cRA words are overrepresented in imagery, as demonstrated by cRA-high index, and they prevail in both imagery and verbal sessions over elaboration (Table C-5-6.). Low-cRA vocabulary is overrepresented in verbal and elaboration sessions compared with imagery.

No time trend is found for high cRA; low cRA increases significantly throughout verbal sessions.

Discussion

Speech Proportion: Patient—Therapist
The therapist is almost twice as active in imagery than in verbal conditions. The therapist-patient speech ratio of roughly 1:2 in verbal sessions corresponds to what is usually found for dynamic psychotherapy (see Table C-5-1.). The therapist’s 54.4% activity during imagery may be attributed to the method: He is more active in accompanying the patient, in asking for more details in the imagery content, and in exploring the patient’s emotional involvement than in the usual psychotherapeutic face-to-face.

Figure C-5-3. Affective Dictionary Ulm (ADU) (patient): Negative Emotions from Session 1 to Session 19
The therapist expressed twice as many positive emotions as the patient, and both patient and therapist express the most positive emotions during imagery. The overall presence of emotion words is higher in therapist (2.14%) than in patient (1.60%) speech. Whereas negative emotions are equally represented in therapist (1.00%) and patient (1.05%) speech, positive emotions prevail in therapist (1.13%) compared with patient (0.55%) speech. This phenomenon is observed over the three conditions; positive emotions were largely dominating in imagery for both patient and therapist. 

Table C-5-1 shows the relative increase in positive emotions from verbal and elaboration to imagery. It is striking for the therapist (verbal: 0.89% of total therapist speech; elaboration: 1.26%; imagery: 2.06%), and it is even more impressive for the patient (verbal: just 0.39% of total patient speech; elaboration: 0.56%; imagery: 1.81%). The opposite movement—from high in verbal and elaboration to low in imagery—is found in both patient and therapist speech for negative emotions.

<table>
<thead>
<tr>
<th>Relative frequency</th>
<th>Effect size,(^a) U tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>V (n = 13)</td>
</tr>
<tr>
<td>High/Low</td>
<td>22.59</td>
</tr>
<tr>
<td></td>
<td>34.03</td>
</tr>
<tr>
<td>High index(^{11})</td>
<td>39.95</td>
</tr>
</tbody>
</table>

Note. For U tests, \(p\) values are two-tailed. KW = Kruskal-Wallis \(H\) test; \(U = Mann-Whitney \(U\) test, E = elaboration; V = verbal; I = imagery. 
\(^a\) Based on arcsine-transformed relative frequencies.
\(^b\) 100 x high/(high + low).
\(~p < 0.1. *p < .05. **p < .01. ***p < .001.\)

Table C-5-6. Mean Relative Frequencies and Effect Sizes of Computerized Referential Activity (Patient) in the Verbal, Elaboration, and Imagery Settings
Do RID Results Suggest More Primary Processing in Imagery Sessions?

Guided affective imagery holds activation of primary process as a cornerstone of its efficacy theory (Leuner, 1984). As Kopta, Lueger, Saunders, and Howard (1999) stated, one problem with most psychotherapy methods is their inability to demonstrate that they actually do what they claim to do. Clearly, this single case study cannot offer confirmation of the theoretical claim, but it can give a coherent impression of what a prototypical therapy with this method is likely to activate.

Imagery is the domain of primary process activation. In the case of this study, and applying the RID method, which is one way of operationalizing the complex primary process construct, the results confirm the hypothesis in an impressive manner: Primary process words in patient’s speech appear about five times as frequently in the imagery condition than in the verbal condition and three times as much as in the elaboration condition. The percentage of primary process vocabulary in imagery (13-39%) is higher than that found for the text written by a Psilocybin® user during the peak of his drug experience (11%; Martindale & Fischer, 1977), higher than in stories created by children between the ages of 2 and 11 years (8.9%; West, Martindale, & Sutton-Smith, 1985), higher in free speech samples from paranoid schizophrenics (6.5%; West & Martindale, 1988), and higher in psychoanalytic therapy (4.7% for “working” sessions, 3-4% for “neutral” sessions, and 3.0% for “resistance” sessions; Reynes et al., 1984). It is interesting to note that elaboration (4.44%) comes close to “working” sessions, whereas verbal sessions (2.8%) come close to the level of “resistance” sessions in Reynes’ et al. study.
Secondary process, in contrast, is most present in verbal sessions followed by elaboration conditions. As for primary process, the distribution is significantly distinct for all three settings.

Whereas Hölzer, Mergenthaler, Pokorny, Kächele, and Luborsky (1996) found an increase for RID primary process throughout psychotherapy, we found secondary process to increase with time. Guided affective imagery differs from usual psychodynamic psychotherapy by explicitly intended activation and utilization of primary process with the aim of coming as close as possible to basic emotional and relational schemas. However, once this activation is obtained, it would be counterproductive to increase primary process further throughout therapy instead of enhancing its movement of progressive integration into secondary process, allowing id to become ego.

*Is There More Expression of Emotions, Particularly Positive Emotions, in Imagery?*

There is a higher density of emotions in imagery as a result of more positive emotions. Emotion activation is one of the parameters that contribute to the success of psychotherapy (Safran & Greenberg, 1991). According to our prediction, there is significantly more emotion vocabulary in imagery than in verbal sessions or with the elaboration condition in between. With 2.52% emotion words, the imagery condition activated more emotions than any of the settings studied by Hölzer, Scheytt, Mergenthaler, and Kächele (1994): psychoanalysis (2.24%) followed by short dynamic psychotherapy (1.97%) and first interview (1.70%).

Emotions during imagery are clearly more positive than negative, whereas in the verbal and particularly elaboration settings negative emotions dominate. This predominance of positive emotions in imagery corresponds to our prediction based on the
hypothesized function of the mechanism of displacement in primary process to diminish negative emotions. Thus, we can conceptualize that the imagery condition makes conflicts more accessible by creating a safe, positive atmosphere and stimulating resources. In contrast, the elaboration and verbal conditions give rise to emotions kept hidden in the positive imagery formulation of these conflicts and foster a move from the subject to the object. Extracts from Session 18 (imagery and elaboration) serve as illustrations (Table 7). Similar results have been obtained from the guided imagery material produced by a training group of Swiss psychotherapists (Stigier & Pokorny, 1998).

The only significant time trends concerning ADU are found for therapist’s positive emotions that increase throughout verbal sessions, in particular Subcategory 4 (Joy). Verbal sessions are often experienced by therapists as easier than imagery sessions in which the therapist has to shift frequently between levels of concreteness and abstractness and has to achieve a parallel presence for obtaining, on the one hand, an empathic idea of the imagined scenery and, on the other hand, a continuous conceptual representation of the ongoing process dynamics.

The question remains as to why research in night dream reports found consistently more negative than positive emotions (Hall, 1953; Popp et al, 1998; Hölzer, Zimmermann, et al. 1996). When comparing the Core Conflictual Relationship Theme (Luborsky & Crits-Christoph, 1998) from direct records of guided imagery from six normal participants with the waking reports they delivered from the same imagery some minutes afterward in the training group (Stigler & Pokorny, 1995), we had found that responses from the object (RO) and reactions of the subject (RS) were significantly less...
positive in the delayed than in the direct reports without the reporting individuals being aware of any such difference. Our tentative explanation was that secondary process intervenes very early as the participant shifts from the hypnoid to the waking state to prepare the individual for facing reality in an emotionally not too positive attitude.

Another question is whether there are good reasons for primary process emanations like imagery, daydreams, and many night dreams to be positively colored. Besides the assumed effect of the mechanism of displacement to diminish negative affects, and the early Freudian hypothesis of a wish fulfillment function of dreams, there is an argument derived from our assumption that primary process is the domain of basic relational and emotional, mostly implicit (procedural) schemas. Basic schemas are thought to develop, as Stern (1985) sketched it out for representations of interactions that have been generalized (RIGs), by way of a process that compares new experiences with a core of averaged experience aggregates. Out of the multitude of everyday experiences with early caregivers, those that foster survival and well-being have probably a greater chance to be selected for schema construction than the minority of negative experiences. Thus, in patients not placed at too severe a disadvantage by continuously negative early experiences with caregivers, these basic schemas should be predominantly positive. Therefore, we hypothesize that, when we create imaginary scenes in therapy or in night dreams, we open the access to our inner stock of positive basic survival resources.

Positive ME emotions (contentment, joy) appear to be dominant in imagery and negative IT emotions (anger, fear) in the verbal and elaboration conditions. In all three conditions, IT emotions (love, surprise, anger, fear) are in the minority (imagery, 0.36%; elaboration, 0.47%; verbal, 0.37%). The overrepresentation of ME emotions in imagery
compared with elaboration and verbal contrasts with the 1:2 ratio of ME to IT emotions Hölzer, Zimmermann, et al. (1996) found in night dream reports. Whereas ME emotions correspond to the Hölzer et al. (1994) results for psychoanalysis, IT emotions are even below the level found in their first interview setting. As these authors state, ME emotions mainly serve the regulation of the self; thus, the 6:1 ratio for ME compared with IT emotions in imagery may be seen as a confirmation of the revised understanding of primary process (Noy, 1969) as primarily self-directed in contrast to the reality-directed secondary process.

Does RA Appear Where We Predicted It to Appear?

Imagery is the domain of high cRA and verbal the domain of low cRA. High cRA in imagery confirms the narrative style of reported imagery compared with predominantly low cRA in verbal and elaboration sessions. This result indicates that, following Bucci’s criteria, verbally shared imagery does have the qualities required for participating in the referential process (i.e., the linking of subsymbolic, sensory, and bodily “knowledge” and emotions with the domain of verbal explication and reflection).

The finding not predicted is the presence of more high cRA in verbal compared with elaboration. If, however, we attribute to the high cRA measure the ability to locate narrative text structures, then it becomes obvious that the imagery and verbal conditions contain more narratives than the elaboration condition, which is the domain of immediate, spontaneous analysis of the imagery “narratives.”

Conclusion

Computerized content- and style-analytic measures for primary process, emotions, and RA are presented as part of a comprehensive, exploratory single-case study. Starting
from the theoretical background that psychotherapy needs to activate emotions and primary process to facilitate access to implicit (procedural) schemas before linking these to the verbal coding domain by RA, single-case material of an imagery-oriented psychotherapy method claiming to mobilize emotions, primary process, and RA is investigated.

The results of this single-case study correspond well to the expectations on the basis of our pilot study with imagery material from a group of psychotherapists. They confirm the predictions that imagery activates more primary process, more emotions, in particular more positive emotions, and more RA. Thus, the theoretical conditions for better access to basic implicit schemas appear to be realized by the investigated imagery psychotherapy method. The next step of this research is to identify the core conflictual themes and defenses, which are both thought to contain implicit schemas.

Single case studies aim at generating hypotheses that may serve as a base for further systematic investigation. With regard to the next step of relational schema analysis, we deduce one main hypothesis from this first part of data analysis. In analogy to the strongly differing emotion constellation we found for the conditions imagery versus verbal, we also expect two distinct types of relational schemas: more positive schemas in imagery to reflect the original procedural schemas built up as “survival guides” throughout early childhood, and more negative schemas in the verbal conditions that reflect the progressive transformation of the original schemas in adapting to the later reality constraints under the influence of secondary process functions. We believe that imagery therapy, like meditation and night dreaming, is able to reestablish contact with the
original, positively oriented schemas as precious sources of “forgotten” knowledge, enabling the person to continuously overwork existent dysfunctional schemas.

Guided affective imagery’s high content in primary process not only makes this research relevant to the question of imagery integration into various therapies but confirms imagery’s structural proximity to night dreams. Imagery as actively elicited by this method thus represents a promising source of material for dream research: Its particular strength lies in the closeness of protocols to the content and emotional atmosphere of dreams.
Effectiveness Study 6. Primary Process and Positive Emotions in Cancer

Patients.

This therapy process study by Frick, Stigler, Georg, Fischer, Bumeder, & Pokorny (2008) investigates the use of guided affective imagery for tumor patients. The therapeutic access to tumor patients is generally described as complex and challenging because of a disturbed emotion regulation and a defensive focus on reality. After autologous blood stem cell transplantation (HCT), 29 patients were treated with psychotherapy, including two daydreaming imagery sessions. Three text-analytical measures—Affective Dictionary Ulm, Regressive Imagery Dictionary, and Computerized Referential Activity for verbatim Session transcripts—as well as the Quality of Life Questionnaire and the Karnofsky Performance Status were administered. Results show that guided affective imagery was able to enhance the psychotherapeutic process in tumor patients by activating the primary process, decreasing anxiety, and increasing referential activity. The positive emotional shift during imagery was achieved by the patients irrespective of their oncological severity status. Study limitations and future directions for research are discussed.

Participants

This study is part of a larger investigation of integrated psycho-oncological treatment for tumor patients who have undergone autologous blood stem cell transplantation. *Autologous* means that the patients receive their own stem cells, harvested before high-dose chemotherapy or radiotherapy. We included all patients who had received a transplant between January 1999 and July 2003, either in a university hospital or in a municipal hospital specializing in hematology/oncology and who agreed
to take part in the study after an initial interview with Eckhard Frick. The inclusion criteria were as follows: minimum age of 18 years, a completely established baseline assessment (before high-dose treatment), a good knowledge of the German language, and the existence of complete transcripts of both imagery sessions “meadow” and “house.” Patients with major psychiatric diseases were excluded. The participants satisfying these criteria (N=29; 12 women and 17 men; mean age =51.3 years, standard deviation = 10.5; range =28-69 years) signed their consent according to the guidelines of the Faculty Research and Ethics Committee of the University of Munich, which approved the study.

**Psychotherapeutic Intervention**

The psychotherapeutic Intervention for outpatients after autologous HCT treatment consisted of about 15 sessions (range = 9-20) of an individualized dynamic short-term psychotherapy conducted by Eckhard Frick (psychiatrist and Jungian analyst, trained in guided affective imagery therapy). Daydream imagery sessions were intermingled with pure verbal sessions. Imagery sessions typically consisted of three phases: verbal introduction, daydreaming imagery, and verbal elaboration. The imagery phase can be described as follows: After a brief relaxation procedure with the patient lying on the couch with eyes closed, the therapist induces imagery by proposing one of the standard motives. In our study, this was a “meadow” in the first imagery session (second psychotherapy session) and a “house” in the second imagery session (which took place at the end of the therapy). Throughout the emerging daydream scenario, which continues to develop over 15 to 30 min in a manner very similar to night dreams, the therapist remains in a verbal exchange with the patient. The therapist’s interventions aim at keeping himself informed about the development of the patient’s imaginary scenario,
slowing down the process to have the patient delve more profoundly into a specific focus or interaction or encouraging the patient to stand up to a painful emotional experience. Overall, the therapist’s attitude is more one of containing and confronting rather than of advice and suggestion. The obvious advantage when comparing this with the therapeutic use of night dreams is the active participation of the therapist, allowing for relatively complete information about the very details of the dream scenario as well as for the possibility of direct therapeutic interventions.

The start of the therapy was randomly assigned either immediately after dismissal from the oncology ward or 6 months after HCT treatment. A minor experimental variation was introduced for the second imagery motive: One subgroup of patients was asked to imagine simply a house (leading implicitly to a finished house) and the other subgroup was asked to imagine an unfinished house. The attribution to one or the other subgroup was randomly decided before the sessions.

**Measuring Instruments**

*Regressive Imagery Dictionary (RID; Martindale, 1975).* This dictionary was originally developed for research in literature by Colin Martindale and co-workers and then increasingly applied in psycho-pathology and psychotherapy research (e.g., Stigler & Pokorny, 2001) and in social psychology (e.g., Frommer, Romppel, & Berth, 2005). The German version of the RID was prepared by Renate Delphendahl during her working visit at the University of Ulm (Ulm Textbank, E. Mergenthaler). RID attributes words to the primary and the secondary processes. Indicators of primary process are words from the categories Regressive Cognition (e.g., themes of the unknown, timeless, changed consciousness), Defensive Symbolism (e.g., passivity, diffusion, chaos), Sensation (e.g.,
touch, taste, smell), Icarian Fantasies (e.g., rise, heights, depths, fire), and “Drives”
(themes from the oral, anal, and sexual spheres). Words from the categories Abstraction,
Instrumental Behavior, Social Behavior, Time, Order, Rules, and Morals are seen as
indicators of secondary process. Martindale et al. (Reynes, Martindale, & Dahl, 1984)
reported a satisfactory construct validity of their Instrument based on research covering a
variety of themes: Higher primary process elements were present, as predicted, in texts
from younger rather than elder children; in myths from primitive rather than more
complex societies; in cases of authors with known psycho-pathology, Psilocybin® users,
and paranoid schizophrenics, but also in working psychotherapy sessions compared with
resistance sessions.

_Affective Dictionary Ulm (ADU; Hölzer, Scheytt, & Kächele, 1992)._ The ADU
differentiates between positive and negative, active and passive, as well as self (Me) and
object (It) emotions. Affect words are grouped into eight categories: love and surprise
(positive It), contentment and joy (positive Me), anger and fear (negative It), and
depression and anxiety (negative Me). The current German version (see Pokorny, 1999)
of the ADU dictionary consists of approximately 2,000 dictionary items in the basic form
and 26,000 in the full form. The verbatim protocols were analyzed by our program HILI.

_Computerized Referential Activity (CRA; Mergenthaler & Bucci 1999)._ This
dictionary consists of two word lists: high CRA and low CRA. The high-CRA list
contains functional words characteristic of concrete, visual, and narrative language (e.g.,
pronoun of the third person, articles, and time prepositions or adverbs). The low-CRA
list contains functional words characteristic of logical thinking (e.g., conjunctions and
indefinite pronouns). The CRA is conceived as a lexical indicator of the bridging
function between nonverbal, sub-symbolic experience and verbal, symbolic expression, which may be particularly insufficient in cancer patients.

Quality of life. Patients’ functional state was assessed by the treating oncologist with the help of the Karnofsky Performance Score (Karnofsky & Burchenal, 1949). The subjective quality of life as related to the state of health was obtained by the self-rating questionnaire European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30; Aaronson et al., 1993). This instrument consists of various single-item symptom scores and nine multi-item scales (five function scales; a scale of global health/quality of life; three symptom scales: Fatigue, Pain, Nausea/Vomiting).

Statistical Analysis

The investigated linguistic measures are generally defined as relative frequencies of token words from a given category per patient. Variables defined in such a way do not exactly satisfy the assumption of the normal distribution. Hence, we apply the nonparametric methods whenever possible, as in the case of correlations or one-way group comparisons. For more complex models of repeated measures, we have to use parametric methods. The so-called arc-sine (or angle) transformation improves the normal behavior of variables in such cases (e.g., Sachs, 2004, pp. 355-356).

Differences in linguistic variables between the three settings (verbal introductory phase, imagery phase, and verbal elaboration phase) in the sample of 29 patients are examined in three successive steps. First, the general existence of setting differences in the considered set of dictionary categories is examined by multivariate analysis of repeated measures. The model includes two repetition factors: setting (three levels) and
category (with eight [or 4 or 2] levels for the ADU and two categories for RID and CRA).
Roughly, setting expresses the setting differences similar for all considered categories,
and the Setting x Category interaction expresses the dissimilarities in the setting
differences. The general existence of differences between settings is hence tested by the
pooled effect of the two mentioned complementary effects. Second, the nonparametric
Friedman test for repeated measures is performed for each linguistic variable in turn.
Third, the nonparametric Wilcoxon test is used for the three pairwise setting
comparisons; the Bonferroni correction is considered.

Two experimental subgroups are compared by the Mann-Whitney U test.
Differences are expected between the motives of the “finished house” versus the
“unfinished house” imagery session, whereas instruction for the “meadow” imagery
session was given without any modification to the whole sample.

Spearman correlations between linguistic variables and clinical scales are
computed separately within the joint verbal (introduction plus elaboration) and
Imagination Segments. Corresponding correlations are mutually compared by the test
based on the Fisher’s z transformation.

[Definition: The Fisher transformation is an approximate variance-
stabilizing transformation for \( r \) when \( X \) and \( Y \) follow a bivariate normal
distribution. This means that the variance of \( z \) is approximately constant
for all values of the population correlation coefficient \( \rho \). Without the
Fisher transformation, the variance of \( r \) grows smaller as \(|\rho|\) gets closer to
1. Since the Fisher transformation is approximately the identity function
when \(|r| < 1/2\), it is sometimes useful to remember that the variance of \( r \) is
well approximated by $1/N$ as long as $|\rho|$ is not too large and $N$ is not too small. This is related to the fact that the asymptotic variance of $r$ is 1 for bivariate normal data. Source: http://en.wikipedia.org/wiki/Fisher_transformation

The SPSS system is applied for Statistical analyses.

**Results**

**Sample**

Of the 29 participants, five were single, 18 were married, five were divorced, and one was widowed. Twenty patients lived with a partner, and nine lived without. Eleven patients had no child, 8 patients one child, and 10 patients had two or more children. Diagnoses were distributed as follows: one with acute myeloic leukemia, 12 with non-Hodgkin’s lymphoma, 12 with multiple myeloma, and four with other diagnoses. Karnofsky Performance Status (theoretical range =0-100) scores before HCT were as follows: 60, $n=2$; 70, $n=9$; 80, $n=12$; 90, $n=4$; and 100, $n=2$. The mean value on the Global Health Status from EORTC QLQ-C30 (theoretical range 0-100) was 57.1.

**Text-Analytic Measures**

The 58 session transcripts from the 29 patients contained a total of 266,341 tokens, which were examined by the text-analytic measures. The Statistical analysis showed no correlation among age, gender, education, or other sociodemographic characteristics and the text-analytic parameters associated with the ADU, RID, and CRA. Moreover, the timing of the psychotherapeutic intervention (either immediately after dismissal from the oncology ward or six months after HCT treatment) had no bearing on the results. For this reason, we can treat both groups as one joint sample.
Imagery and Verbal Session Phases

The results show that the ADU, RID, and CRA clearly differentiated guided imagery from both verbal session segments. The general existence of setting differences was proved within the model of repeated measures with two repetition factors: setting (three levels) and linguistic category (two, four, or eight levels). Results of the exact $F$ statistic for setting, pooled on the category levels, were significant for all considered sets of linguistic variables: for the eight ADU categories El (love) through E8 (anxiety), $F(21, 8) = 7.44$, $p < .01$; for the four aggregated categories positive It through negative Me, $F(9, 20) = 13.41$, $p < .001$; for the two variables representing positive and negative emotions, $F(3, 26) = 14.92$, $p < .001$; for primary and secondary processes, $F(3, 26) = 92.77$, $p < .001$; and for high and low referential activity, $F(3, 26) = 31.83$, $p < .001$. All analogous tests for the two setting levels imagery and verbal, the latter aggregating the introductory and elaboration phases, were significant as well (for all tests, $p < .001$).

Consequently, post hoc tests were possible. The setting differences followed the expected direction: more primary process, more positive emotions, and more high referential activity in imagery.

The predominance of positive emotions during imagery was mainly due to the positive Me emotion contentment (E3). Both the negative It emotion fear (E6) and the negative Me emotion anxiety (E8) were lower in imagery than in the verbal phases. Figure I shows the frequency of ADU category E8 anxiety in the “meadow” session and in the “house” session. Anxiety words were significantly less frequent in imagery in both sessions. As Table I and Figure I show, the main part of the total anxiety reduction in imagery stems from the “meadow” session.
Primary process vocabulary was highest in imagery and lowest in the verbal introduction segment (see Table I), with elaboration in between. The same order (imagery > elaboration > introduction) was found for referential activity (high CRA).

Text-Analytic: Measures and Quality of Life

In Table C-6-1., the correlation between linguistic parameters and quality of life, as seen by the patients themselves and the treating oncologists, is shown for the joint verbal phases (introduction and elaboration) as well as for the guided imagery phases (imagery).

Impressive correlations were found between emotional data and the oncological parameters. The significant correlations between quality-of-life scales and emotion categories found in the verbal segments correspond to expected directions for positive and negative emotion categories. In other words, in the verbal parts of the therapies, the computerized instrument ADU reflects an emotional state corresponding to the recognized clinical scales. This can be seen as a contribution to the clinical validation of this instrument.

For the imagery phase, however, a different pattern emerged: Correlations in the imagery phase differ significantly from those in the verbal phase (test based on Fisher’s z transformation; see foot-noted cells in Table C-6-2.), underscoring the distinct nature of the imagery setting. Keeping in mind that an increased volume of positive emotional words and a decreased volume of negative words were found within the imagery phase, the lack of correlations in imagery means that this emotional profile concerns all investigated patients, with both higher and lower quality of life. This is a clinically
important result: Even the patients with the lowest quality of life and the shortest life expectancy are able to produce emotionally highly positive imagery.

Discussion

This is the first investigation of tumor patients participating in a psychotherapy setting combining classic psychodynamic psychotherapy with the day-dream-provoking method of guided affective imagery. Session transcripts from the verbal and the imagery parts have been analyzed by means of text-analytic measures for emotions, primary process, and referential activity. In previous text-analytic studies investigating dynamically oriented imagery psychotherapy with healthy individuals and a patient with panic disorder, imagery had shown a special efficacy profile when compared with purely verbal psychotherapy by enhancing an increase in primary process, positive emotions, and referential activity. The main question of the present study was whether imagery would be able to produce similar effects in the often not only somatically but also psychologically severely disturbed and difficult-to-treat category of tumor patients. The psychotherapeutic approach in these patients is frequently impeded by their fixation on body function and medical acts; by their limited access to emotions, fantasy, and creativity; and by a limited capacity to make links between the somatosensory domain and conscious mental processing (Sami-Ali, 2000). In addition, we were interested to see whether the degree of severity of the health status had an influence on the obtained effects of imagery.

The results of the present study show that this category of patients did benefit from guided affective imagery, and that the effects were analogous to those obtained in the previous studies investigating this method. First, the segments of guided imagery
showed significantly higher primary process vocabulary than the purely verbal introductory and elaboration segments. This shift in the proportion of primary and secondary processes to more primary process is clinically meaningful for the therapeutic support of cancer patients. HCT patients’ characteristic defense mechanisms such as intellectualization, rationalization, and minimization (Grulke et al., 2004) generate specific coping styles (Tschuschke, 2002) associated with a predominantly secondary process mode of functioning, which has been shown to be associated with resistance in psychotherapy (Reynes et al., 1984). In the particular situation of HCT patients, it may correspond to a physician-oriented, compliant coping style. Lilja et al. (2003) examined the creative functioning (a capacity associated more with the primary than the secondary process) in cancer patients (i.e., their capacity to find new meanings when exposed to pictures). High creativity (i.e., finding new and subjective meanings) was associated with better oncological prognosis.

Primary process language is more emotional than informational. A content analysis of oncological consultations (Butow, Brown, Cogar, Tattersall, & Dunn, 2002) shows that patients gave, and doctors responded to, more informational than emotional cues. According to the Butow et al. study, doctors effectively identify and respond to the majority of informational cues; however, they are less observant of and able to address cues for emotional support.

Second, in the present study, imagery increased positive emotions, especially contentment. The negative emotions fear and anxiety appear clearly less often in imagery than in the two verbal conditions. This is consistent with the theoretical prediction of an anxiety-reducing effect of displacement in mentalmodalities associated with a high
proportion of primary process, such as dreams, daydreams, art, and humor. The
substituted (symbolic) objects of dreams and imagery, although allowing for a transfer of
almost the same relationship pattern, favor a less terrifying confrontation and thus more
positive emotions and a more positive issue of the interaction. In the context of modern
neuroscientific views (Sohns, 2006; Solms & Turnbull, 2002), guided affective imagery
may be hypothesized to work, similarly to the dream, by a relaxation-induced reduction
of the prefrontal executive control function, which leads to a shift from secondary to
primary process mode and thus from reality control to a substitutive world of more
positively colored issues.

Table C-6-1. Emotional Vocabulary (ADU), Primary Versus Secondary Process (RID),
and CRA in Psychotherapy Transcripts (N = 29)
PRE (INTRODUCTION) vs. IMAGINATION vs. ELABORATION  vs. VERBAL

<table>
<thead>
<tr>
<th>Variable</th>
<th>PRE</th>
<th>IMA</th>
<th>ELA</th>
<th>Friedman Test</th>
<th>Group Pairs</th>
<th>ES</th>
<th>Wilcoxon Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>E5 anger</td>
<td>0.06</td>
<td>.04</td>
<td>0.04</td>
<td></td>
<td></td>
<td>-0.16</td>
<td></td>
</tr>
<tr>
<td>E6 fear</td>
<td><strong>0.16</strong></td>
<td>0.07</td>
<td>0.14</td>
<td>*</td>
<td>PRE, ELA &gt; IMA</td>
<td>-0.81</td>
<td>**</td>
</tr>
<tr>
<td>E7 depression</td>
<td>0.30</td>
<td>0.18</td>
<td>0.24</td>
<td></td>
<td></td>
<td>-0.54</td>
<td></td>
</tr>
<tr>
<td>E8 anxiety</td>
<td><strong>0.22</strong></td>
<td>0.07</td>
<td>0.18</td>
<td>***</td>
<td>PRE, ELA &gt; IMA</td>
<td>-1.24</td>
<td>***</td>
</tr>
<tr>
<td>RID primary index</td>
<td>38.00</td>
<td><strong>62.83</strong></td>
<td>43.80</td>
<td>***</td>
<td>IMA&gt;ELA&gt;PRE</td>
<td>3.72</td>
<td>***</td>
</tr>
<tr>
<td>RID primary index</td>
<td>7.17</td>
<td><strong>13.23</strong></td>
<td>8.13</td>
<td>***</td>
<td>IMA&gt;ELA&gt;PRE</td>
<td>3.27</td>
<td>***</td>
</tr>
<tr>
<td>RID secondary</td>
<td><strong>11.65</strong></td>
<td>7.80</td>
<td>10.42</td>
<td>***</td>
<td>PRE&gt;ELA&gt;IMA</td>
<td>-2.27</td>
<td>***</td>
</tr>
<tr>
<td>CRA index</td>
<td>42.15</td>
<td><strong>51.32</strong></td>
<td>44.07</td>
<td>***</td>
<td>IMA &gt; ELA, PRE</td>
<td>1.23</td>
<td>***</td>
</tr>
<tr>
<td>CRA high</td>
<td>21.15</td>
<td><strong>22.72</strong></td>
<td>21.53</td>
<td>***</td>
<td>IMA &gt; PRE</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>CRA low</td>
<td><strong>29.08</strong></td>
<td>21.60</td>
<td><strong>27.32</strong></td>
<td>***</td>
<td>PRE&gt;ELA&gt;IMA</td>
<td>-1.75</td>
<td>***</td>
</tr>
</tbody>
</table>

Note. ADU = Affective Dictionary Ulm; RID = Regressive Imagery Dictionary; CRA = Computerized Referential Activity; PRE = introduction (pre-imagination); IMA = imagery; ELA = Elaboration, VERBAL = PRE + ELA, ES = effect strength. **bold** = highest group mean by significant group differences. a Wilcoxon test, p < .05, Bonferroni corrected. *p < .05, two-tailed. **p < .01, two-tailed. ***p < .001, two-tailed.

Table C-6-2. Spearman Correlations Between Linguistic and Oncological Parameters in Verbal Versus Imaginative Psychotherapy Segments (25 < n < 27)

<table>
<thead>
<tr>
<th>Variable</th>
<th>EF</th>
<th>GHS</th>
<th>KPS</th>
<th>EF</th>
<th>GHS</th>
<th>KPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADU emotion</td>
<td>-.42*</td>
<td>-.28</td>
<td>-.50**</td>
<td>0.01</td>
<td>-.09</td>
<td>-.04</td>
</tr>
<tr>
<td>Positivity index</td>
<td>.52**</td>
<td>-.52a**</td>
<td>.52**</td>
<td>0.14</td>
<td>-.20a</td>
<td>.06</td>
</tr>
<tr>
<td>Positive</td>
<td>.24</td>
<td>.40*</td>
<td>.04</td>
<td>.10</td>
<td>-.11</td>
<td>.01</td>
</tr>
<tr>
<td>Negative</td>
<td>-.56**</td>
<td>-.48b*</td>
<td>-.58c**</td>
<td>-.022</td>
<td>-.08b</td>
<td>-.07c</td>
</tr>
<tr>
<td>E12 positive It</td>
<td>0.03</td>
<td>0.26</td>
<td>-.07</td>
<td>-.16</td>
<td>-.28</td>
<td>-.21</td>
</tr>
<tr>
<td>E34 positive Me</td>
<td>0.29</td>
<td>0.23</td>
<td>0.14</td>
<td>0.28</td>
<td>0.04</td>
<td>0.15</td>
</tr>
<tr>
<td>Variable</td>
<td>Verbal</td>
<td>Imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EF $^g$</td>
<td>GHS $^g$</td>
<td>KPS</td>
<td>EF $^g$</td>
<td>GHS $^g$</td>
<td>KPS</td>
</tr>
<tr>
<td>E56 negative It</td>
<td>-0.45$^*$</td>
<td>-0.44$^c$</td>
<td>-0.40$^*$</td>
<td>0.12$^d$</td>
<td>0.12$^c$</td>
<td>0.01</td>
</tr>
<tr>
<td>E78 negative Me</td>
<td>-0.58$^{**}$</td>
<td>-0.44$^*$</td>
<td>-0.57$^f^{**}$</td>
<td>-0.12</td>
<td>0.05</td>
<td>-0.08$^f$</td>
</tr>
<tr>
<td>E1 love</td>
<td>-0.06</td>
<td>0.16</td>
<td>0.11</td>
<td>-0.23</td>
<td>-0.31</td>
<td>-0.35</td>
</tr>
<tr>
<td>E2 surprise</td>
<td>0.1</td>
<td>0.26</td>
<td>-0.04</td>
<td>-0.08</td>
<td>-0.2</td>
<td>-0.04</td>
</tr>
<tr>
<td>E3 contentment</td>
<td>0.28</td>
<td>0.21</td>
<td>-0.03</td>
<td>0.11</td>
<td>-0.01</td>
<td>-0.23</td>
</tr>
<tr>
<td>E4 joy</td>
<td>0.14</td>
<td>0.2</td>
<td>0.28</td>
<td>0.24</td>
<td>0.14</td>
<td>0.32</td>
</tr>
<tr>
<td>E5 anger</td>
<td>-0.29</td>
<td>-0.24</td>
<td>-0.02</td>
<td>0.16</td>
<td>0.09</td>
<td>0.27</td>
</tr>
<tr>
<td>E6 fear</td>
<td>-0.37</td>
<td>-0.49$^*$</td>
<td>-0.45$^*$</td>
<td>-0.13</td>
<td>-0.08</td>
<td>-0.23</td>
</tr>
<tr>
<td>E7 depression</td>
<td>-0.55$^{**}$</td>
<td>-0.49$^*$</td>
<td>-0.54$^{**}$</td>
<td>-0.14</td>
<td>0.04</td>
<td>-0.12</td>
</tr>
<tr>
<td>E8 anxiety</td>
<td>-0.35</td>
<td>-0.19</td>
<td>-0.32</td>
<td>-0.3</td>
<td>-0.12</td>
<td>-0.19</td>
</tr>
<tr>
<td>RJD primary index</td>
<td>0.08</td>
<td>0.17</td>
<td>-0.09</td>
<td>0.29</td>
<td>0.09</td>
<td>0</td>
</tr>
<tr>
<td>RID primary</td>
<td>0.07</td>
<td>0.19</td>
<td>0.02</td>
<td>-0.16</td>
<td>-0.12</td>
<td>-0.33</td>
</tr>
<tr>
<td>PUD secondary</td>
<td>0.04</td>
<td>-0.03</td>
<td>0.11</td>
<td>-0.44$^*$</td>
<td>-0.12</td>
<td>-0.14</td>
</tr>
<tr>
<td>CRA index</td>
<td>0.48$^*$</td>
<td>0.38</td>
<td>0.29</td>
<td>0.46$^*$</td>
<td>0.31</td>
<td>0.14</td>
</tr>
<tr>
<td>CRA high</td>
<td>0.16</td>
<td>0.15</td>
<td>0.03</td>
<td>0</td>
<td>-0.1</td>
<td>-0.14</td>
</tr>
<tr>
<td>CRA low</td>
<td>-0.66$^{***}$</td>
<td>-0.52$^{**}$</td>
<td>-0.41$^*$</td>
<td>-0.66$^{***}$</td>
<td>-0.56$^{**}$</td>
<td>-0.42$^*$</td>
</tr>
</tbody>
</table>

**Note.** Values that share subscripts a, b, c, d, e or f are pairs of significantly different correlations (test of equality of two correlations: $p<.05$, two-tailed). EF = emotional function; GHS = global health Status; KPS = Karnofsky performance status; ADU = Affective Dictionary Ulm; RID = Regressive Imagery Dictionary; CRA = Computerized Referential Activity. Subscript, $g =$ European Organization for Research and Treatment of Cancer. *$p<.05$, two-tailed. **$p<.01$, two-tailed. ***$p<.001$, two-tailed.
As Hill, Spangler, Sim, and Baumann (2007) found, clients with positive dreams had better process and outcome than those with negative and other dream types. However, the dream content literature (Hall & van de Castle, 1966; Hill et al., 2007; Moorcroft, 2003) found more negative than positive dreams. In keeping with our displacement hypothesis, our view on dream valence is a different one insofar as we do not look only at the absolute positive or negative valence but rather at the relative valence of the daydream content compared with the valence prevailing in the transcribed texts of the waking therapy phases. The rater-based CCRT measure for interactions as well as the computerized lexical ADU measure (in the present study) for affective vocabulary showed consistently and significantly more positive interaction issues and more positive affect words in the imagery than in the waking condition. This appears to us to be an important issue, because even if a dream is judged as (absolutely) negative, this dream can be a substantially more positive version of the underlying waking pattern.

It appears as a remarkable clinical finding that anxiety reduction was comparable in the just-cited single-case study with a panic patient and in our group of tumor patients, for whom deeper and less mobile anxiety remnants are to be supposed. In particular, in the case of tumor patients, we have to take into account the presence of the fear of disease Progression (Black & White, 2005; Herschbach et al., 2004), which is often kept at an unconscious level by means of a variety of coping and defense mechanisms (Faller, 1998; Ruszniewski, 1999).

Third, the imagery segments of the investigated psychotherapy transcripts showed also more referential activity vocabulary, with the high-CRA index being superior in imagery than in both the introductory and the elaboration segments. According to the
multiple-code theory (Bucci, 2002), subsymbolic processes (e.g., pain) can be distinguished from symbolic processes (e.g., nonverbal internal images and verbal symbols). The referential process links the nonverbal representations to one another and to the verbal representations. Referential activity “has central importance... wherever inner experience—images, ideas, emotions, sensations—must be captured and communicated in words” (Mergenthaler & Bucci, 1999). In terms of Bucci’s phase model of the therapeutic process, the induction of imagery can be understood as an enactment on the emotionally rich subsymbolic level, whereas the elaboration phase, with its focus on integrating the imaginary experience, would correspond to the symbolic level of reflection.

Fourth, no connection was found between emotionality, primary/secondary processes, and referential activity on the one hand and sociodemographic characteristics on the other. This may be due to the small and rather homogeneous sample in our study. A study comparing psychoanalytic first interviews from West and East German patients (Frommer et al., 2005) did find differences for distinct sociodemographic profiles: significantly more secondary process thinking in participants who lived in West Germany, who were male, and who were more educated.

Fifth, when investigating for correlations between text-analytic measures and quality of life, the most striking finding appeared in the domain of the emotion measure. Whereas in the verbal segments significant correlations were found in the expected directions between positive/negative emotions and clinical scales (e.g., more positive emotions in those patients doing well), none were found in the imagery segments. This means that the same imagery effect profile of increased positive emotions and decreased
negative emotions was obtained for all patients in the group regardless of their level of somatic severity or quality of life. This finding is of twofold clinical importance: (a) It indicates that even severely impaired cancer patients can benefit from emotion-enhancing tools like imagery, and (b) imagery appears to act on a more profound functional level than predominantly symptom-oriented therapeutic methods.

Sixth, in the present study, a higher proportion of secondary process resulted when the therapist asked the patient to imagine an unfinished house rather than simply the (implicitly finished) house. Words representing security and atmosphere were found mainly in the (finished) “house” imagery, whereas the task to imagine an unfinished house may have confronted the patients with the unpleasant idea of the limited span of life and therapy. Ascher and Jouet (2004) described the massive impact of the objective time of illness and transplantation on the subjective time scale of the patient. They define timelessness and immortality as key characteristics of the primary process and ask how the patient is able to find a balance between these unconscious fantasies and the potentially life-shortening illness.

In conclusion, the challenge of the present study to induce imagery in a category of somatic patients known for their impeded capacity to activate fantasy and imagery, with the aim of increasing the activation of primary process, positive emotions, and referential activity, has led to promising results. Besides enhancing the primary process mode of mental processing, imagery was able to raise positive emotions at all levels of somatic severity and not only in moderately impaired patients. The experience of our study with patients in a very difficult situation may serve as encouragement for future studies. One open question is whether our results with tumor patients also apply to other
categories of somatically ill patients. One of the limitations of our study was that we put
the emphasis mainly on primary process and displacement as hypothetical efficacy
factors. Future studies should take into account additional possible therapeutic factors
such as therapist personality, intervention style, or specific therapeutic alliance in
dynamically oriented imagery psychotherapy.
Effectiveness Study 7. Blood Pressure, Heart Rate and EEG During GAI.

Here Stigler (1993) investigated whether blood pressure, heart rate and electroencephalogram (EEG) can be affected by GAI. Two independent, exploratory studies are presented with healthy volunteers, whose common question is: How do the phases of baseline (BL), relaxation (RX) and Imagination (IM) on heart rate, blood pressure, and EEG vary during the course of GAI therapy. In the first study was also asked whether the mere imagination of exercise already might cause an increase in cardiovascular parameters.

Heart rate and blood pressure during the KB, especially for imagined physical exertion (from U. Scherrer, D. Randin, P. Vollenweider, CHUV, Lausanne):

*Subjects:* 8 clinically inconspicuous women (4) and men (4) between the ages of 19-35 (25.6) years without KB-experience. Continuous measurement of heart rate (ECG) and blood pressure (finger cuff photoplethysmograph: Finapress).

*Results*

<table>
<thead>
<tr>
<th>Condition</th>
<th>Systolic Blood Press SBP mmHg</th>
<th>Diastolic Blood Press DBP mm Hg</th>
<th>Heart Rate HR bpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (1)</td>
<td>128</td>
<td>78</td>
<td>79</td>
</tr>
<tr>
<td>Relaxation (RX)</td>
<td>136</td>
<td>80</td>
<td>75</td>
</tr>
<tr>
<td>Relaxation – Motif Default (RX-MV)</td>
<td>143</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Relaxation – Start Talking (RX – SP)</td>
<td>147</td>
<td>88</td>
<td>83</td>
</tr>
<tr>
<td>Relaxation – Imagination (RX-IM)</td>
<td>144</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td>Imagined Cycling on Flat Ground (RF)</td>
<td>141</td>
<td>85</td>
<td>77</td>
</tr>
<tr>
<td>Activity</td>
<td>Systolic Blood Press SBP mmHg</td>
<td>Diastolic Blood Press DBP mm Hg</td>
<td>Heart Rate HR bpm</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Imagined Cycling on High Ground (RS)</td>
<td>147</td>
<td>88</td>
<td>78</td>
</tr>
<tr>
<td>Baseline (BL{s})</td>
<td>139</td>
<td>86</td>
<td>80</td>
</tr>
<tr>
<td>Ergometer – Flat (EF)</td>
<td>156</td>
<td>96</td>
<td>114</td>
</tr>
<tr>
<td>Ergometer – Steep (ES)</td>
<td>173</td>
<td>114</td>
<td>140</td>
</tr>
</tbody>
</table>

*Table C-7-1.* SBP, DBP and HR during KB and Ergometry

BL (1) (baseline supine) - RX (relaxation): As expected (see Irvine and Logan 1991) falls during the relaxation, the pulse rate for all 8 subjects: on average by 4.2 bpm (0.3-10.3). However, SBP increased by 8 mmHg and DBP by 1.8 mmHg. In this divergent course of HR and BP could be the phenomenon of “acting directional fractionation” (Lacey and Lacey 1974), i.e., a direction cracking between sympathetic and parasympathetic response to the same activity.

RX - MV (Motif default) - SP (Start Talking): The motive default reads: “Now try to imagine presented by a landscape of flat and hilly interests,” At this moment, get all 3 parameters abruptly, most notably the heart rate: from 73.5 mmHg to 83 bpm. SBP increased by 8.5 and DBP by 4.6 mmHg. In the beginning there is talk of a further increase in BP and HR minimal.

BL (1) - RX - IM (Imagination): Compared to BL and RX, the phase of imagining the highest averages in all 3 parameters: SBP - 144.3 points mmHg, DBP = 86.2 mmHg, HR - 78.6 bpm.
RF (imagined cycling on flat ground) - RS (to precipitous ones): The imaginary-defined increase of physical effort is reflected on the cardiovascular parameters: SBP increased by 5.5 mmHg and DBP by 3.1 mmHg, HR by 1.3 bpm.

EF (ergometer analog flat) [Definition: ergometer. Exercise machine to measure work performed], - ES (ergometer, similar but steep), relative to BL (s) (baseline) in the seats: All 3 parameters of the real increase in performance, as expected, more than the imagined.

Alpha activity in the EEG during the KB (from S. Laurian and L. Oros, Hospital de Cery, Lausanne)

Subjects: 10 clinically unremarkable women (7) and men (3) aged 20-45 (29) years, all right-handed (Anet-test). Continuous derivation of the spontaneous EEG electrodes on each 2 frontal, central, temporal and occipital.

<table>
<thead>
<tr>
<th></th>
<th>Right Hemisphere</th>
<th>Left Hemisphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Occipital</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Relaxed Occipital</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>Imaginal Occipital</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>Baseline Temporal</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Relaxed Temporal</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>Imaginal Temporal</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Baseline Central</td>
<td>10.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Relaxed Central</td>
<td>10.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Imaginal Central</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>Baseline Frontal</td>
<td>8</td>
<td>7.5</td>
</tr>
<tr>
<td>Relaxed Frontal</td>
<td>7.5</td>
<td>7</td>
</tr>
<tr>
<td>Right Hemisphere</td>
<td>Left Hemisphere</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Imaginal Frontal</td>
<td>6.5</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Table C-7-2. EEG Readings at Occipital, Temporal, Central and Frontal Regions for Baseline, Relaxed and Imagination States.

Third is accompanied imagining versus baseline and relaxation of higher blood pressure, pulse rate and a higher activation in spontaneous EEG (alpha band), the latter mainly in the left occipital-valley area; Imagined physical performance fourth lead to an actual increase of SBP and DBF, while HR response to the imagined effort, the least (in terms of their very substantial increase on the bicycle ergometer).
Effectiveness Study 8. GAI as Short Psychotherapy in Psychosomatic Gynecology.

This early study by Roth (1976) examines GAI treatment of gynecological disorders. The method used is after H. Leuner psychotherapy (GAI) to report on 15 women aged between 19 and 35 years who were treated in a psychotherapy clinic-patient department for psychosomatic-gynecological complaints with the technique of KB. The selection of the distinction was not for patients bleeding or functional disorders, and came to therapy with the following symptoms: Secondary amenorrhea [abnormal suppression or absence of menstruation], premenstrual dystonia [abnormal tonicity of muscle, characterized by prolonged, repetitive muscle contractions that may cause twisting or jerking movements of the body or a body part], dysmenorrheal [painful menstruation], dyspareunia [pain with intercourse], orgasm difficulties, sexual desire disorders. The KB was long enough in all cases for effective treatment, there were 6 to 50 sessions required. The advantages of the KB seems to be the following: It is a short-term therapy, there is no selection at the start of therapy on the severity of the symptoms as required in the so-called focal therapy, and it can also be used against menstrual disorders and functional, a simultaneous treatment of sexual partner may be waived.

This creates a growing need for adequate treatment methods on a somatic and psychological level. Many such therapies are also promoted and applied. Only a few are sufficiently effective, durable and scientific that is manageable in terms of their validity and reliability. This fact is the crux of psychosomatic therapy, in general. because the psychosomatic illnesses cannot be a universally applied valid theory background, which
would then allow a correspondingly uniform therapy. The reasons for this dilemma of psychosomatic medicine are discussed elsewhere (Bräutigam and Christian; Zepf).

Treatment research in psychosomatic medicine is therefore compelled to proceed empirically and pragmatically. This has changed in obstetrics and gynecology (Prill), as in other areas of psychosomatic medicine showed that especially to be true in the so-called long-term therapies (various schools of psychoanalysis, analytic group therapy) effectively and permanently (Prill, Condrau, Bräutigam and Christian, Vogt). Shorter lasting therapies are either a lesser percentage of active (Malan, Beck and Lambelet) or can only get single symptom improvement (Bellak and Small, Sifneos, Maeder, Beck).

Since only a few patients can afford long-term treatment of many hundreds of hours (who pay health insurance here, in general) the course of treatment is limited to only a few hours. Any such long-term therapies by a qualified therapist creates a large gap between demand for effective treatment options on the one hand, and what would be paid by health insurance to a larger circle of practitioners using short-term therapies on the other hand. For the gynecologist, this discrepancy is especially noticeable because he/she is disproportionately often confronted with psychosomatic illnesses. In addition, he must always find that one of its major therapeutic weapons, endocrinology, here only partially and temporarily brings success, and yet, for example in the treatment of functional disorders such as anorgasmia [regular difficulty reaching orgasm], there is associated with the risk, significant additional effects (Haefliger and Hauser, Eicher, Biron), or even just used as an aid to psychotherapy and displays “good success” only sometimes (Eicher). I am convinced that the gynecologist can be helped, at least in part, where he is familiar with a promising therapy.
The GAI as a method of treatment.

Since I have used KB for some time and it being known to me to be an effective therapeutic technique, I have decided to follow the Prill’s suggestion and apply the KB to a number of patients who, within a certain period of psychosomatic complaints by women in the main or having side effects during Polyclinic hours, come to be part of the Psychiatric Clinic of Berne.

Before going onto the patients and their treatment outcome reports, the KB must first be briefly described as a psychotherapeutic technique, because, in Switzerland [in 1976], it appears not to be disseminated. In Germany, it is used for many years on a broad basis, e.g., by general practitioners who can then purchase the additional title of “psychotherapist.”

The KB is a psychoanalytically informed daydream technique, which is committed to psychoanalytic theory. Its therapeutic value has been demonstrated by several methodological (Leuner, 1969, 1970) and casuistic (Holfeld and Leuner, Wächter, Klessmann) work.

In our clinic it has applied by several doctors and psychologists, for it has always appeared to be proven effective for easy or difficult cases.

Technology

The patient begins after a short rest in a comfortable sitting position or on the couch where under the protection and supervision by the therapist is asked to produce daydreams. He will report regularly on these hypnagogic [onset of sleep, and contrasted with hypnopomia {state of consciousness leading out of sleep}] visions, act and perform imagined benefits. At their sessions, which continue with pre-and post-performance for a
total of 45 to 50 minutes, the patient undergoes a series of induced standard motifs, which offer up an opportunity for the patient to display their deep psychological conflict material. It may be to slow to show momentum, impulse, and fending off reactions and so make possible self-interpretations of unconscious conflict situation or with correction of the maladjusted neurotic.

These “to feel carried,” projective images are regularly of re-symbolic character as they are called because of their control by the “GAI” affect. They are spontaneously elaborated in detail, depending on the nature of the personal problems of patients, there are additional scenes that can be manipulated according to various directional-like (Leuner principles given by Leuner, 1969). Using these principles, the patient can learn to tolerate, for example, and tackle fears and he can learn and deal with an emotionally charged symbolic figure and make it “new” [Reader please note: This paper was published in 1976. Roth’s insight in renewing the symbolic figure is an astonishing parallel to Grawe’s (2007) treatise on “neurological remapping”] for him an unusual experience in the real world.

The technique of the KB is didactically divided into three stages, which also requires training and experience by the therapist as well since the patient’s symptoms will be displayed accordingly. Reference for details of the technique goes to Leuner (1970). Casuistry and results

The following is a summary of my 15 cases of patients with psychosomatic-gynecological complaints. Only five of these patients came with the desire, first and foremost, for their disorders seeking treatment in the sexual area (patients 6, 7, 8, 13, 14). The majority suffered from other symptoms, which they were specified as the main
reason for the prospect of our outpatient clinic, it is psychosomatic complaints (patients 1, 2, 3, 10, 11, 12) and phobic states, and inhibition (patients 2, 4, 5, 9). In almost all cases, the complaints were presented as poly symptomatic. Five of the patients were married at the beginning of therapy (patients 9, 10, 11, 12, 13), and married during the course of therapy (patient 5). Two found a new friend (patients 7, 15), one was just about to break away from her dominating boyfriend (patient 3), three patients had no boyfriends (patients 1, 2, 6), and just as many talking about changing their partner contacts (patient 4, 8, 14). In the cases with those with steady partner commitments (partly due to discussions with these partners) that they were mainly looking for the causes for functional sexual disorders among the patients.

The patients were asked to evaluate their symptom change from the beginning to the clinical outcome of therapy: disappearance (++) , improvement (+) or uninfluenced (-). Symptom changes have taken place in individual therapy courses several times, mostly in terms of a slow decrease in intensity or even short-term gain, there were also a symptom shifts before, but which also disappeared during the course of therapy. Relapses in the strict sense, occurred in none of the catamnesis [follow-up history of a patient after they are discharged]. At the presentation of additional medical histories of patients, particular persons shall be waived, otherwise the context of this work would have blown up. It was expressly pointed out by some that the KB is a mere cosmetic covering up of symptoms without affecting the basic personality. It is even to the contrary, clinically proven by those with a test psychology background (namely, Leuner, Wächter, Klessmann) that may already occur after relatively short KB therapy (15 to 30, rarely more hours) significant personality changes, changes that permanently result, where equally brief forms of therapy
did not seem possible. The effect of KB, in the language of Rogers, a “reorganization” of
the personality and thus the disappearance of symptoms.

Another indication is needed. All 15 patients had been seen by the GP
[gynecological practitioner], or psychotherapy in gynecologic diagnosis and treatment,
sometimes even in past years (patients 1, 2, 6, 7, 8, 10, 11, 12, 13). None of the identified
patients with organically related causes have sued for their complaints, but some had
been treated for some time anyway in an organic sense (patients 2, 6, 7, 8, 10, 12, 13). A
number of patients were sent from physicians pretreatment during our office hours, or
transferred (patients 2, 3, 6, 7, 11, 12, 13, 14), the others came on their own initiative
(patients 1, 4, 5, 9) or at the request of relatives and friends (patient 8, 10, 15). The
adoption of the patients for the therapy was not for menstrual bleeding, or functional
disorders.

Patient 1. Single, 32 year old, premenstrual dystonia (++)\), dysmenorrhoea [severe
uterine pain during menstruation] (++), variable muscle tension (++) and pain back pain
(++)\), mood variations (+) with weeping (++)\). **Therapy:** 32 sessions, 28 of which are with
KB. Temporary addition Ludiomil in small doses, never exceeding 50 mg daily.
Catamnesis 9 months without relapse.

Patient 2. Unmarried, age of 22, secondary amenorrhea [abnormal suppression or
absence of menstruation] (++) for 3 ½ years of chronic headaches (++), nausea (++),
erythrophobia [display redness in one’s face; is a result of an emotional response, which
could reflect embarrassment, shame, or modesty] (++)\), chronic constipation (-).
Depressive neurosis aberration (+). Therapy: 49 sessions, including 38 with KB; temporarily Ludiomil also at higher doses (daily) to 100mg, dose reduction completed before the end of therapy. Catamnesis 6 months without relapse. This patient was temporarily (with a total of four meetings following one after the other) a new variant of the KB-therapy, the so-called introspective imagination applied, what will be reported separately.

Patient 3. Single, 21 year old, premenstrual dystonia despite ovulation inhibitors (++), oligo [few, infrequent] orgasms (+), psychogenic vomiting (+), sore throat (+), globus sensation [sensation of having a lump in the throat] (+), nocturnal cramps (+). Therapy: 6 meetings, including 3 KB; catamnesis 7 months without relapse.

Patient 4. Unmarried, 30 years old, dyspareunia [pain during intercourse] (+), primary anorgasmic [regular difficulty reaching orgasm] (+), migraine headaches (+), hay fever (-), sadomasochistic behavior (self-punishment [++] and injury [++]). Therapy: 50 sessions, including 38 with KB. Catamnesis 6 months without relapse.

Patient 5. Single, 27 years old, premenstrual dystonia despite ovulation inhibitor (+), dyspareunia [pain with intercourse] (+), coital anorgasmia (+) low sexual desire (+), erythrophobia (+), contact inhibitions (+), gastro-intestinal cramping interference (+). Therapy: 20 sessions, including 18 with KB, the therapy was not entirely completed because the patient’s departure abroad. No catamnesis.
Patient 6. Single, 19 years old, premenstrual dystonia (++), dysmenorrhoea, (++), primary anorgasmia (+), various lighter states phobic (+), dizziness (++) , contact inhibition (+).

*Therapy:* 11 sessions, of which 6 with KB. 3 months after the patient strongly desired discontinuation of treatment relapse with helplessness and more easily claustrophobia fear in human-congested spaces, renewed 4 sessions, of which only one with KB since then catamnysis without relapse during a period of 11 months.

Patient 7. Single, 26 years of age, coital anorgasmia (++), dysmenorrhoeal (++), despite ovulation inhibitors (++), erythrophobia (+ +) claustrophobia (++) , chronic constipation (-). *Therapy:* 13 sessions, including 8 for KB. Catamnysis 15 months without relapse.

Patient 8. Unmarried, age of 22, premenstrual dystonia *since* taking ovulation inhibitors (++) , dyspareunia (++), coital anorgasmia (+), hyperphagia [Abnormally increased appetite for and consumption of food] (+), stair phobia (++). *Therapy:* 14 sessions, 12 with KB, catamnysis 4 months without relapse.

Patient 9. Married, aged 24, primary anorgasmia (++), Claustrophobia (++) , agoraphobia [abnormal and persistent fear of public places ] (+ +), various autonomic symptoms, such as night sweats, pruritus [itching sensation that can have various causes], etc. wandering day and night (++) , diffuse severe anxiety attacks (+ +) especially so for over 6 months completely incapable of work (+ +) and bound to her apartment (+ +). *Therapy:* 33 sessions, including 28 with KB. Catamnysis 12 months without relapse.

Patient 11. Married, 30 years old, premenstrual dysmenorrhea (++), dystonia (++), lack of sexual desire (+), Pruritus in arms (++), burnings in the armpits (++). Therapy: 9 sessions, including 5 KB. Catamnesis 17 months without relapse.

Patient 12. Married, 35 years, premenstrual dystonia (-), dysmenorrhea (-), lack of sexual desire (-), primary anorgasmia (-), chronic headaches (-), chronic constipation (-), general muscular tension and pain conditions (-), sleeplessness (-), presumably sec. insufficient sleep abuse. Treatment: The patient came to a total of 6 sessions (of which 3 with KB), terminated because she could not attach to the therapy success.

Patient 13. Married, 27 years old, premenstrual dystonia (-), dysmenorrhea (-), primary anorgasmia (-), claustrophobia (-), chronic constipation (-), migraine headache (-), nightmares (-). Therapy: The patient appeared only during a total of 4 sessions, one with KB; her grounds were to have no time for the therapy, although she would lose with pleasure her symptoms; moreover, her husband “at the moment” had no understanding for the therapy.

Patient 14. Single, 26 year old, nymphomania (-), depressive disgruntlement states with fainting tendency (-), coital anorgasmia (-). Therapy: After a total of 5 sessions, including
the next to last with KB, said the patient no longer wants to come to therapy because they’d noticed in the KB single session that “many things could happen” and she would prefer to leave everything the way it is.

Patient 15. Single, 20 years, dyspareunia (-), primary anorgasmia (-), depressive-neurotic state image (-). Therapy: 3 sessions, of which one session with KB, then patient reported from the telephone they would not reappear for treatment.

In a compilation of gynecological symptoms (most patients had more than only one) is apparent following table:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Number</th>
<th>Cured/Improved</th>
<th>Unaffected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary amenorrhea</td>
<td>1</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>[abnormal suppression or absence of menstruation]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premenstrual dytonia</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>[abnormal tonicity of muscle]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dysmenorrhoea [severe uterine pain during menstruation]</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Dyspareunia [pain during intercourse]</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Orgasm difficulties</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Mission or low sexual desire</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Table C-8-1. GAI Therapy Result for Presenting Gynecological Symptoms in 15 Women*
From the total 15 patients, four were not sufficiently long in the therapy, as needed to be as mentioned in the case description. A therapy could not really have come into play, and of course, the lack of success can not therefore be attributed to the method as such. The reasons for the absence of patients 12 and 13 tends to not have come into play in the doctor-patient relationship and the complexity of the image and status in patient 15 is the seeming lack of motivation. Patient 14 who provided an excuse for their continued failure to appear, however, that the only KB session she attended has, at least, led to some insight.

Discussion

Eleven treated patients is too small to allow it to be treated in a statistical analysis. For the breakdown used here, the disease patterns in individual symptoms is permitted only for illustration, but not for a numerical analysis, since many of the symptoms themselves, are often in ways inextricably linked and therefore should not be considered individually. From this list, however, it can still be concluded that the technique of the KB has a gynecological treatment effectiveness of psychosomatic disorders and is likely to be just as suitable for neurotic and psychosomatic complaints as any other method. For most of the cases, are in addition to the subjective symptom improvement, also social changes described by the patients and objective test results (same test before and after therapy) to confirm the success of therapy.

The numbers listed here from 6 to 50 hours of therapy indicate that the KB is among the short-term therapies. Here are some advantages, therefore: money and time saving compared to the hitherto art in functional sexual disorders such as anorgasmia,
dyspareunia and vaginismus [involuntary spasm of the muscles surrounding the vagina],
as the most successful (in 80% of selected patients) therapy, cited by Masters and
Johnson (1973) KB has two great advantages. One is that it can also be used for
simultaneous instructional treatment of a partner. G. Abraham (1973) observed a
tendency for the treatment of both partners is therefore a pressing need here no more.
The other advantage is that the bleeding and functional problems with the KB can be
handled simultaneously. A preliminary selection, and possibly selective indication for
therapy on the severity of symptoms (Revaz) is unnecessary. One explanation for these
two benefits of KB could be due to the fact that it is not a symptom-centered therapy, but,
as mentioned, takes a on the influence of a personality change (within the meaning of a
correction of the relationship disturbance).

The present study lacks the essential and frequent psychosomatic disorders of
women, such as vaginismus [involuntary spasm of the muscles surrounding the vagina],
pruritus vulvae [irritation of the skin at the anus causing the desire to scratch], Fluor
genitalis [mucous discharge before menstruation], Pelipathie [vaginal abdominial pain],
mastodynia [pain in the breast] and post menopause complaints came because in the time
frame set limited us to consult on these therapies in patients with no such problems in the
consultation. Of course, such interference must be included in a further evaluation to
determine the effectiveness of the KB in psychosomatic gynecology before finality can
be said about it.

In addition to this treatment of female sexual dysfunction, there has been refereed
to our clinic also a number of men with functional sexual disorders, who, as it seems
now, have received treatment with fairly good success.
Finally, it should be emphasized that even for this therapy validity and reliability are not guaranteed. Validity can only be achieved if a greater number of women were treated. The postulate of reliability is only true if other therapists, with the same means, achieve the same results. The KB provides a short-term therapy, according to its particular structure and because of the very good research into the therapeutic mechanisms offers real hope for scientific evaluation. Just as important as the reference to this aspect to me is the illustration of the effectiveness of the postulated by Prill (1964) of KB in psychosomatic gynecology. Also to be shown that the indication of the KB in this area is somewhat different than those of Masters and Johnson, which have hitherto been regarded as one of the few brief sex therapies, especially since the behavioral aspect the therapeutic approach broadly consistent has aligned with the ideas of Masters and Johnson (Kockott).
Effectiveness Study 9. Emotional Experience, and Overcoming Fear Using GAI.

Now that the discussion of global factors of effect in psychotherapy has shifted to the close-to-practice level of concrete methods and described disturbance patterns, Tess (1981b) examines the effects of two constructions using workable catathymic image perception in conjunction with psychoanalytical and systematic desensitization (SD) treatment on the bases of principles derived from learning theory. The indicator of these two approaches to therapy are different: KB is based on the multifariousness of emotional experience whereas, systematic desensitization is concerned with anxiety control. The former is prominent in catathymic image perception, while the latter predominates for systematic desensitization. We examined patients with manifest syndromes of phobia. Both approaches resulted in good progress in a way comparable during an observation period of 4 weeks each on in-patient basis, such success was not seen in a control group receiving only guidance in Autogenic Training (on an in-patient basis like the other two groups). However, a closer look does reveal a significant difference: Whereas systematic desensitization treatment is concerned with training aimed reduction of situation-conditioned anxiety, perception catathymic image initiates a broad spectrum change and wide variety of personality dimensionality, the patients getting more self-assured and adopting a more positive attitude towards their social environment, their general feeling of satisfaction is enhanced. This does not imply that phobic behavior is forgotten or repressed, it is rather its psycho-dynamic basis which is eliminated.
The GAI

Starting from the observation described hypnagogic visions on the threshold of sleep, Silberer (1914), or spontaneously rising imaginations in hypnoid form (Kretschmer, 1963), and developed by H. Leuner (1955), the “Guided Affective Imagery” or Katathym Bilderleben (kata = under, thymos = soul), put on muscle relaxation for patients in a regressive state of consciousness and visual images at the level of primary processes suggesting that the personality-specific conflicts symbolize these. The intense visual experience of perception and sensing unleashes strong emotions, the patient regresses under the protection of the therapist to the level of anaclictic [having a physical and emotional dependence on another person] anxiety transference and his ego functions delegated continuously as he relates to his strong projective imagination, and the therapist encourages clarification [Reader: note this 1981 parallel to Grawe’s (2007) problem clarification principle], reinsurance and are encouraging support. In the GAI psychoanalytic theory, the therapist recognizes an unconscious instinctual dynamic directed against the patient defenses, and the importance of transference and countertransference. Confrontations do not happen with conflict-halting material at the conscious level, but immediately tried in the symbol field of affective-determined pictures, the method of optimal conditions to create healing tendencies of the self-ego and itself. The work of the patient under the guidance of the therapist in his conflict-laden symbols leads to changes in this same symbolism, which involve changes in clinical symptoms. From the therapist’s motives, given standard base dimensions of speaking to the person, allow the comparison between patients in the cross-section or longitudinal
section of a patient, will not be discussed here, nor will the intervention strategies of the therapist (Leuner, 1969).

The Systematic Desensitization

SD learning theory is targeted to reducing phobic fears. The condition is the respondent of the nature of symptoms, according to the neurotic anxiety behavior and is maintained exclusively by the external or internal appearance of phobic objects. Operant anxiety behavior (e.g., comforting and indulgent giving to the environment after the patient is showing symptoms) requires different behavioral means. First, the patient reports experienced real situations that resonate in which he shows phobic anxieties. He assigns to these scenes, the nature of a “fear thermometer” between the anxiety levels of “0” and “100.” “0” describes the state of absolute quiet serenity, “100” his state dissolves to disorganized panic. The therapist then suggests to the patient to imagine situations that are occupied, thanks to a spatial-temporal variation of the manifest anxiety situation, with only milder, lighter tolerable anxiety.

What follows is the real desensitization, where the patient is instructed similar to the GAI, to relax all muscles (Jacobson, 1938). It falls to them in an easy hypnoid state in which the therapist sets a situation with a very low anxiety scene in the fear hierarchy. The so obtained reduced phobic anxiety is usually in the context of the “Habituation” [Reader note the parallel to Grawe’s (2007) “ruminating neurological pathways”] or perhaps most succinctly the “extinction” [Reader note the parallel to Grawe’s (2007) “primary process neural extinguishing”] (Florin, Tunner, 1975). The method encourages the active regulation of anxiety patients [Reader note the parallel to Grawe’s (2007) “promotion of secondary processes” at a conscious level]. However, contrary to the
intended GAI life, neither attempts to experience the cause of the underlying anxiety, or other emotions, but aims to address the immediate phobic fears.

To avoid misunderstanding, this work reaches out from the comprehensive range of behavioral approaches, only the systematic desensitization has a direct parallel to the GAI in the relaxed resting position and thematic requirement of imaginations so that the patient can explain all his views supposedly for behavioral effects.

**Autogenic Training**

This method is so widespread (Langen, 1977) that a further description is unnecessary. We treated clinically overt control phobias in order to assess this factor over such a nonspecific relaxation therapy and its influence in a hospital stay and the question of spontaneous remission (Eysenck, 1963). We are not going to investigate the therapeutic effectiveness of autogenic training with phobic anxiety. The ego supportive role of autogenic training unfolds in manifest symptoms only in a combined psychotherapy (Langen, 1973).

**The Hypotheses**

a) Let us recall the varied experience of patients with GAI and systematic desensitization, we can derive the following expectation: The patient in the desensitization procedures experiences a roller-coaster of frightening scenes. He swings back and forth to his opposing emotions between the poles of a single affective dimension: the increasing anxiety (higher scores on the “fear thermometer”) and the decreasing intensity of anxious suspense up to the experience of complete rest (0-scene). Contradictory to the GAI life, here, the patient has qualitatively distinct experiences
about the feelings without the excitation intensity of going through the emotions such fluctuations, as imposing on the desensitization experience.

b) Systematic desensitization focuses on fear-regulation of the patient whereas Guided Affective Imagery promotes transformations on all the issues raised in symboldrama levels of conflict. Thus, it can be for the effectiveness of the methods in the case of systematic desensitization, not to expect a completely isolated improvement of phobic symptoms while initiating the KB, a holistic personality change to the phobic syndrome will be centrally affected.

Methodical approach

The assistance included 15 male patients admitted to the hospital with indications of phobic anxiety. In particular, at the initial examination, we secured the respondents the nature of their disorder phobias with the help of a behavioral analysis. Each of the phobic symptoms could be closer to equal fears, anxieties divided into authority fears. In any case, we avoided any additional pharmacotherapy. The assignment of patients to one of three treatment methods used (Guided Affective Imagery, systematic desensitization, autogenic training) occurred after their assessment.

Different classes of diagnostic instruments accompanied the therapeutic process of the three treatment groups: To capture the different patterns from subjective experience and physiological behavior therapy by choosing the GAI or choosing the systematic desensitization or autogenic training for the short admissions that, in principle, is not comparable, so we chose two parameters: A quantitative variations in the intensity of emotional experience for one and, for the other, went through high sense of divergent classes.
As an indicator we used the emotional intensity fluctuations to record the respiratory rate, which is well established as a parameter for decreasing or increasing excitement in the psychophysiology.

The qualitative changes in sentiment was recorded by a questionnaire on 13 different feeling classes described by the patient (Traxel, 1968, Krech and Crutchfield, 1974). The questionnaire was filled out immediately after the 20-minute treatment with GAI or systematic desensitization. Then the patient was able to specify which categories of these emotional experiences he had during the last session and now beyond this even add their own comments. Another group of diagnostic surveys accompanied the hospitalization of the patient outside the therapeutic situation. They are traversed by the control group.

Two standardized psychometric procedures were used: casting tests and the Freiburg Personality Inventory (Fahrenberg, Selg, 1970). The questionnaire was presented to the patient five times: before the beginning of therapy and at weekly intervals after every 4th session. Other diagnostic procedures documented the results of the therapy against the background of learning theory constructs.

For each patient an individually tailored behavioral test was designed. It is to measure the anxiety situations that were as realistic as possible. Thus, for example, a patient had the job of managing the hospital, he had go in pajamas and bathrobe 20 minutes on the floor as a so-called general, the command center of the entire hospital, going up and down without receiving a reasonable explanation for him being in the hospital. During this time, a standard of 20 minutes, the patient had to register as his anxiety level from 0 to 100 as it went up and down to enter this fear then return
immediately to a predetermined location. If he came before the expiry of 20 minutes in a state of panic, that is the fear value reached “100,” he was allowed to leave the situation.

Each patient completed his behavior test again five times: before the beginning of therapy and at end of each week of treatment. Of course, in waiting for the four weeks, a habituation effect occurred. Among the various treatment conditions diagnostics from the narrower tradition of systematic desensitization in the above-described anxiety hierarchy occurs. Here, we observed the change in the subjective level of anxiety related to the defined scenes over the course of 4 weeks. The study plan is the following:

Weekday 1-4. KIP Systematic Desens. Autogenic Training

Weeks 1-4
- Recording of respiratory rate and the feelings experienced therapeutic classes for each weekly session
- Weekend ……Repetition of the preliminary investigation………………

n = 5 patients in each group (KIP, Systematic Desensitization and Autogenic Training)

Results and discussion

First, the differences during the therapeutic sessions with GAI life and systematic desensitization are presented. Figure C-9-1. shows confirms the highly significant (t test, p <0.01) to our above suspicion: the experience of the patient during the GAI includes usually twice as many feeling classes as the experience during the systematic desensitization, however, this finding does not coincide with forecasts of a purist behaviorism. Rather, our results can not be overlooked as a subject for more reflective patients in the Systematic Desensitization. Patients choosing to allow the treatment of far
more emotions than the theory grant them you sometimes feel joy, sadness or anger, which in the literature one rarely finds evidence (Weitzmann, 1967).

![Graphs showing data](image)

**Figure C-9-1.** Anxiety of Scenes and Changes of Anxiety Levels for GAI, Systematic Desensitization and Autogenic Training Methods  

a) Shows the same for the hierarchies of anxiety experienced scenes (group averages), b) The change in subjective anxiety levels during conduct rehearsals in the course of therapy with GAI life (KB), Systematic Desensitization (SD) and autogenic training (AT).

The height of the average breathing rate as an indicator of emotional intensity is different in both groups (Figure C-9-2a): Systematic desensitization results in significantly higher values of breathing rate (Figure C-9-2b) than for Guided Affective Imagery. The variance in respiration rate is much more for systematic desensitization than for the KB. The activating intensity of experience, thus shows its variation for the systematic desensitization of a particularly strong expression. Qualitatively this is possible but only anxious feeling tone and the reduction in the foreground. On the other
hand, it outweighs the qualitative variation, the differentiated experience of emotional
moments in the GAI life, where the mean in the intensity reached a higher level than
observed in the systematic desensitization.

In the profiles of the standardized questionnaire Giessen-test and the Freiburg
Personality Inventory changed (analysis variance, $P < 0.1$). Between the groups before
the start of therapy in both questionnaire procedure is no systematic difference.

Compared with their baseline values in answering the self-test questionnaire
suggested the patients in the therapeutically disadvantaged group with Autogenic
Training had an oppressive, anxious and depressive self-experience. The patients showed
less imagination, felt embarrassed and rebuked the process. From the experimental
groups for patients of GAI, distinguished themselves in an increasingly cheerful self-
experience and acting from a firmer-grounded determination.

The Freiburg Personality Inventory confirmed the positive self-assessment of patients under GAI life. They looked lively, had enforcement, but also more trustability, considerate, tolerant, extroverted and masculine than the others. This was opposite to each change in the patients in the control group with Autogenic Training. The group with Systematic Desensitization was by no means in between, but much closer to the negative self-description of the control group. Consequently, the GAI life development of the psycho-social powers in the assessment of patients appears to promote the most visible change.

Also in the behavioral diagnosis interpreted the control group participated in autogenic training once again (Figure C-9-1).

Fears are indeed explicitly dealt with in therapy with more fearlessness for patients with GAI than in the group that benefited the least with Autogenic Training.

Even with the change in levels of anxiety hierarchies, the patient who remained in the control group with Autogenic Training was at a disadvantage. Their hierarchies of fearful-occupied scenes lose none of their dangerous character, while they regress under Systematic Desensitization and GAI, the fears are similar. The GAI thus proves its therapeutic value to be effective and successful in phobias which have been chiefly, to this time, the domain of Systematic Desensitization. The Systematic Desensitization only has a slight edge when it comes to addressing fears in real situations. But these are also strongly linked to the therapy process, while the phobic event take place in the GAI patient.
Final comment

Both GAI and Systematic Desensitization methods work better than the sole hospital stay with instruction in Autogenic Training. Moreover, the results show further how the KB where its psychosocial and certainly creative potential to the individual is activated, presumably, this is a conversion of the imagination as an expression of catathymic restructuring of contentious areas of personality. So it is obvious that the personally enriching and burgeoning wealth of GAI for qualitative variety of emotions during the therapy in relation to Autogenic Training enables the patient to confront his symbolized emotions. Systemic Desensitization has perfected, however, only the mechanism of overcoming fear at the cost of a strong restriction from the autonomously integrative tendencies of the spiritual experience.

Systematic Desensitization already ends when the patient has forgotten his fear while going through emotional experience. GAI is the psychodynamics where the fear transforms by teaching the master the sources for his irrational fears. KB uncovers abandoned dimensions of experience overcome by phobic anxiety which when deleted, the world regains its positive character.
Effectiveness Study 10. Results of a GAI for Test Anxiety.

This is a recent and well-designed case study by Ihme and Salzer (2005). It employs GAI methods to determine whether it is effective in alleviating the symptoms associated with test anxiety. It goes well beyond this purpose by exposing the inner processes at work in GAI that bring about healing and change to behavior. This work is highly illuminating and will bring to focus the core elements which are necessary for GAI to work. It has all the current GAI principles that make GAI effective today and points to a new direction being impacted by the neuropsychotherapy of Klaus Grawe (2007).

Summary

Test anxiety is found not only in everyday life, but goes beyond to a clinically significant distress in some people. Despite this fact, it still does not seem to be a specifically targeted, science-based treatment method to give relief to adults for test anxiety. The method uses the type of imaginations Katathym imaginative Psychotherapie (KIP), which is a daydream induction influenced intervention.

The examined processes and thus the dependent variables of this study were derived from theoretical considerations and prior empirical causing a therapeutically relevant mechanisms of action. Specifically, these are the ubiquitous active elements of verification, management, resource activation and problem updating Grawe (1994), the quality of the emotions as well as the concepts of primary and secondary process.

The basis of the research was a completely tape-recorded psychotherapy at the established practice of a therapist in a diagnosed patient diagnosed with test anxiety, as a specific phobia, and was treated according to a varied concept of the KIP, in six sessions. As an additional resource, the use of different questionnaires were used at three different
time points (before therapy, immediately after treatment, and a year later). To examine the various dimensions of the process, the authors used the instrument of cube analysis - an observation method for detecting the ubiquitous active elements.

The questionnaire results show that the disorder-specific symptoms could be reduced to be not only clinically relevant, but also this success was also recorded one year after treatment.

The results of this study were discussed particularly in relation to previous empirical findings. The resources over the entire course of treatment are constantly applied to thereby provide the basis for the other three active elements: to clarify, which is predominantly in the first half of treatment implementation, and can thus be exercised in the solution, for the successful implementation of containment measures, the base becomes more established, and updating of their problems can be made more tolerable for the patient.

Figure C-10-1 below summarizes the effect of KIP to the patient with test anxiety. Not only did the patient experience performance improvement for anxiety, another benefit was that the somatic symptoms reduction to negligible levels. Moreover, verbalization on the part of the patient, showed almost 70% more positive emotion words than in the one of Stigler & Pokorny (2001) who conducted a case study on the treatment of anxiety with the KIP. The case study showed KIP to be a resource promoting, solutions-oriented therapy with regressive conflict. The emphatic change allows the patient also to experience positive emotions.
Figure C-10-1. Effect of GAI on Patient “A” Before, Immediately After, and One Year After Therapy Compared to Student Norm.

Particularly striking is that different phases of the imagination regarding the processes involved from the purely verbal stages. Thus, in the imaginations example, less negative and more positive words are used in the discussion stages. This is consistent with recent empirical evidence, and can be taken as evidence that the imaginations effect actually produce a shift from negative to positive affects. Furthermore, the theoretical supporting assumptions encourage, within the daydreams, more primary process.
1. Initial Stabilization (protective phase)  
Alleviation of PTSD symptoms through the activation of resources and the experience of security and control

2. Working with the concept of the inner child (protective phase)  
Strengthening the ego functions

3. Imaginative engagement with the traumatic event  
Processing of trauma

4. Offender confrontation  
Conflict resolution

5. Working with positive and negative introjects *  
Dealing with guilt, anger, injury, etc.

6. Integration of the trauma – Working through and mourning  
The trauma is in memory, the integrated part of life history

* The technique of active introjection of the therapist.

Table C-10-I. Phases of Trauma Treatment with the KIP and the Objectives Sought by Steiner & Krippner (2005).

<table>
<thead>
<tr>
<th>HIGHER CATEGORY</th>
<th>EXAMPLE WORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defensive Symbols (passivity, travel, Chaos, etc.)</td>
<td>Shades, lie, desert, shadows, chance, though</td>
</tr>
<tr>
<td>Sensation (meaning, cold, softness, etc.)</td>
<td>Beauty, sweetly, taste, winter, rough, stone</td>
</tr>
<tr>
<td>Desires (anal, oral, sexual)</td>
<td>Breast, drink, sweat, disgust, kiss, in the nude</td>
</tr>
<tr>
<td>Icarian symbols (height, fire, water, descent, etc.)</td>
<td>Fly, sky, fall, lake, flame, flow</td>
</tr>
<tr>
<td>Regressive Cognitions (stranger, timeless, space, etc.)</td>
<td>Secretly, strangely, forever, dream, way, eye</td>
</tr>
<tr>
<td>Only single categories (abstract thinking, time, morality images, etc.)</td>
<td>Know, should measure, properly, work</td>
</tr>
</tbody>
</table>
Effectiveness Study 11. Short-term GAI Therapy (A Controlled Study).

This Wächter & Pudel (1983) GAI study is one of the few which uses a control group. The study examines the effect of a 15 therapeutic sessions (of 50 minutes) continuous treatment with the GAI life in comparison with a control group whose participants were unacquainted.

The two groups of patients for the study were: the KB active group and the control or the K group. The patients were from the outpatient clinic of the Psychiatric Hospital or the Psychotherapeutic Department*. They were mostly referred by practicing physicians. They were selected patients with neurotic and psychosomatic disorders, which are incorporated of their performance in the KB and K program. The circle of schizophrenic psychoses, endogenous depression, organic brain disorders and patients with below-average intellectual ability were excluded from the study. The investigation was limited to the age group between 18 and 40 years.

* The study was conducted at the Department of Psychotherapy and Psychosomatics (Head, Prof. Dr. H. Leuner) at the University of Göttingen.

<table>
<thead>
<tr>
<th></th>
<th>KB Group</th>
<th>K (Control) Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Female/Male</td>
<td>4/10</td>
<td>10/5</td>
</tr>
<tr>
<td>Average Age</td>
<td>27.3</td>
<td>28.3</td>
</tr>
<tr>
<td>Age Range</td>
<td>18-39</td>
<td>18-40</td>
</tr>
</tbody>
</table>

*Table C-11-1. Data of all Patients*
Of the 15 patients in the KB group, one patient on treatment left for external reasons. The original 17 subjects in the K-Group two participants were lost. With regard to their social status among the patients in both groups, they were all middle class. Education and professionally, they came primarily from an academic environment, (teachers, research assistants, and students). In the K group were found, by contrast, a manual worker and two housewives. Because the population was from a university town, it seems more likely to find access to the psychotherapeutic and psychiatric university hospital than other groups in other areas.

To understand the genesis of their disease, other data of the patients was collected for objectifying their situation, the following diagnostic procedures were applied:

- A survey of deep psychological history in the form of a separate semi-standardized interviews - tied to a scheme of the Lower Saxony regional hospital deep therapy (3-4 sessions of 50 minutes).

- Classification of diagnoses: the clinical evaluation of the results, we classified the cases according to the cardinal symptoms, including personality structure (see Table C-11-2). Thereafter, there was a relatively similar distribution in the two groups, only for the "borderline" case in the KB group, was there no counterpart in the K-group.

Regarding the severity of the diseases, these are similar in both groups, and rather provide a "negative selection." Measuring the severity of the disease at the time of their earliest symptom onset showed relatively unfavorable prognostic conditions. In the KB group there were eight with chronic conditions, in the K-Group there were nine chronic cases and five each sub-chronic cases (see Table C-11-2).
<table>
<thead>
<tr>
<th></th>
<th>KB Group</th>
<th>K(Control)-Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive neurosis</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Anxiety neurosis and phobic</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Alcohol, Drugs</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Borderline</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>Psychosomatic</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Years since onset of symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>&gt;10</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

*Table C-11- 2.* Diagnoses of the KB and K (Control) Groups

The Test Battery was primarily on the basis of self-assessment was presented following the history-taking and after the treatment. The patients each took 2 to 3 hours and consisted of:

Gießen list of psychosomatic complaints (licensed in 1971), own list of mental disorders, hereinafter also called "Göttingen list" (Leuner and Wächter), personality questionnaires with scores of extra-introversion, Neuroticism and rigidity (S-NO) (Brengelmann, 1960),
Manifest Anxiety Scale (MAS) (Taylor 1953), Standard Progressive Matrices by raven on the determination of the indicative levels of intelligence (Raven 1960), a separate questionnaire to determine the attitude of the patient for treatment after the seventh treatment session, and “After Exploration” after the completion of treatment for clinical assessment in symptoms.

The clinical results were evaluated by a group of 11 evaluation rating scales.

For the KB-group and the therapeutic Technique: The treatment of patients in the KB group was exclusively an outpatient basis in individual sessions within the framework of the basic level of KB. The specific technique of associative intermediate level of KB, however, was not used (Leuner, 1970). In respect to training, the therapist was therefore given a course of action in GAI technology area, which after the training guidelines of AGKB [Association of Guided Affective Imagery and imaginative processes in psychotherapy, Residence: Friedländerweg 30, D-34 Göttingen.] and the time of training of the therapist was considered to be just.

The scheduling of treatment to 15 hours was without regard to success as has been agreed to with the patient before starting therapy, as recommended by Malan (1965), but of course, the conditions of the working alliance have been discussed with the patient. The KB therapy claimed an average of 54 days, i.e., just 8 weeks. The treatment sessions (of approximately 50 minutes) were held twice a week and were divided according to the described by Leuner and now widely proven approach: preliminary (10 min), the exercise period in the KB imagery technique (30-40 minutes) and post-performance (5-10 minutes). According to the basic technique we have not interpreted
the daydream content of KB. The therapist was limited to brief remarks to encourage the patient's processing.

Among 15 patients in the control group survey were history and the collection of psychodiagnostic data, the same as in the KB group. The patients were then referred to, however) regarding the treatment at a later time (waiting list and given them a group therapy with autogenic training, which was later carried out). After expiration of the waiting period, which averaged 46 days (six weeks), repeated the psychodiagnostic measures.

In the literature of psychotherapy treatment goals and success measures are defined in many ways. The goal is often deliberately limited (on the transformation of a function, such as social adjustment, or on gaining the ability to work (Boehm, 1942; Dührssen, 1962). Even a relativization of success is aimed at "flowing therapeutic goals" (Long, 1954), or the fulfillment of an ambitious formula that it establishes Veraguth (1925) for the concept of a "cure."

The clinical evaluation of the influence of the treatment showed "immediate results" occurring in our study by several criteria, which together constitute the intended end result. We put the criteria Boehm (1942) based on the success of psychotherapy in the 1966 form. There were, in addition to the subjective data of the patients spontaneously expressed and targeted the complaints brought before the treatment, especially its real social change, especially the work and enjoyment as well as the management of everyday life (e.g., resumption of interrupted studies) to assess used. The details can not be discussed here, and only mention factors found such as symptom healing and symptom relief shift in the clinical assessment into account.
Treatment results according to clinical criteria

After evaluating the above data, the results of treatment in the KB group assessed as follows: 8 patients had improved from good to very good and easily for one patient. The symptoms was not affected in 4 cases and one case of deterioration of symptoms (Table C-11-3).

<table>
<thead>
<tr>
<th>Diagnostic Group</th>
<th>Number</th>
<th>Improved</th>
<th>Unaffected</th>
<th>Deteriorated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurotic Depression</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Anxiety Neurosis</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Alcohol &amp; Drug Abuse</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Borderline</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Psychosomatic Syndromes</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

*Table C-11-3. Treatment Results in the KB Group after 15 KB-group Sessions (54 days)*

Table C-11-4 shows the relation between symptom duration and treatment success. The focus of the patient and offer treatment success lies in a subchronic and chronic symptoms.
Table C-11-4. Treatment Success in Relation to the Duration of Symptoms (KB-Group)

In the K group symptoms remained unaffected in 8 patients, in one case, a slight improvement occurred and in 6 cases, a worsening of symptoms (Table C-11-5).

<table>
<thead>
<tr>
<th>Diagnostic Group</th>
<th>Number</th>
<th>Improved</th>
<th>Unaffected</th>
<th>Deteriorated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety syndromes</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Neurotic Depression</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alcoholism</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychosomatic Syndromes</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>1</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

Table C-11-5. Clinical Evaluation of the Control Group after Waiting Period of 46 days

<table>
<thead>
<tr>
<th>Duration (years)</th>
<th>Total</th>
<th>Improved</th>
<th>No Change</th>
<th>Deteriorated</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (0-2)</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II (2-5)</td>
<td>5</td>
<td>4</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>III (5-10)</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IV (&gt;10)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Results of external evaluation (rating)

Of the before and after treatment records and compiled lists of symptoms, 11 have been classified by external evaluation (doctors, psychologists and nurses). They rated the above assessment levels of Boehm (1942) and Mascher (1966). At sufficiently high agreement among the critics, it appeared that of the 14 patients in the KB group, 9 were classified as improved, 3 were unchanged and 2 deteriorated. This result was statistically significant at the 1% level.

Figure C-11-1. Results of Clinical External Evaluation (rating)
The questionnaire “attitude towards treatment” showed that all patients who presented with a positive attitude to therapy had a good treatment success. Patients with negative or ambivalent attitude showed no improvement or a worsening of symptoms. Only one patient with a diagnosis of "borderline" was an exception. Similar relationships between positive attitude toward the therapy and the therapeutic success already found Plaum (1967) and screaming (1976).

Additional observations

For those patients whose symptoms at the conclusion of the 15-hour treatment were unaffected or had been getting worse, there was a degradation of character and an armoring and a detectable ego defense. They also had insights gained in their conflict dynamics. The greater part of them now seemed to be interested in some kind of a therapy (analytic group therapy, group therapy with the KB or a single analytical treatment) and more accessible than before the 15-hour treatment. In another group of patients, the changes in test scores were low or even showed a worsening, although they showed clinical improvement after the external evaluation. On the observation of this discrepancy, the results were connected to other considerations that are not yet complete.

Catamnestic

Approximately 2 years after completion of treatment, patients in the KB was asked to write an assessment using a clinical questionnaire and the Gießen Complaints List, their status in self-appraisal. Eleven of the 14 subjects responded. The results are shown in Table C-11-6. As mentioned earlier, had 5 of the 11 subjects participated in the closing bid-to group therapy with the KB (12 sessions).
<table>
<thead>
<tr>
<th>Clinical Questionnaire</th>
<th>Gießen Complaints List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Improvement</td>
<td>7</td>
</tr>
<tr>
<td>Improved</td>
<td>2</td>
</tr>
<tr>
<td>Remained the Same</td>
<td>--</td>
</tr>
<tr>
<td>Deteriorated</td>
<td>2</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

*Table C-11-6. Catamnesis after 2 Years (11 out of 14 patients responding)*

**Summary**

This study shows that the basic KB technique used to develop a therapeutic effect over and above our expectations can occur even in some chronic symptoms. Also worth noting is that these series of patients came for treatment, who, in terms of chronicity and severity, were referred, a certain extent, as “the last stop” in the Psychiatric University Hospital.

The result of the catamnesis after 2 years in which it was subjectively assessed as a satisfactory and lasting improvement. However, we are aware of the problem of uncontrollable influences of other species during this period.

The effectiveness of 15-hours of therapy by targeted selection of patients can be improved, and also the fact that the treatment according to the needs of each individual case on a strict limit amounts needs to be extended to about 20-25 or more sessions. Among the failures listed here, an individualized treatment duration would have led to more satisfactory results, such as Roth (1976) has shown.
In the context of a psychiatric outpatient clinic with 14 outpatient psychotherapy patients with neurotic and psychosomatic disorders in each 15 sessions with the GAI life (elementary, respectively) and compared with a control group. This extreme short psychotherapy led to clinical evaluation (rating-team) and test psychological studies in 9 out of 14 cases showed essential improvements. In the scale of psychosomatic symptoms and psychopathological symptoms and the manifest anxiety scale (MAS), the KB group had significant positive changes occur. The levels of neuroticism and rigidity remained likely due to the short nature of treatment, but with a positive trend, just below the statistical significance. In contrast, in the control group showed only random variation was observed.
Appendix D. Neurological and Biochemical Basis of Behavior

Neural networks

The brain is composed of about 100 billion neurons. A single neuron has no knowledge. There is no meaning stored or encoded within it. The image of things comes about only from discrete patterns of neurons which are activated at the same time. Thus, the neuronal structure capturing thoughts and memories reside in not one but across many neurons connected in precise patterns via active synapses. Each neuron has about 10,000 incoming and 10,000 outgoing synaptic sites. The total number of synapses in the brain is therefore about two quadrillion ($2 \times 10^{15}$). Even more astounding is the number of neuronal combinations that make up thoughts and images. Because of the possible connection combinations, the brain is, without a doubt, the greatest master of pattern creation and recognition (Grawe, 2007).

Marcel Mesulam (2000) has recently formulated a theory to explain how neurons form expansive networks in the brain. The collaboration of specialized neurons has made possible the transmission of action potentials among individual neurons. The action potential is transmitted via the synapses. It is crucial to grasp the transmission processes occurring as chemical processes at the synapses in order to understand whether and how potentials are transmitted between neurons. Such chemical processes ultimately determine the formation and permanence of images and thoughts and how we react to these images and thoughts in the form of a behavioral response (Grawe, 2007).

Biochemical processes involved in the formation of memory, thought and behavior

Refer to Figure D-1. for a view of the following discussion.
Memory neuron connections via dendrites (incoming signals) and axons (outgoing signals)

Magnesium blocks Ca\(^{++}\) ions penetration at N-methyl D-aspartate (NMDA) receptor site

Magnesium ion blocks Ca\(^{++}\) ions penetration

Magnesium ion release allows “second messenger” Ca\(^{++}\) penetration

Mg release

CREB = cAMP-response-element-binding protein

CREB leads to gene transcription which then facilitates neuron excitability via the previously activated synapses in the neural path.

Cell nucleus

Figure D-1. Synaptic Representation of Cascading “Second Messengers”
There are certain biochemical interactions occurring at the synaptic level which are important in establishing long-term memory and achieving desired changes to behavior patterns. The receptors at postsynaptic membranes have either an activating or inhibiting function to the migration of signals passing through the neurons. The number of neurons and their sensitivity for signal transmission depends upon a large number of chemical processes taking place within the neuron and at the synapses (Grawe, 2007). These processes are far more complicated than can be described here.

Of importance to the psychotherapist are the chemical interactions that take place at the N-methyl D-aspartate (NMDA) receptor. In order for a connection to occur between an axon and postsynaptic neuron at the NMDA site, the ion channel for the calcium ion must not be blocked by a magnesium ion. The magnesium ion exists at the membrane of the resting potential or quiescent state of the receptor. When a depolarization takes place at the synaptic region, the magnesium ion leaves the NMDA site permitting the calcium ions to pass through the NMDA receptor and into the postsynaptic neuron. The process is known as long-term potentiation of the synapses. This long-term period transpires over the course of seconds to minutes. This does not result in heightened excitability of the entire neuron, but rather affects only the synapses involved in the prior activation. Therefore, connections involving specific neurons are only the ones that are strengthened. This is what is meant by facilitation of normal connections (Grawe, 2007).

The neurotransmitters that bind to the receptors affect the cell’s function at its surface. These neurotransmitters become docked onto the outer cell membrane and activate it by a within-cell enzyme that in turn produces a secondary, within-cell type of
neurotransmitter known as a “second messenger”. The second messenger may then trigger an infall of follow-on reaction of second messengers that influence the biochemical state of the neuron. This, in turn, allows the ion channels to either open or close. This process is moderated by the non-NMDA receptors and ultimately results in long-term potentiation of only the previously activated synapses. As a result of the moderated process, the neuron can be more easily activated by the ionotopic receptors. The neuron activation process can be minutes in duration. The implication for therapy is that for that period lasting between seconds to minutes, the process of potentiation is occurring at the synapses and can be facilitated by the therapist. If during this period of heightened excitability the neuron continues to be stimulated intensely, the activation or inhibition becomes progressively stronger and yet another process is engaged (Grawe, 2007).

This process, significant for therapeutic intervention, is a third type of influx involving second messengers which occur as a result of multiple steps in the chemical processes at the synaptic site. Among these actions is a significantly long and intense stimulation of high, ungoverned receptors that leads to an increase in the second messenger cyclical adenosinemonophosphate (cAMP), which activates protein kinase A. This protein, in turn, activates another protein, c-AMP-response-element-binding-protein (CREB). The protein has a transcription factor and can activate the transcriptions of genes within the cell nucleus. The activated genes start the synthesis of proteins to produce new proteins which triggers three subsequent processes:
1) To enhance the excitement of synapses that were previously activated and initiated the biochemical avalanche, and

2) To promote neurotropin production that will lead to the creation of more synapses in the vicinity of the synapses that were activated previously, and

3) To promote the manufacture of retrograde messengers affecting the pre-synaptic cell. This process ensures that more neurotransmitters are produced at the pre-synaptic cell and are necessary for increased subsequent signal transmission (Grawe, 2007).

These secondary messenger processes are critical to the formation of new neural pathways that the psychotherapist may utilize in therapeutic interventions. What often happens in a therapeutic exchange are statements and questions between the therapist and client. However, it is unlikely that long-term changes will take place at the synapses with this approach. Real change requires that synaptic connections that are not well established become activated as often, as intensively, and over as long a period of time as possible. The therapist needs to approach the problem intensively and persistently from all directions. This, then, may open the NMDA receptors and activate second messenger cascades. The emergence of such a cascade is more likely if dopamine receptors are simultaneously activated. This situation occurs when the patient’s significant goals are activated simultaneously. If the therapy does not succeed in activating the patient’s important approach goals at this critical time, the therapeutic methods will not achieve the desired change process (Grawe, 2007).

The emphasis of therapy need not be focused on the identification and activation of problems. It need only identify and assess a problem enough to enhance the therapeutic intervention. To bring about a modification within the individual, a positive
intervention is needed to establish a new set of neural activation patterns. Thus, the emphasis should be on altering the individual’s perception of the problem by facilitating a new set of thoughts, behavior patterns, and associated emotions. The activation of new neural patterns must be repeated as often as possible, otherwise the new connections may not be ingrained strongly enough to be utilized outside of therapy (Grawe, 2007).

The enduring message from biochemical processes for the psychotherapist is that the new patterns of experience and behavior at a neural level require concentrated and long-lasting repetition to establish and maintain the experience and create new behavior patterns. Since the new patterns are not deeply-seated immediately, they are not likely to occur as a result of the patient’s own volition and must be frequently facilitated and reinforced by the therapist (Grawe, 2007). The biochemical process described above does not take place via pharmacological intervention but rather as a result of normal mental activity. Grawe postulates that psychological aspects of real life experiences bring about synaptic transmission increases and reductions during the course of day-to-day activity. Therapists can view these biochemical processes as opportunities to strengthen desired behaviors and inhibit undesired ones. The implications for therapy on a biochemical level are of the utmost importance because they underlie the long-term changes occurring in the brain (Grawe, 2007). It is not the purpose of this dissertation to delve into the details of those chemical processes. The interested reader is advised to consult the textbook *Neurosciences* by Kendal et. al. (1996) or the textbook by Squire (2003).

*The underlying neural processes of mental disorders and what a therapist can do to treat them*  There is no such thing as a location of memory, fear, attention, or consciousness.
But there do exist specific regions of the brain where capacity to function and activate are necessary for a specific mental function to take place. Explicit memory, or memory of the most recent activity, is processed by the hippocampus. If the hippocampus were removed, there would no longer be a memory of the events which just took place in waking reality. During periods of high cortisol production, such as the case of the severely depressed, the hippocampus will shrink and can become damaged, thereby reducing the capacity of the hippocampus to process and store recent events and/or store them to long-term (implicit) memory (Grawe, 2007).

Grawe (2007) presents a picture of the neural processes involved with mental disorders such as Post Traumatic Stress Disorder (PTSD), Bipolar, Borderline Personality Disorder, and Generalized Anxiety Disorder. Figure D-2. is this researcher’s conceptual interpretation of the neural processes happening within individuals with these disorders. Sensory input is received at the thalamus which acts as a central switchyard directing those sensory messages to both the limbic and cortex portions of the brain. People with concentration difficulties in an extreme form may be diagnosed with attention deficit disorder (ADD). This state can be characterized by a feature where normal inhibitory processes are no longer functioning appropriately. This typically represents a deficiency in the thalamus, the central relay station that evaluates incoming signals from the sensory

![Parts of the Brain Involved in Fear Response](https://example.com/brain_diagram.png)
regions according to their meaning and importance to the individual. A person with ADD has difficulty inhibiting unimportant sensory signals; however, the thalamus of a person without such concentration problems would subjugate these distractions to the subconscious.

Processing takes place more quickly in the limbic system which reacts to threats in an immediate way. At the core of this function is the amygdala which is characterized by unconscious, involuntary actions based on memory formation from past experiences. The amygdala is not easily influenced by rational thought. Anxiety is produced if the amygdala is hyperactive. Central to the amygdala processing is the access to implicit memory. This is formed in the unconscious without awareness to the individual’s working memory. Because the pathways are so ingrained, it is difficult to change behavior patterns that result from thought and memory processes formed by the amygdala (LeDoux, 2002; Grawe, 2007).

The hippocampus regulates cortisol, a stress hormone. It has access to the explicit memory which has previously stored contextual information formed by a conscious rational process. In a person with an affective mental disorder, cortisol fails to be regulated by the hippocampus, which can result in elevated levels of cortisol, thereby affecting the influence of the prefrontal cortex. The hippocampus with its reduced activity in depressed patients has been shown to shrink in volume (Grawe, 2007).

The prefrontal cortex (PFC) also receives activation signals from the thalamus. It serves as a conscious working memory and attention “rule center” for the brain. Although it is not a part of the limbic system involved in “fight or flight” responses, its function is to arbitrate conflicting thoughts. For that reason the conscious or explicit
memory must be solicited by the PFC. The PFC takes longer to process information and respond to input signals from the thalamus than the amygdala, especially in fearful or threatening situations. The prefrontal cortex has left and right hemispheres that function very differently. The presence of increased cortisol leads to the increased involvement of the right PFC, where avoidance goals and negative emotions are activated. The functioning of the right PFC is more dominant than the left in those individuals with mental disorders. Likewise, the activation or facilitation of certain functions is vital in depressive disorders (Grawe, 2007). The PFC is the area where much of our personality “resides.” The left PFC holds approach goals and emits positive emotions; the right PFC focuses
Figure D-2. Neural Processes of Mental Disorders (e.g. PTSD, Bipolar, Borderline Personality Disorder, and Generalized Anxiety Disorder)
on avoidance mechanisms and generates negative emotions. In a depressed individual, the left PFC becomes hypoactive (Davidson, 2000). The anterior cingulate cortex (ACC) region of the PFC is composed of two subregions. The affected subregion is associated with the limbic system, the regulation of autonomic reactions and emotional and interpersonal behavior. The cognitive subregion is associated with processing cognitively important data and deciding how to respond in a particular situation (Davidson, 2000 & Grawe, 2007). The ACC normally becomes activated when pressing, confusing situations arise and conflicting demands are placed on the individual. The function of the hippocampus is to adjust cortisol levels, alter behavior to fit current contexts, as well as to formulate explicit (conscious) memory contents. In cases of major depression, the ACC is under active and the volume of the hippocampus has been shown to be reduced by 8 to 19 percent (Davidson et al., 2002).

The presence of cortisol leads to poor regulation of emotions and interferes with the PFC’s ability to make conscious decisions involving rational processes based on what is in the explicit memory. Thus, the predominant PFC characteristic is the avoidance response to the perceived “fearful” sensory input and is accompanied by negative emotions (Grawe, 2007).

The reaction to the fear process involving the amygdala is associated with the primary functioning or processing of the brain. For the person with a mental disorder, the primary process path is stronger and dominates the response mechanism when the individual reacts from ingrained processes in the amygdala and implicit memory. For the individual with the disorder, his or her reaction is inbred. He or she has been acting and reacting in the same manner which has resulted in a ruminating experience since the
onset of the implicit memory associated with the fearful event. It makes no difference to the individual what caused the event, when it was formed, or the rationality behind the fearful event which elicited such fear in the first place. The response mechanism occurs from the primary process path involving the implicit memory summoned by the amygdala (LeDoux, 2002; Grawe, 2007).

Figure D-3. shows what an effective psychotherapist can do to achieve a desired response and a positive change to the patient's behavior at the onset of situations which are perceived similar to the past fearful event. The path associated with the prefrontal cortex involves arbitration at a conscious level to process sensory input in the brain, albeit a slower process than through the primary process for the reasons mentioned above. In addition to excitation of desired secondary process neural pathways, there is also a need to inhibit undesired primary process neural pathways. Thus, the therapist strives to inhibit the primary process and simultaneously promote the more rational, secondary process as the patient responds to a perceived fearful event. In order to do this, the therapeutic intervention must be able to identify the sources of conflict in the individual. Within the context of GAI, this identification occurs during the imagination phase of treatment. Therapeutic intervention can promote patient resource activation and change the neural pathways such that the secondary process path will become viable. As a result of the resource activation within the patient, alternate neural pathways can be established through the introduction and reinforcement of cascading second messengers and remapping of the neural network, thereby bypassing the amygdala's immediate response mechanism. The hippocampus develops an increased capability of cortisol reduction. Mental disorder symptoms are thereby decreased. The cortisol reduction by
the hippocampus allows the left PFC to become dominant, the left PFC being the portion that hosts approach goals and positive emotions. The secondary success path has thus become a strengthened neural pathway of response. The promotion of resource activation within the patient is encouraged
Figure D-3. What the Effective Psychotherapist Needs to Do to Bring About Neurological Change Resulting in Altered Behavior

**Sensory Input**

1. Therapist wants to inhibit the Primary Process and to promote the Secondary Process.

2. Therapeutic intervention identifies the sources of the conflict. Within the context of GAI, this is done during the imagination phase.

**Thalamus:** Neural switchyard to the Limbic System (faster) and Cortex (slower)

**Amygdala:** Alternate neural paths are established through introduction and reinforcement of cascading “second messenger” remapping to other neural networks in the brain. This inhibits the habituation and rumination processing by amygdala. Anxiety is reduced.

**Hippocampus:** Promote access to explicit memory (previously stored contextual information). Increase capability in cortisol reduction. Symptoms reduced by increased hippocampus activity.

**Prefrontal Cortex:** Conscious working memory and attention. The “Rule Center”, arbitrator of conflicting thoughts, longer response, The left PFC is activated through continued cascading “secondary messenger” reinforcement via the patient’s Resource Activation.

**Effective reduction of cortisol (stress hormone)**

**Secondary Process Path**

**Response**

Enhanced (strengthened) Neural Pathway
through the therapist’s dialogue on a conscious level during the imagery session and promotes the more preferred secondary processing. At the same time there is an inhibitory response to deal with the perceived threat in the nonbeneficial and former primary process path. The therapist encourages resource activation and offers options for engagement of the symbolic conflictual issue (e.g. on how to engage the “beast”). Thus, a patient’s healthy confrontation response comes from a more rational portion of the brain. In order for this process to become ingrained, the neural path must be repeated and strengthened during the imagery session and post processing. The goal of therapeutic intervention is to encourage the patient to confront and engage the beast with rational processes from the secondary process path, specifically encouraging the activation of the left prefrontal cortex from which approach goals and positive emotions originate.

Resource Activation – The essential element

Resource activation provides the ability of the patient to take positive control over the experiences that produce self esteem. This is accomplished through repeated emphasis of the individual’s positive qualities, characteristics, and capabilities. Resource activation for the patient serves as a self-esteem and control enhancing experience (Grawe, 2007). For the therapist, resource activation is an attempt to provide a means of conveying a satisfying experience in order to promote the internal activation of resources within the patient, irrespective of whether those attempts were successful (Grawe, 2007). Figure D-4. shows a correlation of therapy outcome with the use of resource activation during the course of therapy as reported by the patient and therapist. The therapies with negative outcome are characterized by less resource activation as perceived by both patient and therapist compared to therapies which focus on resource activation as part of
treatment. Sessions are shown with a high, moderate, and poor outcome, separately for patient and therapist. Z-transformed scores are shown for all cells of the design. Average therapies have a score of zero.

![Resource Activation and Therapy Outcome](image)

*Figure D-4. Comparison of Resource Activation Outcome in Therapy. Adapted from Grawe, 2007.*

**Other neural and biochemical processes in the emotional response**

The brain is comprised of neurons that work in coordination with groups of nearby neurons. These groups interact with other groups that may be in varying regions of the brain. Marcel Mesulam (2000), as noted earlier, describes how these groups form networks of information processing. The two networks most aligned with psychotherapeutic intervention deal with memory/emotional and comportment/executive functioning. The memory/emotional functioning relates to the regions of the brain called the amygdala and the hippocampal-entorhinal complex. Research has shown that
psychotherapy may regulate the amygdala (whose function it is to process emotionally charged stimuli by increasing cortisol arousal and the vigilant monitoring of the environment) and increase activity in the hippocampus (involved with elicit memory) in order to facilitate learning new coping strategies. The executive functions of the brain are found in the orbito-frontal, medial frontal cortex and the dorsomedial-prefrontal-posterior parietal cortex of the brain. In a variety of mental dysfunctions such as obsessive-compulsive disorder, depression, and schizophrenia, neuroimaging studies have shown hypo-activation of these frontal regions of the brain (LeDoux, 2002; Grawe, 2007).

Neurons transmit action potentials via the neurotransmitters in the chemical synapses. These microlevel transmissions are the foundation of all other processes in the brain. They govern what will and will not happen in the brain. If psychotherapeutic intervention is effective through changes in the brain, it is due to modification at the synaptic level. Grawe (2007) reports the usual neurotransmitters are glutamate, glycine, gamma amino butric acid (GABA), dopamine, norepinephrine, epinephrine, serotonin, histamine, and acetylcholine. An activating or inhibiting function occurs at the receptor sites on the post-synaptic membrane. This activation or inhibition is directly tied to the overall function or dysfunction of biochemical reactions as they relate to mental disorders. Psychotherapy frequently has as its goal the alleviation of undesirable symptoms in order to allow a client to achieve desired goals. The process of neuronal inhibition is essential for therapeutic change. The neurotransmitter gamma amino butric acid (GABA) actively inhibits the firing of a cell so the neuron no longer transmits its activation. This not only occurs on the neuronal level, but throughout all aspects of the nervous system. It is a vital component in the treatment of anxiety disorders. Control of
emotions is also a factor in the treatment of eating disorders, depression, borderline personality disorder, and aggressive disorders (Grawe, 2007).

The neuroscientist, Joseph LeDoux, entitled his 2002 book, *Synaptic self: How our brains become who we are* and states that “Psychotherapy is fundamentally a learning process for its patients, and as such is a way to rewire the brain. In this sense, psychotherapy ultimately uses biological mechanisms to treat mental illness” (p. 299).

Klaus Grawe’s 2007 book entitled, *Neuropsychotherapy*, details how neurobiological factors are the basis of mental processes, how altering these mental processes can change neuronal pathways, and consequently effect therapeutic outcome.

**Implications for psychotherapy**

The question arises: what is it we gain by seeing a therapist? What is the value of engaging in therapy? How is it that the brain can produce something new out of disorder? If we accept that neural processes lie at the foundations of all memory, beliefs, thoughts, and behavior, would it not make sense that psychotherapy would be more effective if it could be made to influence these neural processes? How is it that psychotherapy helps a person resolve inner conflict?

Psychotherapeutic intervention from a neurological perspective is possible. While the patient is dialoguing with the therapist, the simultaneous activity at receptor sites has involved cascading second messengers and facilitated the activation transmission at the synapses. The dialogue becomes reinforcing to the new neural pathways when it is along the same lines the patient has already developed in dialogue and followed in accordance with the therapist’s guidance. In order for real change to result, new synaptic connections must become ingrained through use and frequent activation. If one expects the
therapeutic dialogue alone to facilitate change, then one must approach the problem persistently from all angles, so the neurons connected to the corresponding neural networks can be simultaneously activated. The initiation of the avalanche of second messengers is facilitated if dopamine receptors are active at the same time. Dopamine is produced in the brain naturally when the patient is actively engaged with his/her approach goals. It is important to clarify the patient’s approach goals in order for a congruent therapeutic alliance to unfold. One can expect a permanent facilitation of neuronal pathways relevant to the patient’s approach goals to occur when the therapist and patient are proceeding toward a common objective. Conversely, if a therapist permits a patient to recurrently experience predominately negative emotions within the therapy sessions, then the therapist, the therapy office, and the next scheduled session will all come to function as a trigger of negative emotions for the patient, despite good intentions. Emotional negative reactions on the part of the patient precipitate the patient’s avoidance activation mechanism which is the opposite of what the therapist wishes to achieve (Grawe, 2007). There are some therapeutic modalities that claim undesirable behaviors or feelings, for example, anxiety, can be extinguished. In other words, the anxiety can be permanently inhibited and removed from neuronal functioning and memory. LeDoux (2002, 2004) and Gutberlet and Miltner (1999) disagree. Rather than the extinction of the implicit memory held in the amygdala, the reactions brought forth by emotional memory are being inhibited by the PFC and not overtly noticed (Grawe, 2007). “Unconscious fear memories that are formed by the amygdala appear to be etched permanently into the brain” (LeDoux, 2004).
Is has become clear to neuroscientists that the plasticity of the brain in reaction to environmental factors reveals that the genetic component in mental disorders is far less than previously thought and that life experiences play a major role in determining gene expression. Likewise, mental disorders are a result of various neural structures and processes (Grawe, 2007). “Psychotherapy’s task is to work with people whose life experiences have had a noxious effect on their brain, and to restore health by exposing them to life experiences that have a salutary effect” (Grave, 2007, p. 73). The impact of these experiences is formed in the first few years of life. The neural foundations of mental disorders are in the implicit memory systems (prior to conscious recall) and are inaccessible to introspection. No one can recall the process by which one’s personality was formed (Grawe, 2007). Personality is anchored in the implicit self (LeDoux, 2002). The implicit self, therefore, governs our behavior and experience. Klaus Grawe (2007, pp. 103-104) describes it in the following:

What we think, decide, and do is not determined by our conscious processes but by processes that have transpired previously without conscious awareness. We know about these processes that do not become conscious primarily from studies that analyze electrical activity in specific brain areas. The advantage of such studies is their very high temporal resolution. Visual activation, from stimulus initiation to the first demonstrable reaction in the primary visual cortex, requires about 60 milliseconds. The negative N1-wave, which appears after 100 milliseconds in evoked potential studies, already indicates an initial
evaluation of the importance of the stimulus for the respective person. Conscious perception appears no earlier than about 300 milliseconds after stimulus presentation. With very complex or meaningful stimuli, it can even last one second or longer until the presentation of the stimulus is consciously perceived. In the period from initial stimulus presentation to conscious perception, the stimulus properties are processed in a complex manner; in particular, the current significance of the stimulus for the organism is being evaluated. What we perceive is the final product resulting from this process, not the process itself. Meanings, therefore, are constituted unconsciously. They are supplied for consciousness but not produced by consciousness. However, we typically experience this the other way around because we are normally not aware of the preceding evaluative process.

Many aspects of mental dysfunctions are introspectively accessible and, as a result, self understanding and insight are possible. The release of glucocorticoids in stressful situations or the neural activity in the hippocampus and amygdala are beyond such accessibility. The foundation of such neuro-chemical responses is beyond our introspection. After the maturation of the hippocampus, around age 4, one can explicitly remember negative life experiences; however, the depth and origin of the mental despair takes place far earlier and prior to conscious memory. These core conditioned responses are deeply imbedded in our neuronal circuitry and can only be altered through repeated “corrective experiences” where new neuronal pathways are activated and old circuits inhibited. Change only occurs during experiences in the present time, where such
integration can take place (Dieter, 2006; Grawe, 2007). KIP can accomplish just that. The therapeutic implementation of KIP is designed to evoke unconscious issues by allowing symbolic images to surface with the potential of dealing with dysfunctional patterns in the current therapeutic setting. The purpose of KIP is for the therapist to journey and assist the client on his or her personally and uniquely designed imagery. Klaus Grave (2007, p. 314) describes it as utilizing “the backdrop of the patient’s motivational structure, because the actual motor of therapeutic change is always the motive of the patient….They are the underlying foundation of therapy…and the therapy must work with this foundation if it is to be successful.”

A crucial element in KIP is the client’s experience of uncomfortable imagery situations. In utilizing Hanscarl Leuner’s ten standard imaginary situations or symbolic themes in conjunction with the five general methods for evoking and interpreting imagery (each of which has been outlined previously), the natural tendency of avoidance can be averted. By systematically addressing difficult dynamics within the imagery sessions and directly confronting the issues toward resolution, the neuronal pathways can be remapped to alleviate dysfunctional behavior and symptoms. If the issue is dealt with repeatedly in imagery sessions and a conscious post-imagery interpretation and processing occurs, a desired neural circuitry can be activated and dysfunctional pathways inhibited. This is referred to by Grawe (2007) as context generation and problem processing. Roth (2001) describes the problem processing as a part of the explicit mode of functioning and its importance in the facilitation of new learning.

The interaction that occurs in the KIP can reduce symptomatology of the mental disorder while never directly dealing with the symptoms. A cascading effect can take
place within the neuronal circuitry which can restructure the brain functioning, decrease the psychopathological symptoms, and thereby influence the neural foundations of the mental dysfunction.

Within the imagery sessions, a client can experience a sense of control and mastery over a situation allowing for an awareness of positive self control which can serve as a protective function and contribute to an important aspect of mental health (Grawe, 2007).

**Neuropsychotherapy as intervention**

What does the term neuropsychotherapy mean? It relates to what neuroscience has to offer psychotherapy. With the advent of neuropsychotherapy, the boundary between neuroscience and behavioral science may become more arbitrary. Increased knowledge has allowed a joining of the biological and psychological sciences, which has provided an understanding of mental processes built on more solid foundations. As modern psychology begins to apply neurological principles there will be an expanding capability brought into both disciplines. Psychotherapy can have a pharmacological component working in tandem toward a common outcome. The psychotherapist's task is to clarify and facilitate a learning experience that is likely to be a positive influence on the patient’s problems with their underlying errant neural foundations. The ease of encoding synapses from the experience of learning has been made possible by the facilitation of therapy to produce the desired effect. The process is similar to how new memories are formed. Neurological chemistry can be adjusted not only by pharmacological intervention but also by therapy. Long before the advent of artificial psychoactive medications, naturally occurring life events became associated with
fluctuations in serotonin and dopamine levels. The prospect of the new field of
neuropsychotherapy offers an exciting new toolset of biochemical influences never
utilized before in treatment. This new dimension creates a novel spectrum of therapeutic
intervention strategies not conceived before this time. On the basis of such an
independent new perspective, it is possible to relate and coordinate with each other and
combine strategies: even though those strategies previously seemed incompatible because
of their mutually inconsistent theoretical foundations. What is known so far about the
effects of pharmacological processes and psychotherapy may potentiate each other’s
effectiveness (Grawe, 2007).

Grawe's research team investigated mechanisms of neural psychotherapy for its
practical application in psychotherapy. Those findings provide a neurological basis for
the formation of emotions and how to address conflicts within the individual. His
empirical and theoretical findings are a foundation which allow us to move beyond the
traditional ideas of psychotherapy into an integration involving neurological and
biochemical processes which occur naturally in the brain (Grawe, 2007).

Psychotherapists can take advantage of the data presented in neuroscience and
explore how the implementation of neuroscience techniques can benefit their practice.
The recent introduction of literature on the subject of neuropsychotherapy has drawn
attention to the neurological basis of the human experience and how we respond to
trauma. The research into neuroscience promotes new models by which we can change
undesirable behavior (Grawe, 2007).

GAI as neuropsychotherapeutic intervention.
KIP allows the unconscious to become known and processed. Clearly, many different psychotherapeutic approaches could be used to engage neural and biochemical processes to produce desired emotional effects in patient treatment. This dissertation contends that GAI is only one of many possible treatment modalities which could produce such neurological changes. The evocation of conflict and its resolution through “resource activation” lie at the heart of the application of the GAI as a treatment modality (Ihme & Salzer, 2005; Kottje-Birnbacher, 1997). Resource activation has also been shown to be a primary mode of change in psychotherapy theory (Grawe, 1999). Moreover, resource activation shows a good correlation with problem resolution for the patient when implementing neuropsychotherapy techniques (Grawe, 2007).

As noted in Grawe’s case of Ms. H (Grawe, 2007, pp. 12):

With this foundation, she was now able and willing to expose herself even to experiences that would predictably trigger strong negative emotions. With this entirely altered context, however, this exposure now did not lead to avoidance, which in different circumstances could have initiated the depressogenic cascade. Instead, the exposure to unpleasant events triggered an active, albeit very painful and exhausting engagement with problems from which she had turned away a very long time ago.

It is the fundamental objective of GAI to get to the primary process that led to the unpleasant event triggering the painful episode in the patient’s past.
GAI then provides a conflict resolution by employing the patient’s “resources” to explore new and potentially productive approaches to resolve the anxiety and to encourage the patient to take risks (i.e., “step into the forest”) (Kottje-Birnbacher, 1997). The therapist, as GAI facilitator, provides the patient with the means of exploring new approaches so that new pathways may be explored.
Appendix E. GAI Literature

European Sources that Qualified for Inclusion in the Meta-Analysis


therapieren. Neue Erkenntnisse zur Katathym-Imaginativen Psychotherapie


Hennig, H. (1982). Das Katathyme Bilderleben als psychotherapeutisches imaginationsverfahren - Grundlagen und praktisches Vorgehen [The GAI as a
psychotherapeutic imagination procedure - principles and practical approach].


Horn, G. (1994a). Die abgestufte Altersregression im Dienste der Therapeutenausbildung [The graduated age regression in the service of therapist training]. In G. Gerber, &
F. Sedlak (Eds.) Katathymes Bilderleben innovativ -Motive und Methoden
[Guided Affective Imagery innovative motives and methods]. München: Ernst Reinhardt.


Klessmann, E. (1990b). *Psychosomatische Manifestation bei Störungen auf niedrigerem Strukturniveau (z.B. Anorexia nervosa) vs. höherem Strukturniveau (Beispiel Konversionsneurose) und ihre KB-spezifischen Unterschiede* [Psychosomatic manifestations of interference on a low level of structure (e.g., anorexia nervosa) vs. higher structural level (e.g. conversion neurosis) and KB-specific differences]. In E. Wilke, & H. Leuner (Eds.), *Das Katathyme Bilderleben in der*


Kottje-Birnbacher, L. (1990b). Tiefenpsychologische und systemische Gesichtspunkte bei der Behandlung psychosomatisch Erkrankter mit dem Katathymen Bilderleben [Depth psychological and systemic factors in the treatment of psychosomatic disease patients with the GAI]. In E. Wilke, & H. Leuner (Eds.),
Das Katathyme Bilderleben in der psychosomatischen Medizin [The GAI life in psychosomatic medicine] (pp.293-301). Bern: Huber.


Lang, O. (1982). Behandlung einer schweren narzißtischen Störung bei hysterischer Persönlichkeitsstruktur – zugleich ein Beitrag zur Eigenart der Übertragung im KIP [Treatment of severe narcissism with hysterical personality disorder - also contributing to the nature of transference in the GAI]. In H. Leuner, & O. Lang (Eds.), Psychotherapie mit dem Tagtraum. Katathymes Bilderleben Ergebnisse (2nd ed.) [Psychotherapie with the daydream, KIP Results (2nd ed.]) (pp. 133-151). Bern: Huber


Introduction to Psychotherapy with daydream technique]. Thieme, Stuttgart: Thieme. (out of print)


H. Leuner (Eds.), *Das Katathyme Bilderleben in der psychosomatischen Medicine [GAI in psychosomatic medicine]* (pp. 214-234). Bern: Huber.


cycle of images, objects and GAI - A therapeutic model for use in KIP].

*Imagination* 2(2003), 5-23.


Pohlhammer, H. (1996). Und das Bild ist Wort geworden oder Das katathyme Bilderleben in der Psychosenpsychotherapie [And the picture has become a word, or the GAI in psychosis psychotherapy]. In R. Hutterer-Krisch (Ed.), *Psychotherapie mit psychotischen [Psychotherapy with psychotics]* (pp. 405-417). Berlin: Springer.


design and activation of resources in the initial phase of therapy].

*Verhaltenstherapie und Verhaltensmedizin [Behavior Therapy and Behavioral Medicine]*, 21, 399-420.


psychosomatischen Gynäkologie [GAI as short psychotherapy in psychosomatic

therapeutischen Anwendung am Beispiel der Hypochondrie [The dimension of
the body and its importance in the GAI life advice for therapeutic use the example

Frauenkrankheiten und bei Sexualstörungen beiderlei Geschlechtes [The GAI
psychosomatic gynecological diseases of women and sexual disorders in both
sexes]. In H. Leuner (Ed.), *Katathymes Bilderleben - Ergebnisse in Theorie und
Praxis [Guided Affective Imagery: Results in the theory and practice] (2nd ed.)
(pp. 209-214). Bern: Huber.

Bilderlebens, dargestellt am Beispiel des Spannungskopfschmerzes [On the
significance of the introspective imagination of GAI, exemplified by the tension
headache]. In H. Leuner (Ed.), *Katathymes Bilderleben - Ergebnisse in Theorie
und Praxis [Guided Affective Imagery: Results in the theory and practice] (2nd
ed.) (pp. 224-234). Bern: Huber.


Schriftenreihe der AGKB. [On the psychodynamics of group therapy with the KB series at AGKB]. Göttingen: Selbstverlag.


tiefenpsychologischen Psychotherapie bei einem Patienten mit schwerer Körperformbehinderung [The Katathym-Imaginative Psychotherapy in the practice of child and adolescent psychiatry with a casuistic contribution to the deep psychological psychotherapy in a patient with severe physical disability].

*Imagination 1*(2000), 29-49.


Einblicke in die Katathym Imaginative Psychotherapie von Adoleszenten [How postmodern youths find their way into your life - an insight into the Katathym imaginative psychotherapy of adolescents]. Praxis der Kinderpsychologie und Kinderpsychiatrie. 54(5), 417-426.


Sterbebegleitung mit KIP [In a white dress with a white ship into the white village. Dying with KIP]. *Imagination* 3(2008), 15-27.


Tagtram. Katathymes Bilderleben, Ergebnisse [Psychotherapie with the
daydream. GAI, Results.] (2nd ed.). Bern: H. Huber.

[Experience with the KB motive of a "good, friendly form"]). In G. Bartl, & F.
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