

## ABSTRACT

Title of Document: EARLIEST REMEMBERED DREAMS  
VERSUS RECENT REMEMBERED DREAMS

Shudarshana Gupta, Master of Science, 2013

Directed By: Dr. Clara E. Hill,  
Psychology Department

This study is to compare the effects of working with Earliest Remembered Dreams (ERD) of individuals to more recent remembered dreams (RRD). A limited body of research examining the characteristics of ERDs (Bulkeley et al. 2005) suggests that many individuals remember a dream from between the age of 3-12 years, and these dreams very often vivid and intense and therefore might facilitate an exploration of salient aspects of the dreamer's early emotional life. However ERDs have never been compared with RRDs to examine if differences exist in their therapeutic value. Each participant was involved in one session with an ERD and one session with an RRD, using the Hill (1996, 2004) model of dream work. The session outcome of these sessions was compared. The study shows that the ERDs reported were 4 times more likely to be nightmares and 2.6 times more likely to be recurrent dreams when compared to RRDs. In terms of session outcome, working with both ERDs and RRDs were found to be equally effective, however the salience of the dream was a significant predictor of the benefit reported by clients.

EARLIEST REMEMBERED DREAMS VERSUS RECENT REMEMBERED  
DREAMS –  
A COMPARISON OF THE OUTCOME OF WORKING WITH EARLIEST  
REMEMBERED DREAMS OF INDIVIDUALS TO MORE RECENT  
REMEMBERED DREAMS, USING THE HILL (1996, 2004) MODEL OF DREAM  
WORK

By

Shudarshana Gupta

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Masters of Science  
2013

Advisory Committee:  
Professor Clara E. Hill, Chair  
Professor Charles J. Gelso  
Professor Mary Ann Hoffman

© Copyright by  
Shudarshana Gupta  
2013

## Table of Contents

TABLE OF CONTENTS	II
LIST OF TABLES	III
LIST OF FIGURES	IV
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: REVIEW OF LITERATURE	4
CHAPTER 3: STATEMENT OF THE PROBLEM	35
CHAPTER 4: METHOD	38
CHAPTER 5: RESULTS	49
CHAPTER 6: DISCUSSION	66
APPENDICES	67
BIBLIOGRAPHY	86

## List of Tables

Table 1- Component Matrix with item loadings for 18 items from Dream Vividness Questionnaire	50
Table 2- Component Matrix with item loadings for the 9 Emotional Intensity items from Dream Vividness Questionnaire	52
Table 3- The Means and Standard Deviations of the characteristics of the dream and outcome measures with earlier studies.	53
Table 4 -The correlation between the predictor and outcome variables used in the study	54
Table 5 -The Within-Person Process Relating Type of Dream, Dream salience, Emotional intensity and Session outcome.	56
Table 6 - The variance in Session outcome accounted for by Between and Within-Person factors	56
Table 7- Therapists' preferences and comments	63

## List of Figures

Figure 1 (a)- A comparison of the percentage of nightmares reported in ERD and RRD sessions	57
Figure 1 (a)- A comparison of the percentage of recurrent dreams reported in ERD and RRD sessions	57
Figure 1 (a)- A comparison of the percentage of therapists and clients' that preferred the ERD session or RRD session	63

## Chapter 1: Introduction

“It was a very scary dream. As a child I would hear folktales about witches in trees and how they would extend their arms and catch children. In the dream my neighbor’s lying down on my bed, her arms stretched from the bed room across the hall, into the bathroom and was hanging on the tap. She asks me to get something from the bathroom. I go into the bathroom and from the window plastic bags are being thrown in. I look out and see a man throwing them in and he is staring at me in this eerie way. I think he’s a ghost. I remember this dream very distinctly.” (S.D, personal communication, March 21, 2011)

This dream was mentioned by a young woman in her early twenties. She recalled having had the dream at the age of 5; it was her earliest remembered dream (ERD). Today, even two decades later, she is still struck by the intensity of the dream and is intrigued by what it could mean.

Because Bulkeley, Broughton, Sanchez, and Stiller (2005) thought that such early dreams might play a vital role in early child development, they asked 109 individuals living in a rural, economically depressed area in northeastern United States about their earliest remembered dreams (ERD). They then studied the content patterns and narrative themes of these ERDs through personal interviews that lasted from 1 to 5 hours. They found that 85 of the 109 participants (78% of the total) recalled a dream from between the ages of 3 and 12 years. Bulkeley et. al found that ERDs very often had a vivid intensity, enormous experiential power, and distinctive memorability. According to Bulkeley et al., ERDs “impress themselves on conscious

awareness with unprecedented forcefulness and remain readily accessible in memory for long periods of time” (205). Given that ERDs are thought to be powerful, salient, and vivid, it makes sense that they would be useful therapeutically.

Also, according to Adler (1936), early childhood memories reveal an individual's “style of life.” A style of life, he asserted, is built up through striving for a particular goal of superiority, and so most of one’s actions and feelings are organic parts of the whole "style of life." Given that Adler thought early memories reflect style of life, he proposed that working with clients’ early memories could help uncover their life stories and allow for a point of entry through which long-standing problems and difficulties could be explored. Perhaps, similar to early recollections, ERDs represent early unresolved conflict and could thus provide a window into exploring and understanding early childhood issues.

Specifically, I wondered about the differences in process and outcome when working with ERDs versus recently remembered dreams (RRD). On the one hand, I could argue that the process and outcome of a dream session should be better with an ERD than a RRD. The rationale for this is that, as mentioned above, ERDs might represent deep unresolved concerns. Following psychodynamic thinking (Freud 1900/1965, Adler, 1936), exploring early childhood experiences could help uncover the roots of current functioning. On the other hand, if the dream is recent it may be easier to draw connections between the dream and current waking life. And RRDs could be just as vivid and salient as an ERD. Furthermore, if dream work itself is powerful, then any dream might elicit deep understanding. For example, if the client



is motivated and involved he or she might be able to gain benefit from working with any dream.

Thus, it could be said that ERD versus RRD makes a difference therapeutically, whereas on the other hand it could be said that the other characteristics of the dream (eg: vividness, salience, valence) or characteristics of the dreamer (eg: openness, motivation) are more relevant to the outcome of dream work. Some research has examined the effects of dream characteristics and dreamer characteristics on dream work, but the results need to be replicated since there are so few studies. Therefore, the purpose of the present study is to compare the process and outcome of working with ERDs versus RRDs in single sessions with the same therapist working with dreamers who present both types of dreams.

## Chapter 2: Review of the Literature

In order to review the relevant literature in a comprehensive manner, I divide it into four distinct sections. First, I discuss some of the most prominent early psychological theories related to dreams. Second, I review the research on early childhood dreams and earliest remembered dreams. Next, I address the literature on how dreams have been used in a therapeutic context. Last, I review the research on how the nature of the dreams influences dream work.

### **Psychological theories of dreaming**

In the field of psychology, Sigmund Freud is often credited with popularizing the interpretation of dreams in the early 20<sup>th</sup> century (Van de castle, 1994). According to Freud (1900/1965, 1918/1974), all dreams serve a fairly consistent purpose: they are an individual's sexual wishes presented in a symbolic or disguised form. Another major contribution that Freud made in the area was drawing the distinction between the latent and manifest content of our dreams. The manifest content can be thought of as what the dreamer recalls as soon as she or he wakes, or, in other words, what the individual would consciously describe to someone else when recalling the dream. Freud suggested that the manifest content in itself did not have much significance because it was a disguised representation of the true thought underlying the dream. The latent content was much more significant. Freud believed that through an exploration of the latent or unconscious content of the dream one might arrive at the unacceptable thoughts and the unconscious desires at the root of the dream.

Freud called the process by which the latent content is transformed into the manifest content “dream work.” In the dream, the latent thought is often disguised in one of several ways. The first process Freud called “condensation”, a process in which multiple unconscious thoughts are combined to make up a single manifest dream image or situation. Therefore, Freud suggested that the material of the latent content was much more extensive than the material of the manifest content. Each image in the manifest content of the dream might represent for the dreamer a composite of several disparate associations. A second process Freud described is “displacement” directing the emotional energy or desire away from the intended person or object and transferring it onto a more neutral, unrelated object in the manifest content of the dream. Next, Freud discussed how “symbolism” was common in dreams. In the process of symbolism, an image might replace an act, a concept, or an individual of significance to the dreamer. Lastly, in the fourth and final step, which is often called “secondary revision”, the dreamer’s ego reorganizes the dream into a coherent story based on the dreamer’s experiences and memories of waking life. These processes mislead the dreamer away from the latent content of the dream. For Freud, dream interpretation consisted of disentangling the dream work and revealing the latent content that is often obscured by the manifest content. Freud believed that by interpreting a patient’s dreams, the analyst could be afforded entry into the unconscious desires and wishes of the dreamer.

Carl Jung's (1965) perspective differed from Freud. He believed that dreams could arise from conflicts that were not necessarily sexual. Also while Freud spoke of the "personal unconscious" unique to each individual, Jung introduced the concept of the "collective unconscious", the aspect of the unconscious that is common across cultures and that functions far below the level of the personal consciousness. Whereas the personal unconscious consisted of desires and fears unknown to the dreamer, the collective unconscious is a reservoir of representative patterns that are similar for each member of a particular species. Jung distinguished between "big dreams" and "little dreams." The former refer to dreams from the collective unconscious, while the latter refers to dreams from the personal unconscious. Although he considered it valuable to explore both kinds of dreams, he believed that the "big dreams" are the "richest jewel in the treasure house of psychic experience" (Jung, 1948, p. 290) and could therefore provide especially significant insights for the dreamer.

Jung also suggested that dreams have a universal dramatic structure: an opening scene that introduces the setting and characters; a development of a plot; an emergence of a major conflict; and a response to the conflict by the main character. Therefore Jung's dream interpretation involves examining the scene and time of dream as well as the character of the main protagonist. In the first phase of dream interpretation, the exposition (the initial setting and the central conflict it represents) is explored. In the second phase, the plot of the dream is examined. This plot contains some essential change that leads the dream to its culmination. In the third phase, the critical events that take place in order to bring the dream to a closure are observed. Finally, the response of the main character to the conflict in the dream is explored.

Jung (1965) attributed significance to the end of dream. He believed since we cannot consciously influence a dream's outcome, the end of a dream reflects how we view our real situation.

Lastly from Alfred Adler's perspective (1936), dreams originate in unfinished and unsolved problems and are oriented towards the future: "In dreams we produce the pictures which will arouse the emotions we need for our purposes, that is, for solving problems confronting us at the time of the dream, in accordance with the particular style of life which is ours."(Adler, 1936) Adler asserted that dreams have a bearing on the future. The dreamer seeks guidance and a solution to a problem in his or her life while asleep. Adlerian psychology emphasizes unity of personality and the individual coherence of the lifestyle in all its expressions. There is no antithesis between conscious and unconscious, as postulated in Freudian psychology. Adler rather viewed the style of life as the architect of the dream. The purpose of the dream is thus to support and back the lifestyle against the demands of logic or common sense. Dreams are an attempt to bridge an individual's lifestyle and present problems. Feelings aroused by the dream are of the utmost importance. In this regard, stirred up feelings during a dream are no different from waking feelings.

Adler was convinced that the individual's unique and constant style of life finds expression to some degree in any activity. Not recognizing any essential theoretical differences between the unconscious and the conscious, between dream thoughts and waking thoughts, Adler believed that the individual's style of life pervades all these different aspects of the individual's life.

According to Adler, the best way to uncover a person's style of life was to ask him or her for old remembrances and then compare them with the other facts he or she has given. For the most part, Adler thought that the style of life does not change, that there is always the same person with the same personality and the same unity. A style of life, he asserted, is built up through the striving for a particular goal of superiority, and so most actions and feelings are organic parts of the whole "action line." Adler (1930) thought that at some points this "action line" is more clearly expressed, for example, early memories. In general, Adler was not concerned with looking for specific solutions to problems in dreams. On the contrary, he believed that the purpose that the dream served was to produce intense affect in the dream which might in turn act as a springboard for change in an individual. (Van de castle, 1994)

It is therefore evident that dream theories have arisen from many theoretical perspectives, and the diversity of these models demonstrates that theoreticians agree on no single, "correct" way to work with dreams. However as Hill and Knox, (2010) suggest the plethora of approaches is a sign that the field is expanding, and an important next step involves empirical validation of dream work. One model that has received a substantial amount of research attention is the Hill (1996, 2004) cognitive-experiential approach. In the area of counseling and psychotherapy, several studies have utilized the Hill (1996, 2004) dream model which involves the three stages of exploration, insight, and action. In the exploration stage of the model, the therapist asks the dreamer to describe and associate to each of the images and feelings in the dream. Thorough exploration is considered necessary to set the foundation for later stages. In the insight stage, the therapist works with the dreamer to construct an

understanding of the meaning of the dream on one or more possible levels such as, parts of the one's self that are reflected in the dream, or past memories. In the action stage, ideas for behavioral changes or changes in the dream are explored, and actual changes in waking life are encouraged. I will return to the empirical findings on the model in a subsequent section on research on the therapeutic value of working with dreams.

### **Research on Childhood Dreams and Earliest Remembered Dream**

Various researchers have studied children's reports of dreams ( Foulkes, 1982, 1999). Some of the studies have taken place in laboratory settings (Foulkes, 1985), whereas others have been conducted in the home environment (Garfield, 1984). The only consistent finding across studies is that animal figures are fairly common in children's dream (Van de Castle, 1994).

Foulkes (1982) conducted longitudinal studies on the dreams of 40 children. He found that in dreams of 3 and 4 year olds most often involved activity is carried out by characters other than the dreamer, and there was a predominance of animal figures. The dreams were only a sentence or two in length and rarely exceeded 50 words. No significant sex differences were reported at this age level.

At ages 5 and 6, dream reports doubled in length, and there was an observable increase in physical and interpersonal activities within the dreams, such as playing with other children and adults. Sex differences emerged such that more male strangers and untamed animals appeared in boys' dreams, whereas more friendly interactions and happy outcomes appeared in girls' dreams.

At the age of 7 or 8, dreamers became more active participant in their dreams. Boys' dreams become more like those of girls, and characters such as family members and other boys appeared more frequently than did animal figures. Girls of the dreamer's age occurred more frequently in girls' dreams than boys' dreams. From ages 9 to 12, the dreamer's involvement in the dream scenarios became more active, and interactions with same sex peers increased. The changes in the content of these dreams seemed to reflect children's cognitive and social development.

Garfield (1984) studied the dreams of children between 5 to 8 years of age in their home setting. Of the total of 247 dreams reported by 120 children, there were 158 bad and 89 good dreams. Out of the 158 bad dreams, 77 were about the child being attacked or chased by a threatening figure, 28 involved the child sensing danger but not actually being threatened, 26 concerned the child being injured or killed by accidental causes. Together these three categories of dreams accounted for a majority (73 % of the total 158) of the bad dreams. Out of the 89 good dreams, 30 dreams involved the child being engaged in enjoyable activity such as playing with toys or taking trips to interesting places, and 15 involved the child receiving an appealing gift or object. The content of these dreams seem to be related to the day to day activity of children. What is striking, however, is that almost half of the dreams reported were "bad" dreams. One might speculate that children feel vulnerable to danger, and dreams reflect these anxieties and fears.

A study by Kamphuis, Timmermans, and Punamäki (2008) provides support for the speculation that children's dream reflect their anxieties. Kamphuis et al. compared the dream narratives of 220 children and adolescents living under



conditions of enduring interpersonal violence with the dream narratives of 99 children and adolescents living in peaceful surroundings. The researchers examined content variables that have been associated with traumatic experiences in Rorschach (Kamphuis, 2008) imagery. They found that children and adolescents living in circumstances of enduring violence had significantly more trauma content in their dreams than did control children. No consistent group differences were observed for animal, clothing, or cooperative movement content.

Although these researchers (Foulkes, 1982, 1999; Garfield 1984; Kamphuis et al., 2008) examined children's dreams, none of these studies addressed the nature of dreams that the dreamer carries forward from childhood and remembers for several years. Every night we forget several dreams, yet a select few we carry with us for years. Thus, these remembered early dreams may be qualitatively different from the plethora of mundane dreams we have almost every night. Although both the content of childhood dreams and the therapeutic value of dreams have been examined, there is a paucity of research on the adult recollection of childhood dreams.

Although there is a scarcity of empirical research, ERDs have attracted some theoretical attention in the 20th and the 21st century. In the 20th century, Western psychologists, pioneering in dream work, such as Sigmund Freud (1900/1965, 1918/1974) and Carl Jung (1965, 1974) each explained ERDs from their own theoretical perspective. For example, Freud (1900/1965) saw ERDs as undisguised wish fulfillment. Freud felt that in children, the dream work process; by which the latent content is converted to manifest content, is much less sophisticated. Hence, the still naïve process of dream work, allows unconscious desires and fears to be revealed

in ways that are less disguised than in adults. To Freud, ERDs represented simple enactments in which the instinctual wishes of the child were fulfilled.

Jung (1974) claimed that the first dreams are archetypal “big dreams”. According to Jung these big dreams were set apart by their memorability, intense imagery and archetypal symbolism. Jung believed that “big dreams” were revelations of transpersonal wisdom from the collective unconscious. In other words, Jung believed that ERDs often express an aspect of personality that has not yet fully come into existence but is still in the process of becoming. According to Jung therefore these dreams when explored could be of extraordinary value to the dreamer.

By contrast, in the early 21st century, Domhoff (1996, 2003) and Foulkes (1982, 1999) argued that early childhood dreams reflect an immature developmental stage of consciousness. These researchers described early childhood dreams as mostly being stagnant, insipid, and passive. According to Domhoff and Foulkes, these dreams were not exceptional in any way and merely reflected developmental immaturity.

Finally, Revonsuo (2000) suggested that ERDs provide strong support for his “threat simulation theory” of dreaming. Revonsuo’s threat simulation theory, with its foundation in evolutionary psychology, suggests that the primary adaptive function of dreaming is to prepare humans for real threats in the waking environment. According to Revonsuo, dreams allow the human species to prepare for threats like wild animals and natural forces. By simulating these violent encounters the dreamer can safely explore how to escape from such life threatening situations. Revonsuo pointed to the

pervasiveness of chasing nightmares in the content of ERDs as substantial evidence for his threat simulation theory.

In light of these theoretical assumptions regarding the function of ERDs, Bulkeley et al. (2005) point out that although each of the mentioned theorists makes sound arguments for their particular interpretation of ERDs, each one attempts to force a single theoretical explanation on all ERDs. ERDs, however, seem to vary both in terms of their content and their significance to the dreamer. Given this diversity, it seems unlikely that any one single explanatory framework will fit all ERDs with equal precision. Bulkeley et al. therefore attempted to examine ERDs using a multifaceted approach; one which incorporates the different theoretical viewpoints earlier mentioned.

In the Bulkeley et al. (2005) study, 109 participants were interviewed in person for periods of 1 to 5 hours regarding sleep and dream patterns. Out of the 109 participants, 85 (78% of the total) recalled a dream from between the ages of 3 to 12 years. During the interview, a total of 38 questions were asked (e.g., “Can you describe the very first dream you ever remember having?”) Each dream interview was conducted in a standardized manner such that each participant was asked the same series of questions. Participants were also asked to provide details about the dream, especially regarding the characters, settings, colors, and emotions in the dream. After the interview each participant’s answers were transcribed immediately.

Researchers then used the King (2004) method of identifying motifs and themes and content analysis to examine the dreams. In King’s words, that there existed a “gap between the scientific analyses of dream content and understanding

dreams as experiences. The former builds knowledge but renders the experienced dream irrelevant; the latter embodies meanings but does not create knowledge” (p. 1). King therefore proposed that in order to bridge this gap between the content and the experience of the dream, both content analysis and narrative inquiry should be used.

To conduct a narrative inquiry King suggested identification and exploration of important motifs and themes in the dreams. King uses the following definitions of motifs and themes:

“A dream motif is defined as a recurring setting and initial situation. “Motif” has connotations of template, form, domain, context, realm, arena. Examples of motifs include a family at home, people at work, players on a stage, the dreamer playing sports, an artist painting a picture. . . . The themes are understood as likely representations of the dreamer’s existential concerns. They may be symbolic, or direct and undisguised. . . . They can include the basic existential givens: concerns about death, freedom, isolation and meaninglessness. . . . They can include other categories such as pessimism, optimism, hopefulness, despair, awkwardness, depth of feeling, various specific emotions, interpersonal contact and support, and so forth.” (pp. 7–8) For the content analysis, the content of ERDs were compared to the content of the Hall and Van de Castle “norm dreams,” gathered from 500 male and 500 female college students in Ohio in the early 1950s.

The dreams reported were then coded using the Hall and Van de Castle (1966) categories for characters, social interactions, misfortunes and good fortunes,

emotions, and settings. All the dreams were coded by a single coder, and a subset of the dreams were recoded by two additional coders (none of whom was the interviewer). The intercoder reliability reported by Bulkeley et al. was 84%. The DreamSAT (Domhoff, 1996), the statistical program available at [www.dreamresearch.net](http://www.dreamresearch.net) was then used to determine the frequencies with which the different themes appeared.

Bulkeley et al., (2005) reported several interesting patterns. In terms of the content of ERDs, consistent with other studies on content patterns in children's dreams (Domhoff, 1996; Foulkes, 1999), friends appeared less frequently and family members more frequently than in the norm dreams. Another prominent feature of ERDs with regard to social interactions is that they had a high frequency of physical aggression, most of which was directed against the dreamer, particularly against the girls. Almost no sexual interaction was involved, probably due to the fact that the dreamers preadolescent age at the time of the dream.

Many of the ERDs were disturbing nightmares. According to Bulkeley et al. (2005), "The difference is that in ERDs (and in children's dreams generally) the aggression tended to be physical and directed against the dreamer, whereas in adult dreams more of the aggression was verbal and directed by the dreamer against other characters. Children, in other words, felt more physically vulnerable in their dreams than did adults. This (physical vulnerability), seems an accurate reflection of most children's emotional experience in the waking world" (p. 210).

In terms of the settings of the dream, ERDs and the norm dreams were approximately the same given that a similar number of dreams were situated in an

indoor and outdoor locations. The difference was that ERDs usually had more fantastic settings that were removed from daily reality than the norm dreams. The predominant affect in both ERDs and norm dreams was negative.

As a result of the narrative approach to identifying the motifs and themes, Bulkeley et al. (2005) found a total of 7 motifs and 2 themes. The 7 motifs are described as follows:

1. Threat simulation: The dreamer is threatened by a person, animal, or creature.
2. Misfortune: The dreamer has an accident, injury, or unexpected problem.
3. Family: The dreamer is part of, or witness to, a threat to a family member.
4. Titanic: The dreamer is alone in a strange, limitless environment and confronts elemental.
5. Wish fulfillment: The dreamer envisions something pleasing and desirable.
6. Mystical: The dreamer has a positive encounter with a supernatural being or power.
7. Flying: The dreamer and/or another character flies, floats, or otherwise defies gravity.

The 2 themes Identified were:

1. Bad versus good: The child's own gut-level feeling about whether it was a bad dream or a good dream.
2. Real versus fantasy: The extent to which the dream more or less accurately simulated waking reality it was considered real. While dreams that involved "unrealistic" places, people, activities, and experiences were thought to be higher on the fantasy continuum.

First the themes and motifs were identified individually by the three coders. Following this the ERDs were categorized then sorted into 1 of these 7 motif categories based on consensus among the same three coders. The findings indicated that threat simulation was the dream motif that recurred most frequently in ERDs. The next most commonly occurring motifs were misfortune, family, titanic. Overall, Bulkeley et al. (2005) reported that ERDs were characterized by the predominance of fear, danger, and helplessness.

Next, with respect to the themes, on the good versus bad spectrum, three quarters of ERD were reported to be “bad” or unpleasant in some way. On the real versus fantasy, at least 15 of the ERDs were entirely realistic in their content and portrayed familiar people, places, and activities. On the other extreme the researchers report that at least 11 of the dreams were entirely fantastic given that they portrayed bizarre settings, impossible activities, and imaginary characters (e.g., like monsters and cartoon characters). An additional 5 dreams involved ghosts, haunted houses or similar supernatural scenarios. Finally, the only dispute in categorizing the ERDs on the real versus fantasy continuum arose with 3 dreams that contained religious figures such as Mary and Jesus. Some may consider these dreams to fall on the fantasy end whereas others might categorize them as realistic. To summarize Bulkeley et al. (2005) reported that ERDs varied greatly on the real versus fantasy spectrum, with a small majority of them being realistic. In terms of the memorability of these dreams, Bulkeley et al. (2005) indicated, “One cannot read through these dream reports without being struck by their vivid intensity, which frequently took the form of powerful physical and emotional carry-over effects”(p. 213).

Bulkeley et. al (2005) thus provided evidence that most adults are able to remember a vivid dream from early childhood. These dreams also seemed to be experientially powerful and extremely memorable. Bulkeley et. al. stated that the “memorability of these dreams does not depend on any special social interaction or contemporaneous response; it derives more fundamentally from the unprecedented power of the dream itself” (p.213). These findings seem to suggest that working with these dreams might be psychologically transformative. Therefore one important question worth exploring is the use of an ERD in a therapeutic setting.

In terms of limitations, Bulkeley et al. (2005) did not obtain any information from the participants examining if their RRDs were qualitatively different from their ERDs. It is possible that, the participants who reported a memorable and vivid ERD might generally have intense dreams, and therefore may also have had RRDs that were equally significant. Without comparing ERDs to RRDs within the same individual it would be erroneous to assume that the former would be a more salient and powerful dream.

To summarize, the content of children’s dreams echoed children’s psychological development. Not only did these dreams reflect the day to day waking life of children but also brought to the forefront, the fears and anxieties that children were grappling with (Foulkes,1979; Garfield ,1984;Kamphuis et. al., 2008). Also, the earliest remembered dream seemed to occupy a unique position in the dreamer’s history due to its salience, memorability, and intense experiential quality (Bulkeley et al., 2005).



## **Research on the Therapeutic Value of Dreams**

In this section I discuss a summary of the outcome of dream work using the Hill (1996, 2004) dream model. In terms of the outcome of dream work using the Hill Model, studies have examined (1) session quality, (2) the goals of dream work (e.g., insight, action ideas, target problems, and attitudes toward dreams), and (3) broader outcomes for general psychotherapy (e.g., symptom change, changes in interpersonal functioning, decreases in depression, well-being and communication).

The quality of dream work sessions has been assessed by client and therapist ratings of depth, working alliance, and satisfaction, assessed by measures completed immediately after sessions. Clients in 12 studies consistently rated the quality of Hill model dream sessions significantly higher than clients did of regular therapy sessions (see review by Hill and Goates, 2004), although it is important to note that all but one of these studies involved a comparison of the data found in the studies to published data rather than including comparisons within the same study. Better data was found in a study where clients were randomly assigned to a dream condition and a loss condition both using the Hill model (Hill et al 2000). Results of the Hill et al. study indicated higher depth and other session level process ratings in the first session and throughout the 12 sessions of therapy. Generally, these findings suggest that, according to clients, sessions in which there was a focus on dream work were of higher quality of the sessions in which clients focused on other topics.

Another major gain that clients make is gaining insight about themselves. Hill et al. (2006) found that clients began with moderate level of insight into their dreams before the dream work sessions and gained further insight during the exploration and

insight stages of dream work. This level of insight continued to increase even after the session given that two weeks later at a follow-up the clients reported gaining additional insight. This may suggest that before coming into the dream sessions, clients might have reached an impasse in terms of their insight into the dream. After the dream session, perhaps, clients become unblocked and continue to reflect on the dream even after the session. These findings for insight have been replicated in several studies. (Hill & Knox 2010)

Hill et al. also found that after a dream session clients reported increased functioning on the target problems in the dream. They suggested that addressing waking life concerns in dream sessions helped clients address problems in waking life. The findings also indicate that clients reported improvement in specific target complaints, such as dealing with divorce (Falk & Hill, 1995) and loss (Hill et al. 2000).

Other research, by Hill and colleagues, has also assessed changes in the quality of clients' action ideas following dream sessions (see review in Hill and Goates, 2004). Findings reveal that clients obtained more clarity and focus about their preferred course of action based on understanding themselves more deeply in the dream sessions. However, ratings of the quality of action ideas were lower than ratings on insight both before and after sessions, suggesting that action fails to keep up with insight.

Research has also been conducted on broader outcomes of the Hill model. (Diermer et al.(1996), Hill et al. (2000), Wonnell & Hill 2005) These researchers found a decrease in general symptoms whereas Falk and Hill (1995) found a

reduction in depression symptoms. In addition, when there was an emphasis on spiritual insight in dream work, it led to an increase in existential well-being (Davis and Hill, 2005). In the area of interpersonal functioning, however, findings on the outcome of the Hill dream model have been mixed (Diemer et al., 1996; Hill et al., 2000). Falk and Hill (1995) examined the outcome of group dream work with separated and divorced women. Researchers found that those in dream groups scored higher in self-esteem and insight than did those in the wait-list control at the final assessment. Kolchakian and Hill (2002) examined dream work with couples and found an increase in other dyadic perspective taking but no changes in dyadic adjustment, primary communications, and self-dyadic perspective.

Therefore, to summarize that the most consistent and positive results have been reported in session outcomes that are specifically focused on dream work (e.g., insight, action ideas, target problems, and attitudes toward dreams). On the other hand outcomes that do not explicitly relate to dream work (e.g., depression, anxiety, and self-esteem) have received less clear evidence given that these broader outcomes may not necessarily come up in the dream.

The components of the Hill (1996, 2004) dream model have also been empirically studied. In one study on the exploration stage, Hill et al. (1998) examined the benefits, in terms of outcome, of only describing the dream image, only associating to the dream images, or both describing and associating to the dream image. Results suggested slightly more benefit in the association only condition but in general both description and association were useful.

For the insight stage, Hill et al. (2001) found waking life interpretations to be just as effective as parts-of-self interpretation, and Davis and Hill (2005) found that nonspiritual and spiritual seemed to be equally beneficial in terms of outcome. However, spiritual interpretations led to more spiritual insight than nonspiritual interpretations. In terms of the action stage, clients who completed all three stages (exploration, insight and action) had higher scores on problem solving and better action ideas than clients who only went through exploration and insight (Wonnell and Hill, 2000). In another study, it was found that how much the therapist used action skills, the level of client involvement, and the level of difficulty of the action plan all predicted the intention to carry out action plans (Wonnell and Hill, 2005).

Qualitative investigations in four studies (Hill et al. 1996, 2000, 2003; Tien et al., 2006) found that clients consistently mentioned gaining insight, making links to waking life, hearing a new or “objective” perspective, catharsis, and hearing new ideas for changes as being beneficial aspects of dream work. In terms of hindering components, there were no consistent findings, suggesting that what was disliked was unique to the session, client, or therapist rather than the model itself (Hill & Knox, 2010).

In terms of client variables, client involvement seems to be related to the outcome of individual dream work (Diemer et al., 1996; Hill et al., 2006; Wonnell and Hill, 2000, 2005) but not to the outcome of group dream work (Falk & Hill, 1995). Also, in a series of three case studies exploring how insight develops in dream sessions (Hill et al., 2007; Knox et al., 2008), the two clients who gained insight actively participated in the sessions and were otherwise motivated, nonresistant, and

trusting of others. With clients where dream work was effective, there was emotional involvement but clients were not overwhelmed by affect. In terms of the therapist variables in these case studies, the successful therapists were adept at using probes for insight and dealing with countertransference reactions toward the clients. In the third unsuccessful case, in contrast, the client was resistant, untrusting, and affectively overwhelmed. Also the therapist in the unsuccessful case was not skillful in conducting the dream work session and was unable to manage her negative countertransference. Another factor is self-efficacy for working with dreams, given that Hill et al., (2008) found that clients benefit from dream work when they felt that working with dreams would help them accomplish their goals. Other studies have examined what client populations are most likely to benefit from dream work. Hill et al. (2001, 2006) and Zack and Hill (1998) found that clients with better outcomes from dream work had more positive attitudes to dream work. Hence, clients having positive attitudes towards dreams seem important for dream work to be effective.

Other empirical investigations examining the role of the therapist in the Hill (1996) model include two studies (Heaton et al., 1998; Hill et al., 2003) that found that volunteer clients preferred to work with a therapist rather than using the same approach in a self-help format. However, a small subgroup of clients in the Hill et al. (2003) study preferred working by themselves. In two qualitative studies (Hill et al., 2000, 2003), liking the therapist was mentioned as a helpful component of the process. Hill et al., (2006) also found that therapist adherence to the model, and competence using the model, were related to session outcome.

To conclude, the Hill (1996) model of dream work has been extensively researched both in terms of its processes and the outcomes it produces. Good outcomes were found on dream work-related variables. In terms of process, the model has been examined both quantitatively and qualitatively, and clients report benefit from stages of exploration, insight and action (Hill and Knox, 2010).

### **Research on Dream Characteristics**

As reviewed in the previous section, about the outcomes of the Hill dream work model (1996, 2004), the efficacy of the model has been well established. However, like with most other forms of psychotherapy, there is a lot of variability in terms of outcome. Thus, in order to use the model in a more efficient manner, it becomes important to investigate possible variables that may predict outcome. It seems reasonable to assume that the nature of the dream itself might influence the outcome and process of dream work. The following section therefore is a review of some studies that have tried to examine how dream characteristics influence the outcome of single sessions using the Hill (1996, 2004) dream work model.

The first to explore the relationship between dream variables and session outcomes was the Zack and Hill (1998) study. The rationale for this study was based on the observation that clients who seemed to gain the most from the dream work brought in dreams that were high on affective quality at the time of the session. Thus, they assessed the valence (pleasantness of the dream) and arousal of the participants' dreams. They were also interested in the relationship between client attitudes towards dreams and session outcome. Given that the clients with more favorable attitudes

could also be expected to be the ones who were more motivated to work harder in sessions, it makes sense that the two variables would be related. Previous studies (Hill et al., 1997) assessing attitude towards dreams had only examined a linear relationship between the variables, but Zack and Hill speculated that the relationship may be more complex. They therefore wished to examine if a higher order relationship existed between client attitude and session outcome. Finally, because waking life stress has on several occasions been linked to dream content and dream affect in particular, they wanted to look at the situational variable of life stress as a possible predictor of the outcome of dream interpretation.

In the Zack and Hill (1998) study, 38 undergraduate introductory psychology students served as volunteer clients. All participants were unaware of the hypotheses and received research credit for participating. The 12 therapists who conducted the dream sessions were doctoral students in clinical or counseling psychology and had completed at least one practicum course. In terms of training in dream work, the 10 therapists who were new to the model were trained in a 10 hour training program and all therapists read Hill (1996) before the training began.

Clients were recruited via a sign-up sheet asking for participants for a “Counseling Study.” Prior to the session, the client’s affective response to the specific dream they brought in was assessed using the Semantic Differential Measure of Emotional State (Mehrabian & Russell, 1974). The amount of waking life stress experienced by participants was determined using the Undergraduate Stress Questionnaire (USQ, Crandall, Preisler, & Aussprung, 1992,). The participants’

opinions towards dreams was evaluated using the Attitudes Towards Dreams Scale (Hill, Diemer, & Heaton, 1997).

Session outcome was measured post-session using the Depth Scale (from The Session Evaluation Questionnaire-4; Stiles and Snow, 1984), the Session Impact Scale-Understanding Subscale (SIS-U, Elliot & Wexler, 1994), the Mastery Insight Scale (MIS) of the Therapeutic Realizations Scale (TRS; Kolden, 1991) and the Gains from Dream Interpretation Scale (GDI; Heaton, Hill, Petersen, Rochlen, & Zack, 1998). Each volunteer client then participated in a 60-90 minute dream interpretation session using the Hill's (1996) cognitive experiential method for working with dreams in psychotherapy.

The findings showed that dream valence predicted session outcome. Moderately unpleasant dreams and extremely pleasant dreams had better outcomes than neutral, moderately pleasant, or extremely unpleasant dreams. Zack and Hill (1998) suggested that clients with extremely unpleasant dreams found it difficult to obtain a sense of resolution in a single 60 to 90 minute session when working with a dream with extremely disturbing images. Working with such difficult dreams possibly requires the client and the therapist to have a stronger foundation and a well-established working alliance.

The level of arousal in the dream however did not significantly predict session outcome. In terms of attitudes, clients with moderate attitudes towards dream work had better outcomes than clients with both positive and negative attitudes. However, the client's waking life stress was not related to session outcome.



Although the study has important implications for the use of the Hill (1996, 2004) cognitive-experiential dream work model, there were several limitations. The sample size was very small and therefore the power was perhaps insufficient to detect replicable results. Single sessions were used, making it harder to generalize results to long term therapy. There was an exclusive use of college students as participants, and the findings may be different for clients in therapy.

Next, Wonnell and Hill (2000) contributed to the literature on the effect of dream characteristics on session outcome in a slightly more indirect fashion. They were interested in empirically determining the effects of the action stage in the Hill (1996) dream work model. In order to do so, they examined with a sample of 43 undergraduate psychology students the impact of the model with or without the action stage. The sample was recruited through a sign-up sheet on which they volunteered to serve as clients for a study titled “dream interpretation.” The 43 volunteer clients were unaware of the hypotheses of the study and received course credit for participating. After recruitment, clients were randomly assigned to one of two conditions: (a) the Hill (1996) dream work model with all three stages of exploration, insight and action or (b) the Hill (1996) dream work mode with only the exploration and insight stages. The dream work was conducted by 22 therapists who were doctoral students or interns from counseling and clinical programs at a large mid-Atlantic U.S. University and who had completed at least one practicum course. All therapists were trained in both conditions. All therapists recruited for this study participated in an 8-hr training workshop on using the Hill model of dream

interpretation. Prior to the workshop, participants were expected to read or reread Hill (1996).

Volunteer clients were asked to bring in a written account of a dream they wished to work on. The sessions lasted 50 to 100 minutes. Half of the sessions were conducted using the entire three-stage model (exploration/insight/action condition), whereas the other half were conducted without the action stage (exploration/insight only condition). Most therapists (21 out of 22) conducted an equal number of sessions in each condition. The order in which the therapists conducted the sessions was randomly assigned and the therapists were told immediately before the first session which condition to do first. Post-session the therapist adherence to the model and the action-stage ease-difficulty was reported by the therapist. Volunteer clients completed the Session Impacts Scale-Problem Solving (SIS-PS; Stiles et al., 1994), the Depth Scale from the Session Evaluation Questionnaire (SEQ) Form 4 (Stiles & Snow, 1984) and the Gains From Dream Interpretation (GDI; Heaton et al., 1998). They also wrote an action plan for the dream that they had worked on in the session; and reported the recency of the dream.

Five judges decided if the action stage was present or not on the basis of written records of the dream work session audiotapes. Next, the judges rated the quality of the clients' action plans on the basis of the dream. Judges were unaware of the experimental condition when making ratings. The therapists' written statements about the ease or difficulty of guiding the action stage were coded into categories by three judges. These categories were: client factors (with subcategories of involvement, psychological mindedness, and miscellaneous factors), dream factors

(with subcategories of dream recency and other), therapist factors, and exploration/insight.

Findings revealed that there were no differences between conditions based on client-perceived session quality or on client-reported insight. The difference however was that volunteer clients who went through the action stage rated sessions higher on problem solving and had higher quality ideas for action than did clients who did not go through the action stage. When examining the therapists' statements about the ease of the action stage, it was found that the easier sessions were attributed to client involvement, client psychological mindedness, recency of the dream, therapist comfort facilitating the action stage, thorough exploration of the dream and client insight into the dream. Of particular interest to the present study is the dream variable of recency of the dream. The findings by Wonnell and Hill (2000) suggested that therapists perceived that older dreams were harder to work with, perhaps because they seemed less relevant to volunteer clients' current waking life, and clients may have been less motivated to explore making any changes based on the dream. The authors also reported that the older dreams may have been less vividly remembered, with fewer details, making them more difficult to link to action.

The limitations of the study included the small sample size and the use of volunteers clients in a single session setting. Also therapists in the study considered themselves to be more humanistically rather than behaviorally oriented and this might have impacted how they conducted the action stage of the model. Finally, the intention of clients to carry out the action plans in either session was not assessed.

The findings related to dream recency in Wonnell and Hill (2000) were however not replicated in Hill et al. (2001), with a larger number of participants (105 undergraduate students). These researchers examined a wide range of predictors. The dream characteristics examined were valence, distortion, vividness, and recency. Volunteer client characteristics of psychological mindedness and attitudes towards dreams were also assessed via self report measures. Finally, the researchers also examined the impact of the type of interpretation in the insight stage. Half the participants were randomly assigned to waking life interpretation and the other half to parts of self interpretation. These sessions were conducted by 12 therapists (11 of whom were doctoral students and 1 was a counseling psychology professor).

Findings of the Hill et al. (2001) study revealed that participants who presented pleasant dreams had better session outcome and gained more insight into their dreams than participants who presented unpleasant dreams. The dream variables of distortion, vividness, and recency, did not predict how much the clients benefited from the sessions. There was, however, a significant correlation between vividness and recency, suggesting that earlier dreams were more vivid than later dreams. The use of volunteer clients in a single session setting was the major limitation of this study. One must therefore use caution before applying the findings to ongoing therapy.

Finally, Hill et al. (2006) examined predictors of session process and outcome in the Hill dream model. The study had several purposes. First, the researchers aimed to determine whether client presession dream-related characteristics (initial insight into the dream, initial action ideas related to the dream, retrospectively rated initial

level of functioning on the target problem, dream salience, and attitudes toward dreams) would predict the process (therapist competence/ adherence and client involvement) of each of the three stages (exploration, insight, action) and the outcome of dream sessions. Second, Hill et. al. wished to examine whether the quality of previous stages in the model would predict the process and outcome of following stage. Finally, they also wished to examine how results for the process and outcome of dream sessions would compare across different perspectives of the clients, therapists, and trained judges. The study was correlational in design and examined the process and outcome of dream session after each volunteer client participated in a single dream session with a trained therapist. The sessions were assessed from the perspectives of clients, therapists, and trained judges.

The 157 volunteer clients in the study consisted of undergraduate, graduate students, and members of the community. Some of the volunteer clients received course credit for participating; others did not receive any compensation. None of the clients were aware of the research questions of the study. The sessions were conducted by 42 therapists (master's-level students in counselor education or counseling psychology, doctoral-level students in counseling psychology, doctoral-level interns in counseling psychology, and counseling psychologists). Finally, the trained judges in the study were all upper-level undergraduate students.

Findings revealed that clients who profited most from dream sessions had poor initial functioning on the problem reflected in the dream, positive attitudes toward dreams, salient dreams, low initial insight into the dream, and poor initial action ideas related to the dream. In terms of the process of the dream work model,

when initial stages of the session were evaluated positively later stages were also evaluated positively. Process variables like the therapist competence/adherence and client involvement were positively related to session outcome. Finally, in terms of perspective, clients', therapists', and judges' perceptions of process related to their own, but not others' evaluations of process and session outcome. Of particular of interest for the current study is that Hill et al. (2006) reported that the dream characteristic of dream salience was related to both therapist and client evaluations of session quality. Hill et al. defined salience as the perceived importance of the dream as reported by the dreamer. This finding suggests that if clients and therapists perceived the dream to be particularly salient, they also perceived the session quality to be higher.

Therefore, according to the previously mentioned research it seems that another important finding is that clients who benefited the most from dream work presented dreams that seemed potent or powerful to them (Hill et al., 2006). Powerful dreams here refer to dreams that the dreamer spends a lot of time thinking about, and dreams that stir up strong emotions in him or her. It also refers to dreams that one believes will help him or her understanding their life better. Hence, salience of the dream also seems to be an important factor. However, findings on the valence of the dream have been less consistent. Zack and Hill (1998) found that when clients brought in moderately unpleasant or extremely pleasant dreams, they had the best session outcomes. When the dreams reported were moderately pleasant or extremely unpleasant the clients had the worst outcomes. In contrast, Hill and colleagues (2001) found that session outcomes were best when dreams were pleasant. Last, no

relationship between dream valence and session outcome emerged in Hill et al. (2003). The inconsistent findings perhaps suggest that both unpleasant and pleasant dreams might result in good dream work.

The findings of Zack and Hill (1998), Wonnell and Hill (2000), Hill et al. (2001), and Hill et al. (2006) are all useful in hypothesizing about the effects of working with ERDs in psychotherapy. Although ERDs and RRDs have never been explicitly explored, the impact of recency of dreams on dream work was examined by both Wonnell and Hill (2000) and Hill et al. (2001). Findings, however, seemed to be inconsistent. Wonnell and Hill (2000) suggested that recent dreams maybe be better to work with in dream session, whereas Hill et al (2001) did not replicate the findings and suggested that old dreams are just as valuable, if not more so than recent dreams. However, the lack of control in recruiting for ERDs versus RRDs may have influenced the results.

Another set of relevant finding involves the salience of dreams given that, ERDs are usually salient for the dreamer (Bulkeley et. al 2005) furthermore according to the findings of Hill et al (2006), salience of a dream predicted session outcome in the evaluations of both therapists and participants. These findings suggest that ERDs might be particularly valuable in dream work given their high salience.

Finally, in terms of dream valence, defined as the pleasantness of a dream, both of Zack and Hill (1998) and Hill et. al (2001) suggested that in a single session setting, it may be more valuable to work with pleasant dreams because the client may not be comfortable discussing strong negative emotions with therapists they have just met. In terms of valence, ERDs sometimes involve pleasant emotions

but very often contain negative affect. If this is the case, one might speculate that the valence of a dream would moderate the effect of ERDs in dream work. Therefore, at present there is some empirical data that suggests that the characteristic of the dream affects the outcome of the dream work. A gap in the literature, however, exists when we look at how ERDs and RRDs might be used therapeutically. Given that ERDs usually possess several unique characteristics, it seems reasonable to assume that the process and outcome of dream work would be different when using an ERD as compared to a RRD (recent remembered dream). Furthermore in the previous research it was not typically specified if the dreams reported were ERDs or RRDs. Further research, therefore, is required to explore how the process and outcome of dream work using the Hill (1996, 2004) will be different when working with an ERD versus and RRD.



## Chapter 3: Statement of the Problem

Several researchers have suggested that the content of children's dreams echo childrens' psychological development (Foulkes, 1979; Garfield ,1984; Kamphuis et al. 2008). Bulkeley et al. (2005) also highlighted how the ERDs reported by individuals, as adults, are usually salient, memorable, and vivid. When Bulkeley et al. (2005) compared the ERDs obtained from 85 participants to Hall and Van de Castles(1966) "norm dreams" gathered from 500 male and 500 female college students in Ohio in the early 1950s they noticed differences. First, with regard to social interactions in the dreams, ERDs frequently consisted of nightmares with physical aggression, directed against the dreamer. In contrast, in the adult "norm" dreams, the aggressive acts were more often verbal and directed by the dreamer against other characters. Bulkeley et al. explained this difference as a reflection of most children's emotional experience in the waking world. Children in their waking lives perhaps feel more vulnerable than adults; hence their dreams reflect this by more often casting the child as the target of aggression. Bulkeley et al. also describe ERDs as vivid and intense, with powerful physical and emotional carry-over effects. ERDs were reported to possess tremendous experiential power, which very often makes them distinctively memorable for the dreamer. Although the content of childrens' dreams and ERDs has been researched, there have been no studies examining how ERDs might be used in a therapeutic context.

In the context of using dreams in a therapeutic setting, a body of research indicates that the Hill (1996, 2004) cognitive experiential dream model is effective. The Hill dream work model helps clients gain a better understanding of their dreams,

better action ideas, a better grasp of their target problem, and better attitudes towards dreams (see review by Hill and Knox, 2010). Although the effectiveness of the model has been established, the use of the model with ERDs versus RRDs is yet to be examined. Therefore, the primary purpose of the present study is to investigate the therapeutic benefit of working with ERDs versus RRDs using the Hill (1996, 2004) cognitive experiential dream model and controlling for the vividness of the dream. Also, it is important to examine if ERDs in general are valuable in therapeutic context, or if other characteristics of the dream like vividness or salience are better predictors of session outcome. ERDs themselves might also be correlated with greater vividness and salience, and therefore need to be compared with RRDs. In other words, ERDs have been described as vivid dreams with several sensory details and a high amount of emotional arousal. Bulkeley et al. also suggest that these dreams are considered important by the dreamer. Perhaps working with any dream with such characteristics, ERDs or RRDs, would lead to better session outcomes than when working with mundane trivial dreams. In that case it is not necessarily the ERD that is therapeutically valuable, but any dream that is vivid and salient.

Because there is no literature on a comparison of these two types of dream sessions, no hypotheses can be constructed. Instead I pose the following preliminary and primary research questions.

Preliminary Questions:

1. Will the vividness of ERDs and RRDs differ?
2. Will the salience of ERDs and RRDs differ?

If the vividness and salience of the ERDs and RRDs do not differ significantly, they will be disregarded and, the following primary questions will be examined:

1. How will session depth differ for sessions involving ERDs versus RRDs ?
2. How will the understanding of self differ for sessions involving ERDs versus RRDs?
3. How will reported session gains vary for sessions involving ERD?

If the vividness and salience of the ERDs and RRDs do differ significantly then the following primary questions will be examined:

1. How will session depth differ for sessions involving ERDs versus RRDs statistically controlling for vividness and salience?
2. How will the understanding of self differ for sessions involving ERDs versus RRDs statistically controlling for vividness and salience?
3. How will session gains reported vary for sessions involving ERD statistically controlling for vividness and salience?

## Chapter 4: Method

### **Research Design**

The present study used a repeated measure, within subject, experimental design. All participants engaged in both conditions, one ERD and one RRD session with the same therapist for single sessions typically lasting 60 to 90 minutes. The type of session delivered first was counter balanced to control for order effects. The independent variable was recency of the dream (ERD versus RRD), and the dependent variables were session depth, session impact, and gains from dream interpretation. Vividness and salience of the dream were also assessed to determine if they influence the session outcome. For the purpose of the study, vividness was defined as the emotional intensity and sensory detail present in the dream. Salience on the other hand, was defined as how important the dreamer thought the dream was for understanding themselves, or their lives.

### **Participants**

**Therapists.** There were 26 volunteer therapists in this study. These therapists were mostly graduate students enrolled in a doctoral program in counseling psychology; 2 Ph.D. psychologists also participated. The therapists ranged in age from 20 to 63 years. ( $M=31.71$ ,  $SD=8.41$ ) All volunteer therapists had completed at least one pre-practicum, during which they participated in a training session on the Hill (1996, 2004) cognitive experiential dream work model. In addition, therapists who had not been trained in the Hill dreamwork model in the last 6 months attended a training session to review and practice the model.

**Clients.** Based on an *a priori* statistical power analysis, using the G\*POWER v3 software (Faul, Erdfelder, Lang, & Buchner, 2007), the total number of participants needed to achieve statistical power of 0.80, a moderate effect size ( $f^2 = 0.40$ ), with an overall  $\alpha = 0.05$  were 22 participants for a repeated measure, within subject design. The present study therefore aimed at recruiting at least 22 dyads. However, 25 clients volunteered for the study and the data from all these clients were used for examining the research question. Also in previous research using a similar within subjects design (Heaton et al. 1998), significant differences were detected with a sample size of 25. Hence, it was assumed that 25 participants would be sufficient for the present study. The volunteer clients who participated in the study were all upper level undergraduate psychology students enrolled in the University of Maryland Psychology 353 or 433 courses. Volunteer clients were offered extra credit for participating in the study. Participants all reported recalling an ERD (before the age of 12), typically recalling 2-3 dreams per week and a willingness to participate in 2 separate dream sessions to explore an ERD and a RRD.

## **Measures**

**Demographic form.** Participants will reported their age, sex, race-ethnicity, year at university, and major or field of study at university. (See Appendix A) The average age of volunteer clients were 20.13. There were 22 females and 3 males who participated in the study and the majority of clients identified themselves as Caucasian.

### **Session Evaluation Questionnaire- Depth subscale (SEQ-D; Stiles 1984).**

The SEQ-D assesses the quality of psychotherapy sessions. The subscale consists of 5

items (deep-shallow, powerful-weak, full-empty, special-ordinary, valuable-worthless) presented in a 7-point bipolar adjective format with the stem "This session was " preceding each of the items. Each item is scored from 1 to 7 (for example, deep to shallow on a 7 point scale), reversed as appropriate, with higher scores indicating greater depth. A score is calculated as the mean of the constituent item ratings.

The SEQ has been applied to a variety of individual, couple, and group therapy sessions (Stiles, Gordon, & Lani, 2002). It is typically completed by participants immediately following sessions. Internal consistency, measured by coefficient alpha, has been high for SEQ Depth across a wide variety of conditions and settings (e.g., for .90 Stiles et al., 1994; .90 for Reynolds et al., 1996). Concurrent validity has been indicated by correlations session impact measures (Stiles et al. 1994), ranging from .44 to .72 between the Depth scale and the Understanding, Problem Solving, and Relationship subscales of the Session Impacts Scale (Elliott & Wexler, 1994). (See Appendix B)

**Session Impact Scale—Understanding Scale (SIS-U; Elliott & Wexler, 1994).** The SIS-U is a widely used measure to examine the power of the session. This three-item self-report subscale of the Session Impact Scale is used to assess the amount of understanding about self or others experienced by clients in therapy sessions. The items are “I realized something new about myself” “I realized something new about others” and “I had clearer awareness after the session.” The SIS-U is rated on a 5-point adjective-anchored scales (1 = *not at all*, 2 = *slightly*, 3 = *somewhat*, 4 = *pretty much*, and 5 = *very much*), and a total score is obtained by

averaging all three items. Scores range from 1 to 5; a higher score indicates greater understanding gained from a session.

Stiles et al. (1994) reported positive correlations of the SIS-U with the Depth, Smoothness, and Arousal scales of the SEQ, hence providing evidence for concurrent validity. An adequate internal consistency (alpha) coefficient of 0.78 was reported by Stiles et al. (1994). This measure has been used in a number of studies to assess the outcome of dream sessions using the Hill (1996, 2004) cognitive experiential dream model (Wonnell & Hill, 2000; Hill et al., 2000; Hill et al., 2001, Davis & Hill, 2005, Hill et al., 2006). (See Appendix C)

**Gains From Dream Interpretation (GDI, Heaton, Hill, Petersen, Rochlen & Zack, 1998).** The GDI has 19 items and assesses gains specific to dream work. The GDI uses a 9-point Likert rating scale (ranging from 1 = *disagree to strongly*; 9 = *agree strongly*).

The GDI was developed from client responses to open-ended questions about what they gained from dream interpretation sessions (Hill, Diemer, & Heaton, 1997). Three subscales were identified through factor analyses: Exploration/Insight Gains (7 items,  $\alpha = .83$ ; e.g., "I was able to explore my dream thoroughly during the session"), Action Gains (5 items,  $\alpha = .82$ ; e.g., "I will use things that I learned in this dream interpretation in my life"), and Experiential Gains (2 items,  $\alpha = .79$ ; e.g., "During the session, I was able to re-experience the feelings I had in the dream"). In the Zack and Hill (1998) study, Exploration/Insight and Action Gains were related positively and significantly with the Depth Scale of the Session Evaluation Questionnaire and the

Session Impact Scale—Understanding subscale, providing evidence of concurrent validity. (See Appendix D)

**Dream Salience (DS The Hill et al., 2006).** The DS measure to assess the perceived importance of the reported dream. The measure consists of 5 items rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). An example item from the DS measure is “Understanding this dream will help me understand my life better.” Hill et al. reported a single factor with factor loadings of  $>.49$  in factor analysis. The internal consistency (Cronbach’s alpha) of the scale was .81. Hill et al.(2006) reported that the dream characteristic of dream salience was related to both therapist and client evaluations of session quality. (See Appendix E)

**Dream Vividness Questionnaire (DVQ).** The DVQ was developed for the present study to assess the vividness of dreams. DVQ was based on the Dream Vividness subscale of the Dream Intensity Inventory (DII), created by Yu (2008), that consisted of 3 item; seeing colors, hearing sounds, and feeling emotions in dreams. A 5-point scale ranging from 0 (*never*) to 4 (*very frequently*) was used to quantify sensory experiences in the Yu study.

The Dream Vividness subscale of the DII (Yu, 2008) did not seem appropriate for the present study because it measures general levels of dream intensity (e.g., I see a lot of colors in dreams” rather than about a specific dream. This measure therefore cannot distinguish between vivid and dull dreams for the same individual. In addition Dream Vividness subscale does not address sensory experiences beyond the two dominant modalities; visual and auditory modules. Tactile, gustatory and olfactory senses also may contribute to the vividness of internal dream experiences.



Emotional arousal, on the other hand, is assessed only by one item. Therefore, the present measure (DVQ) was developed in an attempt to conceptually clarify the construct of dream vividness and address limitations of the DII.

Based on the earlier measure (DII) and discussions with colleagues, measure dream vividness is defined here as both emotional arousal and sensory information present in a dream. The measure therefore involves emotional arousal and sensory information. Emotional arousal was defined as the magnitude of physiological activity due to the emotions felt within the dream, (for example “*I felt overpowered with emotions in this dream*”), whereas sensory information is defined as the extent to which visual, tactile, gustatory, auditory or olfactory information is present in the dream (e.g., “*I could see a lot of colors in the dream*”). The initial dream vividness questionnaire consisted of 18 items, each of which was rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Based on pilot data collected from 25 individuals, on 50 dreams, the emotional arousal subscale had an internal consistency (Cronbach’s alpha) of .96 and the sensory information scale had an internal consistency (Cronbach’s alpha) of .78. (See Appendix F)

**Estimated dream recall measure.** This measure consisted of 2 questions. Firstly, based on Hiscock and Cohen (1973), the participants were asked if “During the last 2 weeks, immediately upon waking up in the morning, how often could you recall dreaming?” The volunteer clients then selected one of eight responses: every morning, just about every morning, most mornings, about every other morning, about 2 mornings a week, about 1 morning each week, once during the 2 weeks, and not

once. The highest possible score that a participant could receive was 7, and the lowest possible score was 0. The second item in the dream recall measure was from Robbins and Tanck (1988). It asked participants “How often do you usually have dreams you remember?” Again volunteer clients were supposed to choose from one of five possibilities, namely, about every night, 2–3 times a week, almost once a week, 1–2 times a month, and less than once a month. The highest possible recall score was 4, and the lowest possible score was 0.

**Therapist Adherence Scale.** The therapists rated the extent to which they competently and appropriately followed the structure of the Hill model using a measure developed for another study (Heaton et al., 1998). The items, rated on 9-point scales (9 = high), include “How completely did you do the exploration stage?”, “How completely did you do the insight stage?” “How completely did you do the action stage?” and “How competent did you feel doing the dream interpretation with the client?” This measure was used to determine whether therapists conducted sessions similarly for the ERD and RRD sessions.

**Action Implementation Scale.** Clients were asked to rate their implementation of the action plan from each dream work session on a 5-point scale ranging from “*did nothing to implement action based on the understanding of the dream*”(1) to “*fully implemented action based on the understanding of the dream*” (5). (Wonnell, 2002).

**Therapist Preference Measure.** At the end of both sessions therapists were asked which dream session they preferred. They were also asked to write down the reasons for this choice.

## **Procedure**

**Training of therapists.** Each therapist signed a consent form agreeing to participate in the study, completed a demographic form, and completed a training session on the Hill Model (1996, 2004) if they had not recently been trained (within the last 6 months) in the Hill Cognitive-Experiential Dream Model. The training sessions typically lasted for 3 hours. The different stages of the model were reviewed, followed by a practice group dream session for up to 90 minutes. The last 30 minutes was devoted to therapists' doubts and answering questions. During the training session therapists were reminded that there is no empirical evidence to suggest that either type of session would be more beneficial for clients. Therapists were given reasons that both ERD and RRDs could be effective. For example, ERDs might be more effective because they represent deep unresolved concerns, whereas RRDs might be more effective given that it may be easier to draw connections between the dream and current waking life with recent dreams. In addition, therapists were told that RRDs could be just as vivid and salient as an ERD. Lastly therapists were reminded that, if dream work itself is powerful, then any dream might elicit deep understanding for the client.

**Selection of volunteer clients.** Participants were recruited primarily from upper level undergraduate psychology classes, and were given extra class credit for participation. The study called for participants who recalled a childhood dream from before the age of 12 years, typically remembered 2-3 dreams per weeks, and were willing to attend 2 dream sessions (60 to 90 minutes each) to try and understand their

dreams. The flyer used to advertise the study provided an email address where interested participants obtained more information about the study.

**Screening for volunteer clients.** Interested participants were contacted by email by the first author. The following protocol was used to screen them, “Let me tell you about the study. What will be involved is two dream sessions. Your time commitment would be about two hours per week for two weeks. You will be required to fill out some questionnaires before and after every session, and you will be interviewed via phone at the end of the study, within 4 to 5 weeks of the last session.” Next the screener checked to see if the client had high dream recall (2-3 times per week), had a childhood dream (before the age of 12), and was interested in working with dreams in sessions, available over the duration of the study, and was motivated.

**Pretreatment client testing.** Volunteer clients were randomly assigned to participate either in the ERD or the RRD session first and the other second. Sessions were scheduled approximately 1 to 2 weeks apart. One day prior to each session, volunteer clients were contacted by phone or email and reminded of their appointments. Those randomly assigned to the ERD condition first were told “Please be ready to explore the earliest dream you can remember, also please bring in a written copy of the dream.” Those randomly assigned to the RRD condition first were told, “Please be ready to explore the most recent dream which you can remember, also please bring in a written copy of the dream.” When the volunteer clients arrived for the session, they were first requested to sign an informed consent form. If they had not previously done so, they were asked to write the dream before the session.

Then the volunteer clients completed a demographic questionnaire, the Dream Vividness Questionnaire and Dream Salience questionnaire.

**Dream sessions.** Therapists were required to follow the Hill (1996, 2004) cognitive-experiential dream model carefully. Sessions lasted approximately 60 to 90 minutes. In the case of long dreams, therapists used a segment of the dream that seemed particularly interesting or troubling for the client. The Hill (1996, 2004) model of dream work involves the three stages of exploration, insight, and action. In the exploration stage of the model, the therapist asks the dreamer to use the 4 step DRAW technique for about 3 images in the dream. In the insight stage, the therapist works with the dreamer to construct an understanding of the meaning of the dream on at least one or more possible levels such as, waking life, parts of the one's self that are reflected in the dream, or past memories. In the action stage, ideas for behavioral changes or changes in the dream are explored, and actual changes in waking life are encouraged. After sessions, therapists were asked to following checklist to ensure that all the important aspects of the model were adhered to:

1. Complete DRAW (Describe, Reexperience, Associate, obtain Waking life triggers) on at least 3 images for at least 25 minutes.
2. Focus of at least 1 level of insight (waking life, parts of self, etc.) for at least 15 minutes.
3. Focus on action (either by changing the dream or applying insights to waking life) for at least 15 minutes.
4. Write down a specific action plan.

After the dream work session the therapist handed in the checklist, and session data included in the study only if all the above-mentioned criteria for the time spent on the different steps were adhered to.

**Postsession testing.** Following each session, volunteer clients completed the SEQ-Depth, the SIS-U, and the GDI.

**Follow-up.** Approximately 4 to 5 weeks after completion of clients' 2nd sessions volunteer clients were contacted by phone by the first author. We selected a 4 to 5 weeks follow-up period in an effort to balance our desire to reduce the potential effects of a recency bias with our desire to obtain clear assessments of clients' preferences for ERD versus RRD. During the interview, clients were asked which of the two types of dream work sessions they preferred.

## Chapter 5: Results

### **Preliminary analyses**

**Principle Components Analysis of Vividness.** Because the Dream Vividness Questionnaire was constructed for the purpose of the study, a principle components analysis (PCA) was conducted using Statistical Package for the Social Sciences (SPSS) version 20.0 for Windows, to examine how well the 18 items in the questionnaire fit together. The initial PCA a KMO of 0.82 was found; since this value is close to 1.0 it indicates that principle components analysis can be used with the data. Also the Bartlett's test of sphericity has an approximate chi-square of 638.14,  $p < .01$ . Small values of the significance level, usually less than 0.05, indicate that a principle components analysis is possible with the data. Overall the KMO and Bartlett's test of sphericity shows that the degree of common variance among the variables is quite high, therefore principle components analysis can be conducted. The result eigenvalues showed that the first factor explained 40% of the variance, the second factor 19% of the variance, a third factor 9% of the variance and a fourth factor explained 6% of the variance, however the initial four component solution that contained all 18 items explained a total of 74% of the variance. An examination of the scree plot suggested a single component because the first component was higher than the others.

Next, in an attempt to refine the measure, items that loaded less than .50 on the first factor were dropped. The factor loadings matrix for this PCA is presented in Table 1. The items that had low factor loadings were related to the sensory

information present in the dream, while items with high factor loading, were related to emotional intensity of the dream.

Table 1  
*Component Matrix with item loadings represented by eigenvalues based on a principle components analysis for 18 items from Dream Vividness Questionnaire (DVQ) (N = 50)*

	Component 1
1. I experienced strong emotions in the dream	.83
2. I could see a lot of colors in the dream	.45
3. The emotions in the dream were intense	.88
4. The dream had several details	.41
5. I felt overpowered with emotions in this dream	.84
6. I could clearly visualize the environment of the dream	.29
7. The details of the dream were blurry	.08
8. In this dream I did not experience emotions with extreme force	.78
9. The dream was extremely charged with emotion	.86
10. I could clearly see the faces of others in the dream	.19
11. I could clearly visualize the objects/creatures/ people in the dream	.10
12. I felt strong affect in the dream	.81
13. I would describe the dream as affectively intense	.92
14. I could see details of the location in the dream	.20
15. I did not experience intense affect in the dream	.89
16. I could clearly hear what was said in the dream	.29
17. The dream was not emotionally arousing	.88
18. I can't remember who was in the dream	.13



A second PCA was performed on the 9 items, retained after the first item selection process. This PCA KMO was 0.91 which is close to 1.0 indicating that a principal component analysis can be used the data. The Bartlett's test of sphericity has an approximate Chi-square of 439.48,  $p < .01$ . Since the significance value is less than 0.05, this indicates that a factor analysis is possible with the data. Overall this shows that the degree of common variance among the variables is quite high, therefore factor analysis can be conducted. The analysis suggested one factor explaining 75% of the variance. Since most the retained items were related to affective quality of the dream, the factor was called Emotional Intensity. All 9 items were retained because they had primary loadings over .5. The factor loadings matrix for this final result is presented in Table 2.

Table 2

*Component Matrix with item loadings represented by eigenvalues based on a principle components analysis for the 9 Emotional Intensity items from Dream Vividness Questionnaire (DVQ) (N = 50)*

	Emotional Intensity
1. I experienced strong emotions in the dream	.86
2. The emotions in the dream were intense	.90
3. I felt overpowered with emotions in this dream	.84
4. In this dream I did not experience emotions with extreme force	.81
5. The dream was extremely charged with emotion	.89
6. I felt strong affect in the dream	.82
7. I would describe the dream as affectively intense	.91
8. I did not experience intense affect in the dream	.89
9. The dream was not emotionally arousing	.88

**Comparison of Data to previous Research.** Table 3 compares the means and standard deviations between the variables from the current study to previous research. As can be seen in Table 3 the means and standard deviations of scores reported for dream characteristic salience and session outcome measures, SEQ-D and SIS-U are similar to scores obtained on these variables in previous studies. Therefore, it can be assumed that the present sample does not have any unusual characteristics, when compared to scores reported by participants in previous research.

Table 3

*The Means and Standard Deviations of the characteristics of the dream and outcome measures with earlier studies.*

	Current Study				Previous Studies	
	ERD		RRD		M	SD
	M	SD	M	SD		
SEQ-D	6.24	0.73	6.20	0.99	6.07 <sup>a</sup>	0.81 <sup>a</sup>
SIS-U	3.96	1.01	4.21	1.63	3.45 <sup>b</sup>	0.94 <sup>b</sup>
GDI	103.52	15.65	103.60	13.88	101.50 <sup>c</sup>	12.73 <sup>c</sup>
Saliency	2.81	0.78	3.21	0.83	3.17 <sup>d</sup>	0.77 <sup>d</sup>

*Note.*  $N = 50$ . <sup>a</sup>Hill et al. (2001), <sup>b</sup>Rochlen et al., <sup>c</sup>Kolchakian, & Hill (2002), <sup>d</sup>Hill et al. 2006

**Estimation of the Overall Outcome.** Table 4 shows the intercorrelations (using Pearson Product Moment correlations) among variables used in the analysis. As can be seen from Table 4, the three session outcome measures were all highly correlated. Given that all three outcome measures (GDI, SIS-U and SEQ-D) were administered for the purpose of assessing the overall session outcome, and these scores were highly correlated, raw scores obtained by the participants on the GDI, SIS-U, and SEQ-D were standardized by converting them to t scores and then averaging the three scores to obtain a single score for session outcome.

Table 4

*The correlation between the predictor and outcome variables used in the study.*

	Salience	EI	GDI	SEQ	SIS
Salience					
Emotional Intensity	.31*				
GDI	.35*	.12			
SEQ	.43**	.19	.75**		
SIS	.28*	.11	.75**	.72**	
Overall Outcome	.39**	.16	.92**	.91**	.90**

Note N= 50

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## **Characteristics of the Dreams**

In terms of the characteristics of the dreams, the Figure 1 (a) and (b) below compare ERDs and RRDs in terms of the percent of nightmares and recurrent dreams. As is depicted in the figure below 80 percent of the ERDs (20 dreams) were nightmares as compared to 20 percent of RRDs (5 dreams). In terms of recurrence, volunteer clients reported 52 percent (13 dreams) of ERDs, and 20 percent of RRDs (5 dreams). This suggests that ERDs were 4 times more likely to be nightmares than RRDs were. Similarly ERDs are 2.6 times more likely to be recurrent dreams than RRDs were. Paired chi square should be included and discussed.!!!

Figure 1 (a)

*A comparison of the percentage of nightmares reported in ERD and RRD sessions*

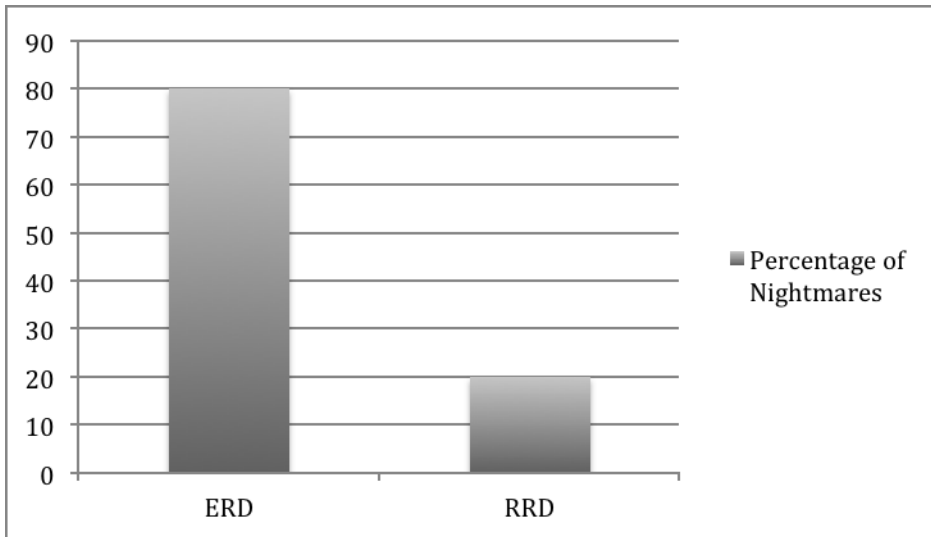
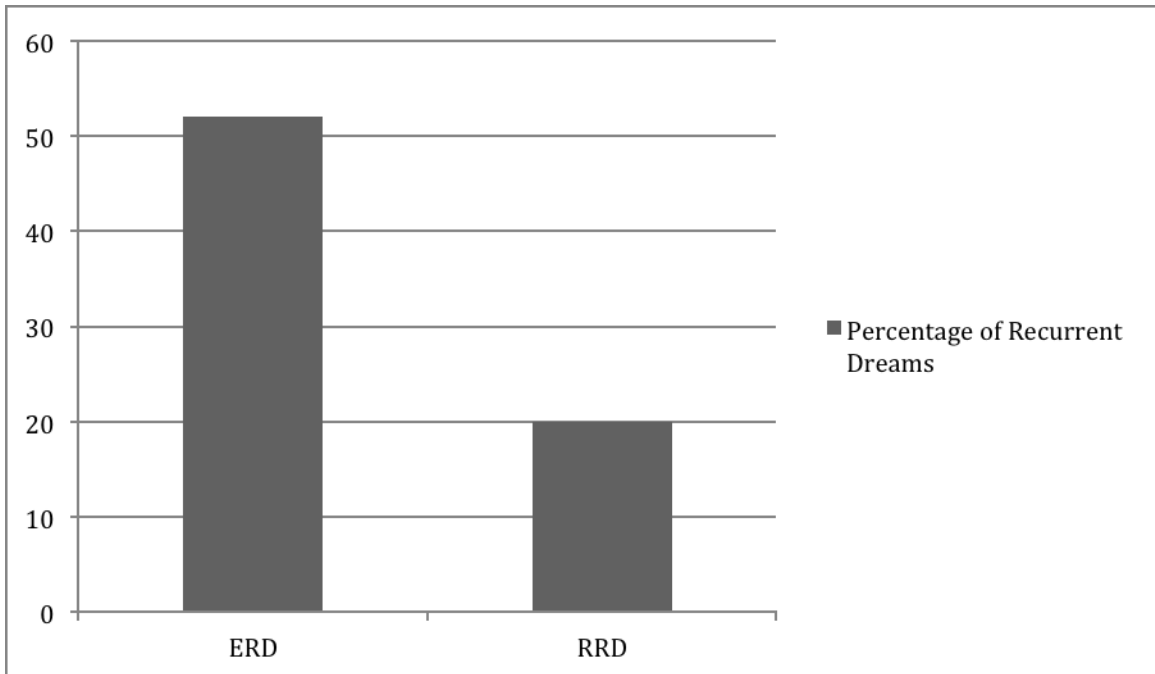


Figure 1 (b)

*A comparison of the percentage of recurrent dreams reported in ERD and RRD sessions*



## **Preliminary Questions**

Since the dream vividness measure was reevaluated to obtain a score for the emotional intensity of the dream, emotional intensity was used in the analysis instead of vividness. Therefore the altered research questions are as follows

1. Will the emotional intensity of ERDs and RRDs differ?

Using a repeated measure analysis of variance (ANOVA), to test the difference between the emotional intensity of early and recent dreams we found that, there are no significant differences in the two dream conditions,  $F(1, 24) = .19, p = .66$ .

2. Will the salience of ERDs and RRDs differ?

Next, we examined if there was a difference in the salience of early versus recent dreams. The results using a repeated measure ANOVA revealed that, there were no significant differences between early and recent dreams in terms of their salience,  $F(1, 24) = 3.29, p = .08$ .

## **Primary Questions**

I originally posed 3 primary research questions each one relating to gains from a single outcome measure. These questions were: 1. How will session depth differ for sessions involving ERDs versus RRDs? 2. How will the understanding of self differ for sessions involving ERDs versus RRDs? 3. How will session gains reported vary for sessions involving ERDs versus RRDs? However, as mentioned earlier, the three outcome measures GDI, SIS-U and SEQ-D, were highly correlated and hence the raw scores obtained by the participants on the GDI, SIS-U, and SEQ-D were standardized

by converting them to t scores and then averaging the three scores to obtain a single score for session outcome.

Thus, the revised primary research question examined was: How will session outcome differ for sessions involving ERDs versus RRDs?

### **Data Analytic Strategy**

Multilevel Modeling (MLM) was the preferred statistical analysis because the dream variables were nested under clients. Each client had two dreams so variables dream salience, dream emotional intensity and dream session outcome were nested under client. MLM takes into account the fact that there are correlated error terms between dream session outcomes of the same client. For example, if a client is especially resistant to dream work, then this would negatively affect the overall session outcome for both dream sessions. Since there is a potential correlation between dream session outcomes scores with the same client, MLM is well suited for the analysis.

MLM was used to test the within-person process describing the relationship between predictor variables, type of dream session (i.e. ERD or RRD), dream salience and emotional impact of the dream and the dream session outcome variable. MLM allows us to test whether the within-person process differed significantly across individuals. MLM was conducted by means of the mixed models linear program in SPSS 20. The lower level variables entered into the model were type of dream session, and the covariates, dream salience, and emotional intensity of the dream. The



higher level variable was the client. The dependent variable was the overall session outcome.

Table 6, shows unstandardized betas which indicate that dream salience is the only the within-person Level 1 variables that was significantly associated with session outcome. Overall, participants reported greater session outcome when they worked on a dream that they considered salient.

The effect varied across clients, the association was stronger for some clients than it was for others. To determine the percentage of variance due client factors the intraclass correlation coefficient (ICC) was determine and found to be .37 (between subject variance is 43.33 divided by total variance 69.23). This means that the 37% of the variance was accounted for by client factors.

Table 5.

*The Within-Person Process Relating Type of Dream, Dream salience, Emotional intensity and Session outcome.*

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	38.54	5.68	46.02	6.785	.00	27.10	49.97
Salience	.72	.28	45.79	2.56	.02	.153	1.29
Emotional Intensity	.045	.13	43.21	.35	.73	-.22	.31
Dream Type	-.32	1.92	23.24	.17	.87	-4.29	3.65

a. Dependent Variable: Session Outcome.

Table 6.

*The variance in Session outcome accounted for by Between and Within-Person factors*

Parameter	Estimate
Repeated Measures	Variance 43.33
Intercept [subject = client id]	Variance 25.90

## **Preferences**

### **Pair chi square**

Therapist and client preferences of ERD versus RRD dream work session are shown below in the figure 3. As is depicted in the figure below, 24% of clients (6 clients) and 40% of therapists (10 therapists) preferred the ERD session, and 60% of both therapists and clients (15 clients and 15 therapists) preferred the RRD session. Lastly, 16% of clients (4 clients) remained undecided in terms of which session they preferred. No statistical test is possible to compare the client and therapist session preferences because these observations are not independent, but by eyeballing the data it appears that clients and therapists somewhat preferred the recent dream session as compared to the early dream session.

The therapist preferences, therapist reported liking the RRDs because clients “considered them more salient to current issues,” and because therapists felt “it was easier to access more emotions,” in the RRD when compared to the ERD. Therapist that preferred the ERD reported that, “the client had more invested in the dream” and the clients “got into more personal and interpersonal dynamics” as a result of the session. Two therapists also noted that there were similar themes or symbols in both the ERD and RRD. Table 8 includes all the comments given by therapists.

Figure 2

*A comparison of the percentage of therapists and clients' that preferred the ERD session or RRD session*

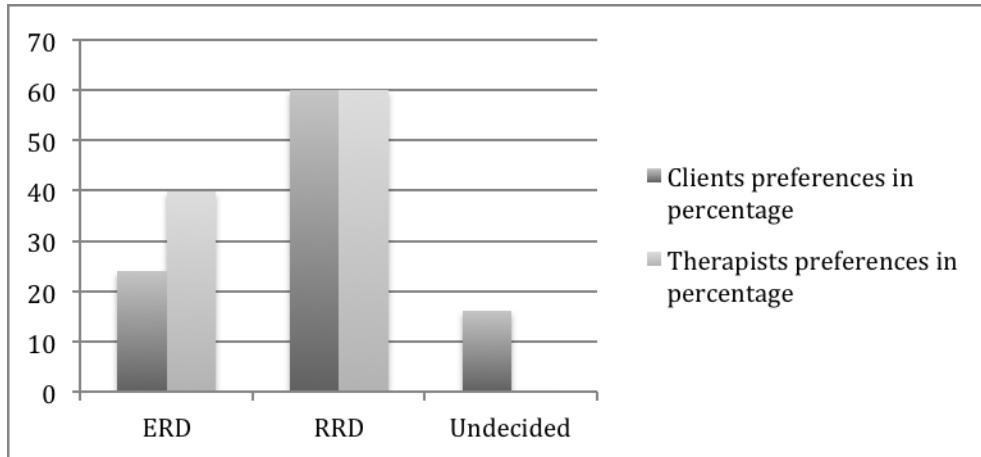


Table 7.

*Therapists' preferences and comments.*

Therapist Number	Therapist Preference	Reason for preference
1	ERD	The ERD because we were able to find similar patterns as those in RRD, and were able to use the patterns we explored in the RRD to understand the ERD.
2	ERD	ERD. The stuff about this dream that she wanted to change was pretty insightful, and it seemed related to some core conflictual issue that the client is facing.
3	RRD	Seemed more meaningful to client. Smoother session. Deeper session.

---



---

4	RRD	It might have just been the material but the people had a way easier time talking about her ex-boyfriend compared to her earlier relationships (ERD). I felt more connected to her experience during RRD.
5	ERD	The earlier dream lends itself to a more comprehensive client's development of some of her inner conflicts and CCRT (core conflictual relationship themes). I could use the past experiences to link to the present or other important life events of the client's life and the current dream. It provides more variability and room for creativity and exploration.
6	ERD	The dream was very comforting, meaningful and vivid for the client. It had a spiritual quality that really appealed to me.
7	RRD	The client seemed were emotionally engaged in the recent dream session, the insight stage in the RRD was smoother and initiated by the client.
8	RRD	The dream seemed more applicable to her life and the actual dream had more depth and details which allowed for a smoother transition from the exploration stage to the insight then action stage.
9	RRD	The client considered them more salient to current issues.
10	RRD	Client was drawn to the waking life interpretation level and was better able to relate to the dream.
11	RRD	It was the second session and the client opened up more- it wasn't the dream per se but more that she was able to lower her defenses and get into her feelings.
12	RRD	I could explore more waking life triggers. Client seemed to be more

---

---



---

		engaged in the RRD than ERD.
13	ERD	Because it was surprisingly more relevant and allowed us to explore client patterns that were less threatening than the current dream.
14	ERD	The dream seemed richer than the recent dream, which seemed to have many elements of hypnagogic hallucination.
15	ERD	We got into more personal and interpersonal dynamics- parents, friends, self.
16	RRD	In the recent dream, the client engaged more readily and had more associations to her dream. Both dreams were very interesting but the client was more vested in the action stage, related to waking changes in real life.
17	RRD	For the client, working with the earlier dream was challenging because she didn't have many waking life associations, other than "I probably thought of this image because I saw it on TV as a kid." She also thought of the (earlier) dream a lot, so it was harder for her to come to new insights. The recent dream was easier to work with because she had more associations and could relate things more easily to waking life and connect things. For what it's worth I think the earliest dream was harder to work with, but the client got more out of the session (insight) than the client did for the recent dream.
18	RRD	It is more relatable to present problems and led to more action related change.
19	RRD	It was easier to access more emotions in RRD.
20	RRD	The current dream had more tangible waking triggers so the client was better able to formulate hypotheses about insight.

---

---

---

21	RRD	The most recent dream was easier for the client to remember to find waking life triggers/associations to. Thus the dream session seemed more relevant and meaningful.
22	ERD	The ERD had more rich details that the client remembered pretty vividly.
23	ERD	The client could engage herself more. She could identify with her emotions in that dream more compared to the RRD, which was difficult for her to relate to in general, and especially to real life.
24	RRD	I had more time in the second session to do a more complete dream session. We were able to discuss each stage more in depth. The client also seemed more willing and comfortable sharing with me. I also was less nervous interacting with the client as well as go over the steps of the dream sessions.
25	ERD	The client had more invested in that dream and seemed more interested in deriving meaning from this dream. I got the sense that the RRD didn't hold much significance for the client, and so the client didn't come with the same level of excitement for interpreting the dream.

---

## Chapter 6: Discussion

In this chapter I discuss the characteristics of early and recent dreams, the clients' perceived benefit from sessions with both ERDs and RRDs, and the reasons why therapists and clients preferred to work with both types of dreams. These findings will also be explored in light of their implications on therapeutic dream work.

### **Characteristics of ERDs and RRDs**

ERDs were 4 times more likely than RRDs to be nightmares, and 2 times more likely to be recurrent dreams. These results suggest that the dreams that stand out from childhood are those that recurrently invoke intense fear. Similarly, Bulkeley, Broughton, Sanchez, and Stiller (2005) found that many ERDs were disturbing nightmares in which aggression was often directed towards the child dreamer, perhaps because these dreams echoed the vulnerability that children experience in waking life. As Bulkeley et. al (2005) pointed out, the child was usually the victim of aggression in ERDs, whereas in recent dreams the dreamer was more likely to be the aggressor.

Van De Castle (1994) also suggested that due to a lack of confidence in their ability to overcome problems, children often dream of difficult situations that they try to overcome. However, as children grow older and become more self-reliant, they feel better equipped to deal with the obstructions found within their dreams. And life . Similarly, Sandler and Sandler (1978) suggested that childhood is a time when we are dependent on others to satisfy fundamental needs like safety and wellbeing.



The following is an example from the present study of a nightmare in which the child dreamer is the victim of aggression:

*“I’m walking through a park with younger brother, I can see a lot of trees and but we are the only ones there. Suddenly I see a snake sunbathing on the path. I try to protect my brother but the snake sees us and tries to attack. I put my left arm forward to save my brother and the snake bites me.”*

According to the therapists in the present study, there were also other differences between the two types of dreams as they were presented in the session ERDs were described as snapshots with a few bold images. In contrast, RRDs were described as coherent stories with complicated and detailed plots and subplots. These differences in the length and structure of ERDs and RRDs are illustrated by the following examples.

**ERD Resembling a Snapshot:**

*“I wake up, run down the stairs, through my kitchen, and into the family room. There are lions all over the room. My mom is lying on the couch and my dad is in the chair. A lion knocks over the lamp, and I yell to my parents,” It knocked over the lamp”*

**RRD with a Complex Storyline:**

*“My dream started off with me being at X University to visit my girlfriend, M. I was hanging out with her roommates in her apartment only the place and people in my dream did not match up with the real X University and people. In my dream I knew that I was at X and that I was with M’s roommates, but it wasn’t the real X and her real roommates. M was not with us throughout the*

*dream. She was at work or something else that didn't cause any alarm for me in the dream. I was with her roommates in her apartment, which was an old house with a lot of extensions that had been added on to it. The house had a big open two story room as the main part of the house, and the rooms that everyone slept in branched off from this big open room. There was an old metal winding staircase that spun from the entrance of the house to the bottom level. We walked down the staircase and saw a bunch of the X university professors who were turning the big open room into a huge library with bookshelves running up the sides of the walls and big ladders which allowed you to scale the walls and find a book. The roommates were expecting this transformation. The professors were all dressed in Nazi uniforms, but they were not Nazis themselves. They all were huge history enthusiasts and in addition were political activists. One of their fellow professors had recently been arrested for protesting the destruction of the house that we were currently in. I don't know why the house was to be destroyed or why the professors wanted to save it so badly, but in order to try to save the house, the professors had gathered up each of their personal book collections and were turning the house into an antique book library. I sat down in a winged back chair and looked on the side table next to me and saw an extremely old version of the Bible that had been written in Latin. I flipped through some of the pages and was astounded by the beauty of the book....”*

Lastly, when asked about the reasons behind their preference for working with ERD versus RRD, therapists mentioned that while the content of RRDs consisted of

current conflicts, ERDs consisted of material connected to early family experiences and dynamics. This finding is supported by the work of other researchers (Foulkes, 1979, 1985; Garfield 1984; Kamphuis et al., 2008) who found that children's dream content is related to their experiences and anxieties. An ERD in which the dreamer discusses family relationships and feelings is given below:

*“My house is burglarized, 3 to 4 burglars hold my family hostage. They get my father away and demand money. He refuses; we beg him to think otherwise. The burglars take me and hand me a gun and say that I have to shoot my dad. I refuse; they tell me to shoot him otherwise they'll kill me. My dad tells me to shoot him; he doesn't want me to die. I DO IT. The burglars leave. My mom and brother hate me because I shot Dad. They told me I should have shot the burglars instead. I didn't know I could have done that, I didn't consider it an option. I had conflicting feelings of anger, depression, anxiety, sadness and remorse. I know my family won't talk to me ever again. I am completely isolated to deal with grief on my own.”*

### **Preliminary Questions**

Results showed that the order in which volunteer clients participated in the 2 dream sessions did not significantly predict session outcome. Hence, clients who participated in RRD before the ERD reported just as much benefit as clients who participated in the dream sessions in the reverse order. Furthermore, clients' ability to gain from sessions did not seem to change over time (i.e., the second session was not better than the first). Thus, there did not seem to be any order or time effects.

1. Will the emotional intensity of ERDs and RRDs differ?

In terms of the emotional intensity of ERDs and RRDs, there were no significant differences between the two dream types. Clients reported that they felt equally affectively aroused by both ERDs and RRDs. This was surprising given that ERDs were more likely to be nightmares, which one would assume implied heightened emotionality. We speculate that there may have been some desensitization involved in ERDs given that dreamers have repeated them to themselves many times and thus they were not as shocking and fresh as when the first occurred. In contrast RRDs were more recent and may have reflected more current conflict.

## 2. Will the salience of ERDs and RRDs differ?

Talk about how it's impressive that there is no difference!!! There were no significant differences in dream salience of ERDs when compared to RRDs. This lack of difference is an interesting given that it is believed in Freudian theory that dream interpretation should ideally focus on dreams that occurred over the preceding 48 hours (Freud, 1900). According to Freud, all dreams had a point of contact or a waking life trigger with the events of the past 2 days. He called this the 'daily residue' of the experiences of the previous 2 days, and believed this impacted one's dreams. Focusing on these recent dreams would therefore make these waking life triggers more apparent and the dream more salient. Findings from the current study however imply that clients did not share this view. Based on the self-reported salience of ERDs and RRDs, it appears that clients felt both types of equally relevant.

Similarly these findings, however, seem to contradict Bulkeley's (2010) conclusions regarding ERDs being unusually vivid and emotional dreams that occupy a unique position in the individual's dreaming history. We speculate that there are

two primary reasons for the divergence of present findings with those of Bulkeley. Firstly, in terms of sampling, Bulkeley recruited clients from the community who came in because they remembered especially vivid ERDs. On the other hand, the current sample consisted of undergraduate psychology students who volunteered for dream sessions in exchange for research credit. These were clients who remembered both an ERD and anRRD but did not necessarily consider such dreams to be important or salient to them. The sample in the Bulkeley study therefore may have had different characteristics and motivations than the current sample of undergraduate students.

The second reason hypothesized for the difference in the results of the current study and Bulkeley's (2010) study is that in the latter there was an absence of a comparison group of recent dreams of the participants. In the Bulkeley study, the participants were asked to provide an account of only their ERDs and not their current dreams. Since these obtained ERDs were not compared to any other dreams the dreamer had, it is impossible to contrast the content and significance of early and recent dreams. It is therefore plausible that the sample in the study by Bulkeley consisted of individuals who generally had vivid and powerful dreams, and the recent dreams might have been equally intense and impactful. Since the content of ERDs and RRDs were not juxtaposed within the same individual, we cannot be sure of the ERD's uniqueness as compared to that of any other dreams that the client may have experienced.

### **Primary question**

Session quality scores, as reported by the clients, suggested that sessions involving ERDs and RRDs were equally beneficial. However, the salience of the dream, assessed prior to the session, significantly predicted session outcome. These findings suggest that it is not the recency of the dream that results in favorable session outcome, but the fact that clients presented a powerful and salient dream. This finding is in line with previous research (Hill et al. 2006), which implies that the perceived importance or salience of the dream might make a client more motivated to work on their dreams, thereby positively impacting the outcome of the session.

### **Client and Therapist Dream Session Preferences**

Clients were called approximately 4-5 weeks after both dream sessions were completed, and asked which session they preferred. Most clients preferred the RRD sessions. Volunteer clients reported that these dreams appeared more applicable to their current lives and therefore felt more useful to work on.

Therapist preferences of the ERD or RRD session were assessed after the end of both sessions. Therapists also answered an open-ended question regarding the reason for this preference. The therapists also preferred working with recent dreams, because these dreams were "easier to work." Therapists also mentioned that since recent dream content usually involved the clients' current life situation, the waking life triggers were much easier to identify. ERDs on the other hand, may have been more complex and symbolic, hence making them harder to tackle in a single session format. Chi square

As observed by two therapists, through RRD sessions the volunteer clients learned something about a situation currently affecting their lives, whereas in the ERD session, the content discussed seemed to teach clients something about deeper inner dynamics; unfortunately we did not have measures that assessed this distinction. RRD sessions were also considered by therapists to be the more “productive” of the two, as it was easier to come up action ideas for these dreams. ERDs, on the other hand, were described as beneficial for helping the client gain insight into an aspect of self but harder to translate into action.

Therapists also reported that ERDs sometimes brought up unexpectedly threatening material for clients, who were often surprised by the intensity of their emotional reactions while working on an early dream. In this sense, RRD sessions may have been safer to examine, allowing the client an opportunity to retain more control of the material that was being brought up. Hence RRDs were about conflicts or concerns that the client might have spent time thinking about, whereas the meaning of ERDs may have caught them by surprise.

In the absence of a strong therapeutic relationship (given that these clients had only met their therapist on 1 or 2 occasions) the ERDs might have been too unsettling to explore deeply with a therapist with whom trust had not yet been developed.

### **Limitations of Study**

The present study had several limitations. Firstly, the small sample size made it difficult to apply findings to a larger population. Although there are no hard and fast rules regarding the required sample size in MLM, overall increasing the number of higher level units or the category under which the data is nested, increases

statistical power at a much greater rate than increasing the number of lower level units (Adelson & Owen, 2012). In the current study ERD and RRD sessions (the lower level unit of analysis) were nested under clients (the higher level unit of analysis) This suggests that increasing the number of volunteer clients would increase the likelihood of detecting differences in session outcome, assuming such differences exist.

Some researchers (e.g., Kreft, 1996; Kreft & De Leeuw, 1998; Snijders & Bosker, 1999) have suggested 30 observations at each level of analysis as a general guideline for using MLM. In the present study the number of observations in the higher analysis was close to 30 (the study was based on dream sessions with 25 clients and therapists), but the number of observations at the lower level (the number of dream sessions per client) was only 2. This suggests that perhaps if either the number of client-therapist dyads or the number of sessions working on each dream were increased, this would also increase the ability to detect differences in the therapeutic outcome of working with ERDs versus RRDs.

Next, all volunteer clients were undergraduate psychology students from the same university. The relatively homogeneous and small sample also limited the generalizability of the findings. Therefore, perhaps the results found are only applicable to the population of psychology undergraduate students. A bigger sample size and a more diverse sample of participants might reveal different findings. Also volunteer clients were recruited for the present study and clients in regular therapy might be more or less motivated to work on their dreams.



The same limitation is applicable to the volunteer therapists; all but 2 therapists were in a doctoral program in counseling psychology from the same university as the clients thus, therapists were exposed to similar forms of training making for similarities in their therapeutic styles. Therefore, these findings might apply only to dream sessions conducted by therapists with a unique form of training. Further examination with a more diverse sample of therapists is therefore required.

The current study's generalizability to ongoing therapy is also limited by the nature of the dream sessions. It should be noted that the Hill model consists of a single session format in which the client and therapist work on a single dream for a duration of 60 to 90 minutes. Therapists involved in naturalistic therapy report spending an average of only 8% of their time working on dreams (Crook & Hill, 2003). Perhaps the findings in the current study apply only to situations in which the dream work is the focus of the entire session, which is rarely the case in ongoing therapy. Therefore, caution must be exercised before applying these findings to working with the dreams of non-recruited clients in the naturalistic setting of ongoing psychotherapy.

There were also limitations in terms of our ability to measure the therapeutic benefit from dream work. The comments from therapists suggest that ERDs and RRDs might help the clients gain insights into different aspects of their lives. ERD might help clients learn something about themselves or early family dynamics whereas RRDs might help clients gain insight into current situations. However, the measures used to assess session quality were unable to pick up on these nuanced differences.

Lastly, the measure used to assess emotional intensity of the dream was created for the purpose of this study. Therefore, further research is needed before its reliability and validity can be ascertained.

### **Directions for Future Research**

A potential direction for future research might be to examine the recurrent patterns and images present in clients' early and recent dreams. Some therapists commented that similarities were observed in the themes and symbols explored in both the ERD and RRD dream session. Dream images, in psychoanalytic theory, are believed to reveal intrapsychic conflicts that can be used to help dreamers become aware of hidden feelings (Freud 1900/1966, Jung 1964, 1974). If such common motifs do exist between ERDs and RRDs, it might suggest that exploring these images would help clients gain insight into recurring inner conflicts. An interesting direction for future research is to therefore examine repeated ideas present across dreams for an individual. These themes, if recognized and explored, may help clients gain a deeper understanding of themselves.

In addition, working with early dreams in a naturalistic therapy setting may be another intriguing direction for future research. Based on results from this study we speculated that ERDs might be too emotionally expensive to be explored in a single dream session setting. It would therefore be important to test this assumption by examining dream work on early dreams, when a strong therapeutic relationship is present between the client and therapist.

The findings related to dream salience might also have important implications for the use of dreams in regular therapy. If working on a dream that the client

perceives as important can lead to more effective dream work, this might mean that it could be beneficial to explore how much value the client places on a dream before exploring the dream in therapy.

### **Conclusion**

The result of the current study add to the body of empirical work on the Hill dream model and provide further insight into the dream characteristics that have an impact on the outcome of dream sessions. Although it was originally hypothesized that the recency of dreams would predict session outcome this was not indicated by the results, given that there were no significant differences in session outcome of ERD versus RRD session. The findings suggest that therapists need not only focus only on recent dream in which waking life triggers are easily available, but might also consider working with dreams clients have carried with them for several years. Based on preliminary anecdotal evidence, it is suggested that while working on recent dreams might help the clients gain insight into their current life situation, whereas earlier dreams might help clients understand older conflicts or recurring problems better. Lastly, since dream salience was found to be a significant predictor of reported quality of the dream session, clients are more likely to gain benefit from working on dreams they consider salient.

# Appendices

## Appendix A

### Demographic Form

Date: \_\_\_\_\_

Age: \_\_\_\_\_ Sex:  Male  Female

Race/Ethnicity (check as many as apply):

White American

African American

Asian American/ Pacific Islander

Hispanic American

Native American/ Alaskan Native

Middle Eastern

Multiethnic (please specify: \_\_\_\_\_)

International (please specify: \_\_\_\_\_)

Other (please specify: \_\_\_\_\_)

Year at university (check one):  FRSH  SOPH  JUNR  SENR

Major or field of study at university: \_\_\_\_\_

## Appendix B

### Session Evaluation Questionnaire- Depth Scale

**Instructions:** we are interested in hearing exactly what you thought about this session. Please think about each question carefully and answer as honestly as possible. Please place the correct number from 1 to 7 to show how you feel about this session.

This session was:

Valuable						Worthless
1	2	3	4	5	6	7
Shallow						Deep
1	2	3	4	5	6	7
Full						Empty
1	2	3	4	5	6	7
Weak						Powerful
1	2	3	4	5	6	7
Special						Ordinary
1	2	3	4	5	6	7

## Appendix C

### Session Impacts Scale -Understanding scale

**Instructions:** we are interested in hearing exactly what you gained from participating in this session. Please think about each question carefully and answer as honestly as possible. Circle the number that best describes your response. Indicate the extent to which the following statements were true for you.

1. *Realized something new about myself.* As a result of the session, I now have new insight about myself or have understood something new about me; I see a new connection or see why I did or felt something. (Note: There must be a sense of "newness" as a result of something which happened during the session.)

1 - *not at all* 2 – *slightly* 3 – *somewhat* 4 - *pretty much* 5 - *very much*

2. *Realized something new about someone else.* As a result of the session, I now have new insight about another person or have understood something new about someone else or people in general. (A sense of "newness" should be present.)

1 - *not at all* 2 – *slightly* 3 – *somewhat* 4 - *pretty much* 5 - *very much*

3. *More aware of or clearer about feelings, experiences.* As a result of this session, I have been able to get in touch with my feelings, thoughts, memories, or other experiences; I have become more aware of experiences which I have been avoiding; some feelings or experiences of mine which had been unclear have become clearer. (Note: Refers to becoming clearer about *what* you are feeling rather than *why* you are feeling something.)

1 - *not at all* 2 – *slightly* 3 – *somewhat* 4 - *pretty much* 5 - *very much*

Appendix D

**Gains from Dream Interpretation**

**Instructions:** we are interested in hearing exactly what you gained from participating in this session. Please think about each question carefully and answer as honestly as possible. Circle the number that best describes your response.

Disagree Strongly-1      Neutral-5      Agree Strongly-9

1. I was able to explore my dream thoroughly during the session.
2. I learned more about what this dream meant for me personally during the session.      1   2   3   4   5   6  
7   8   9
3. During the session, I was able to re-experience the feelings I had in my dream.      1   2   3   4   5   6  
7   8   9
- Because of the session, I have more of a sense that I can change my dreams when they are frightening or bad.      1   2   3   4   5   6  
7   8   9
4. I got ideas during the session for how to change some aspect(s) of myself or my life.      1   2   3   4   5   6  
7   8   9
5. I learned more from the session about how past events influence my present behavior.      1   2   3   4   5   6  
7   8   9
6. I learned more about waking life from working with my dream.      1   2   3   4   5   6  
7   8   9
7. I felt like I was very involved in working with this dream during the session.      1   2   3   4   5   6  
7   8   9
8. I felt like I was actually reliving the dream during the session.      1   2   3   4   5   6  
7   8   9
9. I learned a new way of thinking about myself      1   2   3   4   5   6  
7   8   9

- |  |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|
| 11. I will use things that I learned in this dream interpretation in my life.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 12. I learnt thing that I would not have thought of on my own.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13. I was able to make some connection between images in my dream and issues in my waking life that I had not previously considered. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 14. I felt reassures about myself or my dream after this session.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |



## Appendix E

### Dream Salience

**Instructions:** we are interested in hearing exactly what the perceived importance of the dream is for you. Please think about each question carefully and answer as honestly as possible. Circle the number that best describes your response.

1. "Understanding this dream will help me understand my life better."  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
2. "This dream is trivial and NOT worth focusing on,"  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
3. "This dream stirs up strong emotions in me,"  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
4. "I spend a lot of time thinking about this dream,"  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
5. "This is an important dream"  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree

## Appendix F

### Dream Vividness Questionnaire

**Instructions:** While answering these questions, please describe the feelings and sensations you experienced while you were dreaming and not afterwards when you thought about the dream.

#### I. Details of the dream-

1. What was the age at which the dream was dreamt? \_\_\_\_ years old
2. Was the dream a recurrent dream? Yes No
3. Was the dream a nightmare? Yes No

**II.** The following questions are multiple choice responses in which you pick one of 5 statements. Indicate the extent to which the following statements were true for your Earliest Remembered Dream:

1. I experienced strong emotions in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
2. I could see a lot of colors in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
3. The emotions in the dream were intense.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
4. The dream had several details.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
5. I felt overpowered with emotions in this dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
6. I could clearly visualize the environment of the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
7. The details of the dream were blurry.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
8. In this dream I did not experience emotions with extreme force.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree

9. The dream was extremely charged with emotion.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
10. I could clearly see the faces of others in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
11. I could clearly visualize the objects/creatures/people in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
12. I felt strong affect in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
13. I would describe the dream as affectively intense.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
14. I could see details of the location in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
15. I did not experience intense affect in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
16. I could clearly hear what was said in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
17. The dream was not emotionally arousing.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree
18. I can't remember who was in the dream.  
1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4- Agree 5-Strongly agree

## Bibliography

- Adams, K., & Hyde, B. (2008). Children's grief dreams and the theory of spiritual intelligence. *Dreaming*, 18(1), 58-67.
- Adler, A. (1936). On the interpretation of dreams. *International Journal of Individual Psychology*, 2, 3–16.
- Adler, A. (1938). *Social Interest: Challenge to Mankind*. Faber & Faber, London.
- Morewedge, C. K., & Norton, M. I. (2009). When dreaming is believing: The (motivated) interpretation of dreams. *Journal of Personality and Social Psychology*, 96(2), 249–264.
- Adler, A. (1958). *What Life Should Mean to You*. Capricorn, New York.
- Bulkeley, K., Broughton, B., Sanchez, A., & Stiller, J. (2005). Earliest Remembered Dreams. *Dreaming*, 15(3), 205-222
- Davis, T. L., and Hill, C. E. (2005). Including spirituality in the Hill model of dream interpretation. *Journal of Counseling Psychology*, 83, 492–503.
- Diemer, R., Lobell, L., Vivino, B., and Hill, C. E. (1996). A comparison of dream interpretation, event interpretation, and unstructured sessions in brief psychotherapy. *J. Coun. Psychol.* 43, 99–112.
- Domhoff, G. W. (1996). *Finding meaning in dreams: A quantitative approach*. New York: Plenum Press.
- Domhoff, G. W. (2003). *The scientific study of dreams: Neural networks, cognitive*

*development, and content analysis*. Washington, DC: American Psychological Association.

Elliott, R., & Wexler, M. M. (1994). Measuring the impact of sessions in process-experiential therapy of depression: The Session Impacts Scale. *Journal of Counseling Psychology, 41*, 166-174.

Falk, D. R., and Hill, C. E. (1995). The process and outcome of dream interpretation groups for divorcing women. *Dreaming 5*, 29–42.

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). GPower 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research methods, 39*(2), 175-191.  
doi:10.3758/BF03193146

Foulkes, D. (1982). *Children's dreams: Longitudinal studies*. New York: Wiley.

Foulkes, D. (1999). *Children's dreaming and the development of consciousness*. Cambridge, MA: Harvard University Press.

Freud, S. (1965). *The interpretation of dreams* (J. Strachey, Trans.). New York: Avon Books. (Original work published 1900)

Freud, S. (1974). From the history of an infantile neurosis. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 17, pp. 3–122). London: Hogarth Press. (Original work published 1918)

Garfield, P. (1974). *Creative dreaming*. New York: Ballantine.

- Heaton, K. J., Hill, C. E., Petersen, D., Rochlen, A. B., and Zack, J. (1998). A comparison of therapist-facilitated and self-guided dream interpretation sessions. *Journal of Counseling Psychology* 45, 115–121.
- Hill, C. E., Diemer, R., and Heaton, K. J. (1997). Dream interpretation sessions: who volunteers, who benefits, and what volunteer clients view as most and least helpful. *Journal of Counseling Psychology*, 44, 53–62.
- Heaton, K. J., Kelley, F., Eiche, K., Tomlinson, M., and Hess, S. (2000). Structured brief therapy with a focus on dreams or loss for clients with troubling dreams and recent losses. *Journal of Counseling Psychology*, 47, 90–101.
- Heaton, K. J., Hill, C. E., Petersen, D., Rochlen, A. B., and Zack, J. (1998). A comparison of therapist-facilitated and self-guided dream interpretation sessions. *J. Coun. Psychol.* 45, 115–121.
- Hill, C. E. (1996). *Working with Dreams in Psychotherapy*. Guilford Press, New York.
- Hill, C. E., Kelley, F. A., Davis, T. L., Crook, R. E., Maldonado, L. E., Turkson, M. A., Wonnell, T. L., Suthakaren, V., Zack, J. S., Rochlen, A. B., Kolchakian, M. R., and Codrington, J. N. (2001). Predictors of outcome of dream interpretation sessions: volunteer client characteristics, dream characteristics, and type of interpretation. *Dreaming*, 11, 53–72.
- Hill, C. E., and Goates, M. K. (2004). *Research on the Hill cognitive-experiential*

- dream model. In: Dream Work in Therapy: Facilitating Exploration, Insight, and Action* (C. E. Hill, ed.), American Psychological Association, Washington, DC, pp. 245–288. Hogarth Press.
- Hill, C. E., Crook-Lyon, R. E., Hess, S., Goates-Jones, M. K., Roffman, M., Stahl, J., Sim, W., and Johnson, M. (2006). Prediction of session process and outcome in the Hill dream model: contributions of client dream-related characteristics and the process of the three stages. *Dreaming* 16, 159–185.
- Hill, C. E., Rochlen, A. B., Zack, J. S., McCready, T., and Dematatis, A. (2003). Working with dreams using the Hill cognitive-experiential model: a comparison of computer-assisted, therapist empathy, and therapist empathy and input conditions. *Journal of Counseling Psychology* 50, 211–220.
- Jung, C. G. (1948/1960) *The Collected Works of C. G. Jung, Vol. 8* (London, Routledge).
- Jung, C. G. (1965). *Memories, dreams, reflections* (R. Winston & C. Winston, Trans.). New York: Vintage Books.
- Jung, C. G. (1974). *Dreams* (R. F. C. Hull, Trans.). Princeton, NJ: Princeton University Press.
- Kamphuis, J. H., Turn, N., Timmermans, M., & Punamäki, R. (2008). Extending the Rorschach Trauma Content index and aggression indexes to dream narratives of children exposed to enduring violence: An exploratory study. *Journal of Personality Assessment*, 90(6), 578-584.
- King, P. (2004, June). *The dreamer's dream meanings and content analysis: A*

- reconciliation*. Paper presented at the meeting of the International Association for the Study of Dreams, Copenhagen, Denmark.
- Kolchakian, M. R., and Hill, C. E. (2002). Working with unmarried couples with dreams. *Dreaming* 12, 1–16.
- Kolchakian, M. R., & Hill, C. E. (2002). Dream interpretation with heterosexual dating couples. *Dreaming*, 12(1), 1-16. doi:10.1023/A:1013884804836
- Revonsuo, A. (2000). The reinterpretation of dreams: An evolutionary hypothesis of the function of dreaming. *Behavioral and Brain Sciences*, 23, 877–901, 904–1018, 1063–1082.
- Reynolds, S., Stiles, W. B., Barkham, M., Shapiro, D. A., Hardy, G. E., & Rees, A. (1996). Acceleration of changes in session impact during contrasting time-limited psychotherapies. *Journal Of Consulting And Clinical Psychology*, 64(3), 577-586.
- Stiles, W. B., & Snow, J. S. (1984). Counseling session impact as viewed by novice counselors and their clients. *Journal of Counseling Psychology* 31, 3-12. Van de Castle, R. L. (1994). *Our dreaming mind*. New York: Ballantine Books.
- Wonnell, T.L, and Hill, C. E. (2000). The effects of including the action stage in dream interpretation. *Journal of Counseling Psychology*, 47, 372–379.
- Wonnell, T. L., and Hill, C. E. (2005). Predictors of intention to act and implementation of action in dream sessions: therapist skills, level of difficulty of action plan, and client involvement. *Dreaming* 15, 129–141.
- Yu, C. (2008). Dream Intensity Inventory and Chinese people's dream experience frequencies. *Dreaming*, 18(2), 94-111.



Zack, J., and Hill, C. E. (1998). Predicting dream interpretation outcome by attitudes, stress, and emotion. *Dreaming* 8, 169–185.