An exploration of the inner experience of depression

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AN EXPLORATION OF THE
INNER EXPERIENCE OF DEPRESSION

by

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ABSTRACT

An Exploration of the Inner Experience of Depression

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This study explored the inner experience of people with depression using the Descriptive Experience Sampling method. Participants were screened with the SCL-90-R and then selected for the depression group or the control group. Participants were asked to complete the BDI-II and the VAS as pre-test and post-test measures. Participants used the Descriptive Experience Sampling method, which entails random cueing by a beeping device and recording of inner experiences including thoughts, images, and feelings. Samples were discussed thoroughly by the participants and the researchers. Summaries of the samples were then coded for prominent characteristics. The most frequent codes for the depression group were feelings, sensory awareness, and unsymbolized thinking. The most frequent codes for the control group were feelings, images, and sensory awareness. The depression group also tended to have more experiences per sample overall than the control group.
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CHAPTER 1

INTRODUCTION

Depression is a common and potentially devastating disorder that touches nearly everyone in some way. Approximately 17 percent of Americans suffer some form of depression at least once in their lives and six percent have more chronic concerns with depression (Kessler, McGonagle, Zhao, & Nelson, 1994). Individuals who experience multiple bouts of depression are at high risk for future relapse (Judd et al., 1998). Depression is twice as likely to occur in women and is seen cross-culturally (Nolen-Hoeksema, Parker, & Larson, 1994). Depression troubles not only the individual, but also those close to him or her (McCabe & Gotlib, 1993), making the effects far-reaching.

Moreover, the costs of depression can be profound and reach across all areas of a person's life. People with depression are more likely to have physical concerns and are more likely to die due to these concerns (Klerman & Weissman, 1989). Depression can cause problems with a person's way of thinking, self-view, social relationships, and academic and work history (Lewinsohn, Steinmetz, Larson, & Franklin, 1981). Further difficulties associated with depression include impaired job functioning, less interest in sex, and dissatisfaction with intimate relationships (Coryell, Scheftner, Keller, & Endicott, 1993). Marital problems, occupational problems, academic problems, alcohol or substance abuse, and increased reliance on
medical resources can occur (APA, 1994). Perhaps of greatest cost is the high rate of suicide among people with depression (APA, 1994). For these reasons, completely understanding the nature and causes of depression is critically important.

An appropriate step toward fully comprehending depression is to understand the inner experience of those who suffer from depression. The purpose of this project is to explore the inner experience of depression. Inner experience can be described as anything that occurs in an individual’s awareness, including thoughts, feelings, images, and any other internal experience. In the pages to follow, I summarize the current thinking about the inner experience of depression and review the major issues involved in undertaking an exploration of inner experience. Parks and Hollon (1988) have listed eight strategies used by previous researchers to explore inner experience. I discuss these eight methods and present their specific advantages and disadvantages. Finally, I discuss why I believe the Descriptive Experience Sampling (DES) method may yield the clearest picture yet of the inner experience of depression.

Current Theories of Depression

Because of the importance of understanding this disorder, many people have already theorized about the inner experience of depression. Currently there are four primary theories of depression. These include the Diagnostic and Statistical Manual of Major Mental Disorders-IV (DSM-IV; APA, 1994), Cognitive Theory, Affectivity Theory, and Hopelessness Theory. Each of these models has a unique view of the inner experience of depression.
According to the DSM-IV, "the essential feature of a Major Depressive Episode is a period of at least two weeks during which there is either a depressed mood or the loss of interest or pleasure in nearly all activities" (APA, 1994, p. 320). Thus the diagnosis of depression is tied directly to a person's inner experience. In fact, the DSM-IV criteria for diagnosing a Major Depressive Episode focus predominantly on the intrapsychic characteristics of the individual. As indicated by the DSM-IV, someone is judged to be experiencing a Major Depressive Episode if five or more of the following symptoms are present for a two-week period:

- Depressed mood
- Diminished interest in daily activities
- Fatigue or energy loss
- Feelings of worthlessness or guilt
- Diminished ability to think or concentrate
- Recurrent thoughts of death or suicidal ideation
- Psychomotor agitation or retardation
- Significant weight change
- Insomnia/hypersomnia

The first six of these nine criteria concern the intrapsychic aspects, or what can be called the inner experience, of the individual.

Cognitive Theory also addresses the inner experience of depression (Beck, Rush, Shaw, & Emory, 1979). Beck, the foremost name in the cognitive theories of depression today, emphasized the centrality of distorted thinking in depression. He derived his theory by asking patients with depression to report what they were
thinking (Beck, 1991). From this information, he deduced that people with depression had negative thoughts. People were not necessarily aware of having these negative thoughts, so Beck described them as being automatic. These automatic negative thoughts were, in turn, the building blocks of negative schemas. When an event occurred, a related schema was activated. If the schema brought up was negative, it then colored experiences of the self, the future, and experiences in a negative way resulting in a globally negative outlook (Beck et al., 1979).

The third model, Affectivity Theory (Clark, Steer, & Beck, 1994) focuses on the emotional aspect of the inner experience of depression. There are two dimensions to the model, positive affect and negative affect. Both are continuous variables that occur to varying degrees in any individual with or without depression and are part of everyday inner experience (Clark, Steer, & Beck, 1994). Positive affectivity is “the extent to which a person avows a zest for life” (Jolly, Dyck, Kramer, & Wherry, 1994). Negative affectivity is “the extent to which a person reports feeling upset or unpleasantly aroused” (Jolly et al., 1994). According to Affectivity Theory, high negative affect and low positive affect are associated with depression (Clark, Steer, & Beck, 1994).

The fourth model, Hopelessness Theory (Abramson, Metalsky, & Alloy, 1989; Metalsky & Joiner, 1992), focuses on feelings of hopelessness within depression. As a result, the focus is brought to the inner experience of the individual. This theory assumes that there are multiple types of depression, with hopelessness depression being one of them. Hopelessness is defined as 1) negative expectations about the occurrence of highly valued outcomes, and 2) expectations of
helplessness about changing the likelihood of the occurrence of these outcomes. Hopelessness in this case does not refer to negative affectivity as does the previous model, but instead the theory revolves around expectations of a situation. It assumes that a person expects a negative outcome of a desired event and believes he or she is unable to change said negative outcome (Abramson, Metalsky, & Alloy, 1989; Metalsky & Joiner, 1992). These expectations then become the defining criteria for the inner experience of depression.

Hence, these four major models of depression all address the inner experience of depression in some fashion. Among the criteria listed for depression in the DSM-IV, two-thirds pertain to inner experience. Beck emphasized the cognitive pieces. Affectivity Theory addressed the emotional components. Finally, Hopelessness Theory concentrated on feelings of hopelessness and the attached internal expectations. Whereas each model focused on one aspect, no model encompassed all aspects of the inner experience of depression. Furthermore, as we shall see in the next section, all four of these theories of the inner experience of depression rest on shaky methodological foundations.

Methodological Flaws

The theories discussed previously have, in various forms, attempted to capture some aspect or aspects of the nature of the inner experience by using self-report methodologies. As there is a lack of observable behaviors when assessing inner experiences, the researcher is forced to rely on self-report by the participant. Because of this need to rely on self-report methods, the following seven issues
related to accuracy of self-report data should be considered when trying to examine
the inner experience of depression.

The first issue involves whether or not people are able to access their inner
states freely and accurately. Self-report assessment instruments are developed with
the assumption that individuals are aware of their inner states and can gain access to
them. However, Nisbett and Wilson (1977) made the argument that people may not,
in fact, have awareness of some their own inner states, casting doubt on this
fundamental assumption. They argued that people often were not aware of the
specific cognitive processes that occurred, and that they were not aware ordinarily
of the effect of outside stimuli on those processes (see also Grover, 1982). Further,
Glass and Arnowoff (1997) acknowledged that responses on questionnaires might not
mirror an individual’s actual thoughts. At most, upon reflection, the person might
have been able to indicate that some mental process did occur, but the details of the
mental process were lost.

To demonstrate the difficulty people have accessing their mental processes,
Nisbett and Wilson (1977) asked participants to choose the best of four identical
stockings presented in a row. Participants tended to choose the right-most stocking.
When asked why, participants indicated various reasons that had nothing to do with
position, but instead cited color, scent, or cleanliness. In reality, the only
differentiating feature was location. Participants even openly denied that position
had any part in the decision process. This study also points out that people will
respond to questions about and give descriptions of their mental processes even
when their answers are demonstrably incorrect.
A second difficulty with self-report methods others have used to access the inner experience of depression includes the possible influence of participant bias. Self-report assessment instruments in general assume that individuals report their inner experience genuinely (Glass & Arnkoff, 1997; Grover, 1982; Piedmont, McCrae, Riemann, & Angleitner, 2000). Piedmont and his colleagues (2000) argued that demand characteristics commonly confound self-report methodologies. Participant bias can occur when an individual's desire to please influences the nature of the data collected. Oftentimes this influence occurs because participants want to present a certain image to the experimenter. In addition, some individuals may practice purposeful deception. Reasons for deception may include concerns with self-presentation, wanting to respond or behave in a socially desirable manner, malingering, or discomfort with revealing certain information (Piedmont et al., 2000).

A third difficulty with self-report methods is the potential influence of experimenter bias. Experimenter bias can take many forms but is characterized by the influence of the researcher's expectations on the experiment (Piedmont et al., 2000). For example, if a researcher desires a specific outcome, the researcher may influence the experiment at a number of levels to achieve that outcome. A researcher's anticipations and hopes for a project can combine with participants' biases to further compound prejudices.

A fourth potential difficulty is instrument bias. In order to elicit a self-report, it is necessary to question the individual in some manner, either orally or by written questionnaire. Schwarz (1999) reported that the phrasing and content of
questions could have an impact on the answers given. Participants will attempt to
answer the questions given, and the answers are only as good as the questions.
Instrument bias is related closely to experimenter bias, as an individual creates the
method at some point. Consequently, there are three levels at which bias can occur,
at the level of the instrument, at the level of the experimenter, and at the level of the
participant.

The fifth potential concern is memory itself, which may present difficulties
when retrospective methods are used. Self-report methods rely on memory to some
degree. Because memory can degrade fairly rapidly, the farther a person moves
from a specific event, the less likely the person is to have a complete and accurate
memory of that episode. Even if someone is asked about his inner state of five
minutes ago, the response may not be totally accurate (Schwarz, 1999). Due to the
rapid decay of memory, information may be lost and importance is placed on the
quick retrieval of information.

A sixth prospective problem is selection and is a problem of sampling over
time. For instance, asking a person about his inner state over the last two weeks is
unlikely to result in a precise representation of what actually occurred during that
two-week period (Schwarz, 1999). Instead the individual is asked for a
generalization of events over time. For example, if one is asked what one ate for
breakfast over the past week, and is only allowed one answer, only a partial
response may be given. A generalization of breakfast foods may be reported, but a
complete list may not. Thus, the problem is one of selecting what to report when
given an extended period of time to choose from.
A seventh issue that can influence self-reports, and one that is also related to memory is the dependence on mood. Eich (1995) reported that memories of inner states are often linked strongly to mood. Moreover, how something is remembered may be influenced by how one is feeling at the time of recall. When there is a change in mood from the time an event occurred, memories of inner states at the time of the event might be altered. The longer one waits for recall, the more likely there is a change in mood, and therefore the probability increases that the memory will be biased or distorted (Eich, 1995).

Although there may be many problems and concerns with self-report measures, it would not be appropriate to dismiss self-report methods entirely, as valuable information still may be gained. Even Nisbett and Wilson (1977) suggested that individuals were not always wrong in their reports of inner states. Regardless, Nisbett and Wilson’s (1977) work recommended that researchers should maintain some skepticism when using self-report methods. Therefore, self report of inner states and experiences may be an imperfect methodology, but with proper preparation, useful and valuable information may still be gathered.

Guidelines for Evaluating Methods of Accessing Inner Experience

Given the potential value of understanding the inner experience of depression, it is worthwhile to consider the characteristics of effective methods of accessing the inner experience of depression. Hurlburt and Heavey (2001) have contributed five guidelines.

The first guideline suggests that researchers interested in exploring inner experience should maintain a skeptical stance regarding the accuracy of participant
reports of inner experience, regardless of what method they use. Although individuals may be able to report accurately on their inner experience, this should not be assumed. Accordingly, a skeptical stance is necessary to prompt investigators to evaluate critically the extent to which they are developing an accurate understanding of inner experience.

The second guideline suggests that reports of inner experience should be as nonretrospective as possible. As we have seen, memory degrades fairly rapidly and by reporting what has occurred, as soon after an event as possible, there may be less loss of information. Schwarz (1999) noted that reports become less accurate as time passes, and Eich (1995) reported changes in memory due to changes in mood that occurred over time. Consequently, if the time between an event and the recording of the event is kept short, there is less room for error due to memory problems.

The third guideline suggests focusing on specific moments instead of allowing for generalizations. When a person begins to speak of how an event generally occurs, the individual is no longer talking about what has already occurred at any given moment but instead is reconstructing the moment. There are a myriad of factors that may influence the generalizations we develop about our inner experience, including cultural and social influences, and expectations and beliefs. Therefore, explorations of inner experience are best limited to what has occurred at a specific moment while avoiding conjecturing about what has generally occurred.

The fourth guideline suggests keeping the exploration of inner experience to moments that are as short as possible. Just as memory degrades over time, there is also a limit to what can be stored. It is more difficult to remember the full details of
an event when the event takes place over a longer period of time. Keeping the moment being explored as brief as possible minimizes the likelihood that information will be lost due to memory overload.

The fifth and final guideline advises that introspection should be conducted in the natural environment and during typical daily activities. By sampling during normal activities, both ecological validity and generalizability are increased. Hence, the researcher is more likely to gain a realistic picture of what naturally occurs in the inner experience.

Methods Used to Explore Inner Experience

Parks and Hollon (1988) identified eight methods that have been used to explore inner experience: Thinking Aloud, Private Speech, Articulated Thoughts, Production Method, Endorsement, Thought Listing, Event Recording, and Thought Sampling. The last method, Thought Sampling, can be divided into two main methods: Experience Sampling Methods (ESM) and Descriptive Experience Sampling (DES). All of these methods have both advantages and disadvantages that relate to the concerns described previously, and each of these methods can be used to explore the inner experience of depression. Several of these processes overlap methodologically, and it can sometimes be difficult to clearly differentiate between approaches.

Thinking Aloud

One method used to explore inner experiences discussed by Parks and Hollon (1988) is Thinking Aloud. With this method, participants are asked to voice their thoughts as they occur during some task. This method is similar to Free
Association, a method by which an individual says whatever comes to mind (Parks & Hollon, 1988). When Beck was first developing his theory of depression, he used a derivation of this method that involved simply asking patients to report what they were thinking (Beck, 1991). It is important to note, however, that Beck’s subsequent treatment methods do not fall under the category of Thinking Aloud.

An advantage of the Thinking Aloud method is that it does not rely on recall (Haaga, 1997). Instead, individuals are asked to relate simply what is being thought as the cognition occurs. They are not required to store thoughts for later report, thereby eliminating the need for recall.

A second advantage of using the Thinking Aloud method is that it is open-ended (Clark, 1997; Davison, Vogel, & Coffman, 1997). The researcher does not ask the individual a specific question about the thoughts, but instead allows the person to verbalize freely what is being thought. This method thus avoids any restrictive form with regard to how information is gathered.

There are, however, three disadvantages to using the Thinking Aloud method. The first disadvantage is that the process can seem unusual or atypical to the person (Parks & Hollon, 1988). This may result in an aberration in the sample of thoughts collected. Individuals may present cognitions that may deviate from what normally transpires.

A second disadvantage of Thinking Aloud is that the person may not be able to state thoughts that occur simultaneously. This means that only a portion of all cognitions present may be verbalized. In addition, the person may not be able to
report all of the details of one particularly complex thought. This could produce an incomplete picture of the individual's inner experience.

A third disadvantage of Thinking Aloud is that participants may not honestly report what is being thought (Parks & Hollon, 1988). This may be due in part to demand characteristics. Individuals may attempt to report what they believe the researcher is interested in instead of giving an accurate representation of their inner states. It is also feasible that individuals may not relate their inner states accurately for any of the reasons listed above.

**Private Speech**

Another method reviewed by Parks and Hollon (1988) was labeled Private Speech and involves individuals speaking at barely audible levels to themselves. This technique has usually been used with children. It was thought that just audible speech is a direct reflection of inner thoughts (Parks & Hollon, 1988). Private Speech is very similar to Thinking Aloud, and some reviews of methods couple the two (Davison, Vogel, & Coffman, 1997). One difference between the two is that with the Thinking Aloud method, the thoughts are vocalized at the request of the experimenter, whereas with Private Speech, the thoughts are verbalized naturally or without prompt.

This method has been used primarily in educational research and settings (Davison, Vogel, & Coffman, 1997). Research has tended to focus on specific issues related to education such as attention and reading comprehension (Davison, Vogel, & Coffman, 1997). It does not appear that this method has been used with adults experiencing depression in order to examine inner experiences.
Private Speech has a number of advantages. the first of which is that it is not
limited by issues of recall (Clark, 1997). Within this method, the individuals speak
aloud and to themselves without any constraints. Whatever they want to say is said
immediately. There is no delay between the occurrence of a thought and the recall
of that thought.

A second advantage is that Private Speech in not a restrictive process (Clark.
1997). No limitations are placed on the individual about what to report. This is
another open-ended method that allows for the exploration of whatever thoughts are
present.

A third advantage of using Private Speech is that people should be honest in
their verbalizations. A key component of this method is that the speech is private.
If this were truly the case, then individuals would have less of a need to present
themselves falsely. Demand characteristics and purposeful deception become less
likely.

Due to the similar nature of Private Speech and Thinking Aloud, the two
methods share a disadvantage. The individual may not be able to voice all thoughts
experienced at the same time. It may be difficult to tell if the thought presented is
one of many, and it may be impossible to then note any relation of co-occurring
thoughts.

Articulated Thoughts

In the Articulated Thoughts method (Parks & Hollon, 1988) the individual is
placed in an imagined situation and the participant is then asked to report any
thoughts experienced during that circumstance. Typically, the reported thoughts are analyzed for content and themes (Parks & Hollon, 1988).

One study using the Articulated Thoughts method examined both individuals with depression and individuals with other forms of psychopathology. White, Davison, Haaga, and White (1992) reported that when participants were presented with a negative simulated situation, the individuals who had been diagnosed with depression showed a greater tendency toward the cognitive biases presented in Beck's theory (Beck, Rush, Shaw, & Emery, 1979) than those individuals diagnosed with other disorders. This study reported on only one possible aspect of an individual's inner experience, cognitive distortions.

The Articulated Thoughts method has two main advantages. The first is that the process is open-ended (Haaga, 1997). The researcher does not request a certain type of thought, nor does the researcher ask for a specific form of the thought other than the thought to be verbalized. Because of this, there is a reduced chance of researcher bias.

The second advantage is that this method does not rely on recall (Haaga, 1997). Participants report thoughts as they have them and, therefore, do not have to rely on memory. This issue would only be a disadvantage if the individual were asked to describe thoughts after the event and not during the event.

There are three disadvantages to using this method. The first is that the scenario used to elicit the thoughts is not real. The participants are requested to imagine a scene and then report what they believe they might think if truly in that
situation. The reported thoughts are then not an accurate representation of the person's inner experience, but a conjectured representation.

A second disadvantage when using Articulated Thoughts is the representativeness of the report. By choosing the scenario, the researcher may in turn bias the resulting data. Demand characteristics are also at issue. The participants may report the thoughts they would like to have in the imagined scenario instead of the actual thoughts they would have.

A final disadvantage of the Articulated Thoughts method is that it is an incomplete method (Haaga, 1997). Research using this method has been limited to date, and a complete method of coding the elicited thoughts has not been developed (Haaga, 1997). The method is not standardized, but developers are working toward that aim (Haaga, 1997).

Production Method

In the Production Method (Parks & Hollon, 1988), like the Articulated Thoughts method, the individual is placed in a situation, but this time the circumstances are real and not imagined. This could be considered an in vivo methodology. The participant is again asked to report any thoughts experienced during the event. The Production Method varies slightly from Thinking Aloud. Generally, Thinking Aloud is used while completing a task such as problem solving, and the Production Method is used in a greater variety of situations. Although the methods are similar, Thinking Aloud involves voicing thoughts during a specified task, Articulated Thoughts involves voicing thoughts in an imagined situation, and Production Method involves voicing thoughts in a real life situation.
The two advantages of using the Production Method are the same as the advantages of using Articulated Thoughts. First, the Production Method does not rely on memory as thoughts are reported as they occur. Second, the method is also open-ended in the sense that no specific restrictions, such as content, are placed on the requested thought.

The disadvantages for this method are similar to the disadvantages listed for Articulated Thoughts. The first disadvantage involves the scenario used to elicit the thoughts in question. In the Production Method, the situation is not imagined but is real. While this may be seen as an improvement, the participant is still placed in the scene and so the circumstances remain contrived. Individuals know that they are in a created reality and, therefore, the reports of inner experience may still be biased or incomplete. There is added realism with the Production Method, but the individual is not actually in a truly natural setting.

A second disadvantage with the Production Method is genuineness of report. Just as with Articulated Thoughts, both experimenter and participant biases may be present. Adding the in vivo aspect does not eliminate this issue.

**Endorsement Methods**

The Endorsement Method (Parks & Hollon, 1988) includes all questionnaires, scales, and checklists. Endorsement Methods are typically structured instruments tailored to a specific subject matter such a particular disorder or personality trait. Individuals might indicate if a thought had occurred or rate the frequency of a thought (Glass & Arnkoff, 1997).
There are numerous specific Endorsement Methods, and a complete review of all of these is beyond the scope of this paper. Four will be reviewed here with a focus placed on the most common or most widely used Endorsement Methods with depression.

The most frequently used Endorsement Method with depression is the Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) and Beck Depression Inventory II (Beck, Steer, & Brown, 1996). The BDI-II is used in this study. The BDI-II consists of 21 items that are each rated on a 0-3 scale. The BDI has been used to assess for cognitions related to depression in both clinical and normal populations, and reflects Beck's conceptualization of depression (Groth-Marnat, 1999). The BDI has been shown to be as effective as full-length interviews in diagnosing depression (Groth-Marnat, 1999). Analysis of both reliability and validity of the BDI have been favorable (Groth-Marnat, 1999).

A second commonly used Endorsement Method is the Automatic Thoughts Questionnaire (ATQ, Glass & Arnkoff, 1997). The ATQ is a measure formulated to assess the frequency of negative and positive automatic thoughts (Hollon & Kendall, 1980). The primary use of the ATQ is to differentiate depression from lack of depression (Glass & Arnkoff, 1997). The ATQ has a positive and a negative scale (ATQ-P and ATQ-N), with 30 negative statements on the negative scale and 10 positive statements on the positive scale. The statements are rated on a 1-5 scale (from "never" to "all the time") of occurrence over the previous week. The ATQ is a measure of frequency of negative and positive thoughts. Scores on the ATQ have been shown to differ for clinical patients with depression versus patients without
depression, and formerly depressed and nondepressed patients did not differ on the ATQ (Glass & Arnkoff, 1997). This indicates that the ATQ may be useful in diagnosing depression and determining cessation of depression, but there is no support for the idea that it captures the internal state of the patient at any given time. It appears to be a global assessment of depression. Additionally, the ATQ may be confounded as it measures both high trait anxiety and depression (Glass & Arnkoff, 1997).

The Cognition Checklist (CCL; Beck, Brown, Steer, Eidelson, & Riskind, 1987) is another popular example of the Endorsement Method (Glass & Arnkoff, 1997). The CCL is a 26 item self-report measure. It consists of 2 scales (14 items for the Depression Scale and 12 items for the Anxiety Scale). It is used to assess the frequency of depressive cognitions and danger cognitions in depressed and anxious adults. The Depression Scale (CCLD), a subscale on the CCL, assesses negative thoughts about the self, the future, and experiences (Steer, Beck, Clark, & Beck, 1994). The CCLD correlated positively with the BDI and the revised Hamilton Psychiatric Rating Scale for Depression (HRSD-R), another commonly used scale for depression (Steer et al., 1994). Discriminate validity was reported between the CCLD and the Anxiety Scale (CCLA), but discriminate validity has not been examined with any other measures. Glass and Arnkoff (1997) reported only a moderate correlation of clinician's ratings of depression with the CCLD. Again, it appears that the CCLD is an appropriate measure of depressive symptoms in general, but the research does not speak to its relevance to specific internal states.
Its primary use is to discriminate between anxiety and depression, not to describe the inner experience of anxiety or depression.

The Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988) is a measure designed to assess the degree of negative and positive affect. The PANAS is a 20-item measure consisting of 2 scales (Positive Affect Scale and Negative Affect Scale) of 10 questions each. Participants rate different items on a 5-point scale (1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, and 5 = extremely) of how they have felt over the past few days or past week. Items on the Negative Affect Scale include various adjectives such as afraid, nervous, jittery, blue, lonely, angry, scornful, guilty, etc… (Bagozzi, 1993; Jolly, et al., 1994).

Different results have been reported as to its effectiveness in assessing negative and positive affect. Bagozzi (1993) indicated that poor support exists for convergent validity of negative affect when self- and peer-reports were compared. It was reported that the scores on the PANAS as completed by the patient and verbal reports by observers did not match. On the other hand, Jolly, Dyck, Kramer. and Wherry (1994) reported that the PANAS had good convergent validity with Beck’s Depression Inventory (BDI) and depressive symptoms in general. This conflicting information seems to indicate that the PANAS is not a sufficient measure of a person’s inner state, but may be a good indicator of the individual matching diagnostic criteria of depression. The PANAS may lend itself to a more global indication of dysfunction without describing a person’s experience of that depression.
There are three general advantages to Endorsement Methods. The primary advantage is ease of use (Haaga, 1997; Glass & Arnkoff, 1997). Checklists and questionnaires tend to be short, standardized, and easy to score. They can be used in various settings and at multiple times. Most do not require a trained administrator. Endorsement Methods are perhaps the most convenient of all of the methods.

A second advantage is high discriminant validity (Haaga, 1997). It is easier to examine the psychometric properties of questionnaires and checklists than with the other methods described. In general, most Endorsement Methods tend to be well validated.

A third advantage of using Endorsement Methods is that researchers can accrue normative data (Glass & Arnkoff, 1997). As these methods are easy to use and quick to administer, it is possible to use them with large numbers of participants. This aids the process of examining psychometric properties and establishing baselines and norms.

There are four disadvantages to using these methods. The first is that Endorsement Methods are vulnerable to issues of demand characteristics (Haaga, 1997; Glass & Arnkoff, 1997; Parks & Hollon, 1988). Participants may respond to a presented item for any number of reasons that may not include actually having the thought (Haaga, 1997). Clients may also respond in a way they believe they should instead of in a way that corresponds to their actual experience (Glass & Arnkoff, 1997). Social desirability is another component of demand characteristics that can be problematic for this method (Haaga, 1997).
A second disadvantage is the reliance on recall (Haaga, 1997; Glass & Arnkoff, 1997). Endorsement Methods often ask individuals to rate thoughts or feelings that have occurred over a period of time, even as long as weeks or months. If people have difficulty reporting accurately on a thought that occurred five minutes ago, it is highly unlikely that they will be able to report on a thought that happened a week ago (Schwarz, 1999).

The potential influence of Mood Dependent Memory is the third disadvantage for Endorsement Methods. As the length of time between events and recall increases, there is an increasing chance that mood will change. Additionally, Endorsement Methods often ask respondents to characterize moods over extended periods rather than asking the individual to report on their mood at a specific point in time. This type of general characterization of mood is highly prone to bias of mood at the time of recording (Eich, 1995).

A fourth disadvantage with Endorsement Methods is that the questions restrict the range of possible answers (Glass & Arnkoff, 1997). For example, on a checklist, an individual may be given 30 words to endorse or rate. It is possible that those 30 words do not constitute a complete realm of possibilities of that individual’s inner experience. Instead, only a subset of possible thoughts or feelings can be assessed at any one time with any particular Endorsement Method.

**Thought Listing**

In Thought Listing (Parks & Hollon, 1988, Haaga, 1997), individuals write down, immediately following an event, all of the relevant thoughts they recall having during that event. The event may have been a role-play, an interaction, a
specified problem area, or any other stimulus. Thought listing is not a continuous list of thoughts, but summarizes only those thoughts relevant to the event at hand.

In order to assess thoughts and feelings during the therapy process, Beck and his colleagues (1979) developed the Daily Record of Dysfunctional Thoughts (DRDT). This is a form of Thought Listing. On the DRDT, the individual writes down related thoughts and feelings concerning a problem area. This recording is supposed to happen immediately following the occurrence of distorted thoughts or negative feelings. Burns (1999) developed a similar record to Beck called the Triple Column Technique, and both are intended for use of examining distorted thinking. Although these methods can be used to explore thoughts and feelings, the focus is on distorted thoughts.

There are two advantages to using the Thought Listing method. The first advantage is that Mood Dependant Memory (Eich, 1995) is minimized to the extent that the recording occurs immediately after an event. While there is reliance on recall in that the participant reports thoughts after an event has occurred, minimizing the time between the thought occurrences and recall, decreases the likelihood that mood will have changed and thereby change the memory of the thoughts.

A second advantage of the Thought Listing method is that it tends to be an open-ended method. The participant is free to record the thoughts that occurred without restrictions and is encouraged to relate both cognition and affect. This allows for a more complete picture of the distorted thought and feeling that actually occurred.
There are, however, two main disadvantages to the Thought Listing method. While this process is less reliant on memory than other methods such as the Endorsement Methods, memory is still an issue. Participants are asked to take note of thoughts after both an event and the thoughts have occurred. It is not clear how long of a period of time is to be recorded, but as that amount of time increases, the likelihood of accurate recall decreases. For example, if a person is asked to relate all of the thoughts that occurred during a five-minute period, it is doubtful that the person will be able to list all thoughts that were present (Schwarz, 1999).

A second disadvantage of Thought Listing is one that is similar to a disadvantage of both Articulated Thoughts and Production Method. Although the stimulus may be a naturally occurring event, the stimulus is often provided to the participant in the form of a role-play or contrived interaction. Both experimenter and participant biases are, therefore, more likely to occur.

Event Recording

In Event Recording (Parks & Hollon, 1988) a person is asked to wait for a specific event to occur and then to write down any thoughts that occur in relation to the event. An alternative method of Event Recording is to have the person imagine that an event has happened and then describe their thoughts related to this imagined event. This second version is similar in nature to Articulated Thoughts.

Event Recording is used typically to examine specific behaviors such as binge eating or smoking (Foster, Laverty-Finch, Gizzo, & Osantowski, 1999). Thoughts and feelings are often only recorded in relation to that behavior, keeping the focus on the behavioral response. An exception to this is Langston's (1994)
examination of positive events. Langston (1994) studied college students and their
responses to positive events using Event Recording in the form of a diary. Langston
found that when the participants were aware of a positive event occurring and
capitalized on that event, mood was elevated temporarily. The participants were
not, however, chosen for having symptoms of depression, and the focus of the study
was the impact of positive events on mood. This does not provide an account of the
inner experience of individuals experiencing depression. To our knowledge, this
method has not been used to examine depression.

The advantages of Event Recording are twofold. First, the researcher can
look at inner experiences at specific times. By waiting for a specific event, the
researcher can examine thoughts associated with a particular stimulus. In this way,
if the researcher were interested in thoughts related to a particular event, only
thoughts that occur with that event would be recorded.

Second, there is less reliance on memory. The participant records thoughts
that occur immediately after the event occurs. This results in a shorter time between
the thoughts taking place and recall of those thoughts. Again, as the encoding-recall
period is short, this method is less prone to bias from Mood Dependent Memory
(Eich, 1995) and other memory-related problems.

There are three main disadvantages to using Event Recording. The first
disadvantage is that the event must occur. Depending on the normal frequency of
the event, this process could be extremely time consuming. If the event in question
does not occur with much frequency, the researcher may be tempted to have the
participant imagine the event instead. This brings in the additional disadvantages of
researcher and participant bias as discussed in Articulated Thoughts and Production Method. The researcher bias can be seen in the creation of the contrived event, and the participant bias can be seen in the response to the created event. Neither may follow what would happen in a real situation.

A second disadvantage is that if an extended period of time is assessed, individuals may not be able to recall all pertinent thoughts (Schwarz, 1999).

The third disadvantage is the genuineness of the report. As the thoughts assessed relate to a specific event, and the researcher chooses that event, experimenter biases may come into play. For example, demand characteristics may lead participants to report what they believe their thoughts should be in relation to the chosen event.

**Thought Sampling**

The final category presented by Parks and Hollon (1988) was Thought Sampling. Thought Sampling can be divided into two subcategories: Experience Sampling Method (ESM) and Descriptive Experience Sampling (DES: Hurlburt, 1997). Each is discussed in turn.

**Experience Sampling Method (ESM)**

The Experience Sampling Method (ESM) is used to examine “what people do, feel, and think during their daily lives” (Larson & Csikszentmihalyi, 1983, p. 41). ESM was developed in 1975 by Csikszentmihalyi in order to look at the inner experiences of individuals in the natural environment and to examine the characteristics of thinking (Hurlburt, 1997). In order to do so, participants are required to wear a beeping device during their normal daily activities. This beeping
device is designed to sound at programmed intervals cueing the individual to
examine the inner state that has occurred at the moment immediately prior to the
beep. At this time, participants record various features of this inner state (Larson &
Csikszentmihalyi, 1983). Each participant is provided with a structured form on
which to record specific aspects of each inner state.

ESM studies that focus on depression tend to include participants that have
both depression and anxiety and not depression alone. For example, de Vries,
Dijkman-Caes, and Delespaul (1990; de Vries, Delespaul & Dijkman-Caes, 1992)
studied comorbidity of anxiety and depression in the daily lives of individuals.
Participants were chosen who had complaints of both depression and anxiety and
were divided into two groups: high-anxiety/moderate-depression and high-
anxiety/high-depression. De Vries, Dijkman-Caes, and Delespaul (1990; de Vries,
Delespaul & Dijkman-Caes, 1992) reported that the group with high-anxiety/high-
depression had more idle thoughts, they had ruminated more, and they had fewer
focused thoughts in public. They also had more self-care thoughts, and they had
less care of and involvement with others. Overall, the high-anxiety/high-depression
group was found to be less active and more isolated. Although differences were
found between these two groups, it is not clear what impact the presence of anxiety
had on these results, and therefore, a clear picture of the inner experience of
depression was not available from this study.

Swendsen (1997, 1998) used ESM to examine the Helplessness-
Hopelessness etiological theory of depression in relation to daily mood experiences.
The Helplessness-Hopelessness Theory includes anxiety as a common precursor of
Helplessness-Hopelessness depression. The purpose of the study was to examine individuals, to elicit their reactions to negative events that occurred in daily life, and to rate both anxiety and depression. Participants were undergraduate students and were considered a normal, non-disordered sample. They were sampled for a week and provided the researcher with reports of negative events, thoughts, anxiety, and depression. Swendsen (1997, 1998) indicated that an individual's causal attributions about a negative event had an effect on that person's self-report of inner states of depression. If a negative event was seen as more stable and global, participants reported increased depression. Just as with the studies completed by de Vries, Dijkman-Caes, and Delespaul (1990; de Vries, Delespaul & Dijkman-Caes, 1992), Swendsen did not provide a clear look at the inner experience of depression but instead focused on participants' reports of both anxiety and depression.

The majority of ESM research that has examined depression alone has not included participants actually experiencing clinical depression. Most researchers, instead, included individuals chosen because of other factors. Measures of some aspect of depression were added later as a secondary point of interest. For example, Swendsen, Tennen, Carney, Affleck, Willard, & Hromi (2000) chose individuals based on alcohol consumption and had them rate drinking, daily moods, and overall levels of depression. Fichman, Koestner, Suroff, and Gordon (1999) examined depressive personality styles and ability to change moods in a normal, non-disordered population. Emmons and King (1988) explored personal goals, using ESM to assess positive and negative thoughts in a normal population. None of these studies involved a specific examination of the inner experience of depression.
One study presented by Barge-Schaapveld, Nicolson, van der Hoop, and de Vries did utilize participants diagnosed with depression (1995). The purpose of the study was to demonstrate changes in individuals' daily activities and negative affect over time when treated with antidepressants. ESM was used for a week prior to administration of anti-depressant medications and during the sixth week of administration of medications. Mood was assessed with 14 items and mental state was assessed with two items, all rated on a seven-point Likert scale. Those who responded well to medication reported greater increases in daily activities and greater increases in positive affect than those who did not respond well to medication. Whereas this study had a stronger focus on the inner state of individuals experiencing depression than other research, the scope was still rather narrow in that they reviewed limited aspects of the inner experience of depression and restricted participants to rating a short list of adjectives. There was, perhaps, more to the inner experience of depression than daily activity and positive or negative affect.

In conclusion, there are many studies that have utilized the ESM methodology. Some of these studies used participants chosen based on signs and symptoms of depression. Other studies explored depression as it related to additional issues and states. There were not, however, any studies that attempted to explore the inner experience of depression with individuals specifically experiencing clinical depression. Typical ESM research assumed an understanding of a person's experience of depression, typically matching DSM-IV criteria, and, therefore, did not attempt to explore depression further.
Just as with the previous methods described, ESM has its own set of advantages and disadvantages. One advantage of ESM is that it minimizes the likelihood of problems occurring due to difficulties with memory. Specifically, ESM involves examining moments that are short and the evaluation of these moments occurs immediately after the beep. A combination of short moments and quick appraisal of moments helps to reduce the problems with encoding and recall discussed earlier. For this reason, the participant is provided with the structured form ahead of time and is asked to have it available at all times in case of a beeped moment occurring.

One disadvantage of ESM involves the potential of bias due to demand characteristics. By including specific questions about the research topic, such as rating a depressed mood on a seven-point Likert scale, the researcher may be cueing the participant to answer in a certain direction. All of the key ideas that the researcher is interested in are clearly laid out for the participant.

A second disadvantage relates to the characteristics of the structured form. The form used in ESM research constrains answers that could be given by the participant. For example, with regard to self-reports on physical states, only three choices are typically given – hungry, tired, and not feeling well. It is possible that a participant may have physically related concerns other than these. If participants are hot, they may not be “feeling well,” but this does not provide a clear picture of what was happening at the moment. The standard form does not allow room for variations or answers outside of the provided descriptors. These constraints on the
Descriptive Experience Sampling (DES)

Descriptive Experience Sampling (DES) (Hurlburt, 1990; 1993) evolved from Thought Sampling (Hurlburt, 1979). Random sampling was instrumental in demonstrating categorical groupings of thoughts across individuals and over a variety of situations. These included Aggressive/Bad Mood, Pleasant/Sexual, Daydreaming/Past Sexual, Clear Thought, Thought and Mood Duration, and Self-Critical (Hurlburt, Lech, & Saltman, 1984). This was important in that the possibility of classification of thoughts in general was shown to be possible. Coding or classifying thoughts is an important characteristic of DES.

Like ESM, DES has been used to examine an individual’s inner experiences in the natural environment. As in the procedure employed with ESM, DES uses a beeper device to cue participants to attend to a specific moment. However, with DES participants are asked to capture the moment as they experience it by taking notes rather than by answering a predetermined list of questions.

Instead of turning in a completed structured form as with ESM studies, DES participants and researcher engage in a debriefing session designed to develop a complete understanding and description of the sampled moments. During this discussion, the researcher and participant review as many of the collected moments as possible. The participant is encouraged to describe his or her inner experience at the cued moment and the researcher asks questions to help the participant explain the experience as fully as possible. Unlike ESM, no written forms are provided with
descriptors for the participant to rate. DES has been used to explore what is present in the moment without predetermined limitations imposed by what the researcher believes might be present. The goal is to develop as clear an understanding as possible of the participant's inner experience during the moments in question. It is then possible to then code those moments (Hurlburt & Heavey, 1999) in order to compare across individuals.

A review of previous research using DES uncovered only one study that has examined the inner state of individuals who are experiencing depression. Hurlburt (1993) examined four people with moods including hypomania, normal, and depressed. Each of the participants was sampled during various moods in order to provide a mixed design of between and within participants. The purpose of the study was to explore the inner experience of these individuals in their natural setting. A number of results were found with regard to the form that characterized the individuals' thoughts. Un symbolized thinking, that is, thoughts that are not accompanied by a symbolic representation, increased during periods of depression. Conversely, the frequency of specific words or specific images decreased with level of depression. Furthermore, the clarity of those images decreased as depression increased. People with depression also had difficulty "discriminating perceptual description from conceptual description" (Hurlburt, 1993, p. 106). For example, a person reported hearing a sound when sound was never present in an auditory manner but may have been represented by visual words. The individual might have heard the word "hello," no sound was present, and the word "hello" was seen mentally, almost as if the person were seeing sound. Whereas this research was
promising with regard to showing differences in the inner experience of people with depression, the small sample size of four people, not all of whom were depressed, merits further exploration of the topic.

One advantage of using DES is that by not using a standard form, DES attempts to maintain a more open position regarding what the nature of inner experience will be. Not limiting or constraining the information that is gathered from the participant may allow the researcher to gain a more complete picture of the inner experience of the individual.

Another advantage of using DES involves the non-retrospective nature of the method. With DES, just as with ESM, keeping moments as short as possible and recording them immediately following the beep helps minimize bias due to difficulties with memory. DES attempts to keep the moment assessed as brief as possible, and in a DES study, the participant is provided with a notebook that can be kept readily available and which is used to record the beeped moment.

A third advantage of DES is ecological validity (Haaga, 1997). The participant is sampled randomly in his or her natural environment. By using random sampling in the natural environment, there is a better chance of achieving a representative sample of an individual's typical inner experience.

One disadvantage relates to demand characteristics. With some DES studies, participants are chosen for certain criteria. For example, in a study of depression, individuals experiencing depression are selected and informed that the purpose of the study is to examine the inner states of people experiencing depression. Knowing this, it is possible that some individuals may attempt to bias
their responses in a way that would be compatible with typical views of depression. However, precautions are taken to help to minimize this issue. Participants are encouraged to describe each experience as it occurred. The researcher attempts to maintain an open demeanor and request a genuine account of the moment.

**Best Overall Method**

Considering the advantages and disadvantages of each of the eight methods presented by Parks and Hollon and (1988) and the guidelines suggested by Hurlburt and Heavey (2001), Descriptive Experience Sampling (DES) appears to be the best method to use in the exploration of the inner experience of depression. DES as a procedure utilizes a skeptical stance. It is a nonretrospective method that focuses on specific, short moments as they occur in the person's natural environment. This translates to a more open stance regarding the subject matter, less reliance on memory, and increased ecological validity. The issue of demand characteristics is taken into consideration and addressed. Whereas other self-report methods may share some of the same advantages, DES appears to be the best method overall for exploring inner experience.

**The Present Study**

In the present study, the inner experiences of three people identified as being depressed and five people identified as not being depressed were explored. Participants were categorized initially using the SCL-90-R. The Descriptive Experience Sampling method (Hurlburt, 1990) was used to explore inner experience. Participants were given the Beck's Depression Inventory II both prior to and after completing the sampling procedure. Participants were given a device...
programmed to beep randomly during an interval ranging from immediate to 60 minutes. Participants were instructed to try to capture everything that was in their awareness at the moment immediately at onset of the beep. They were given a notebook to in which they could make notes that would help them recall what was in their awareness at the moment of the beep during the debriefing meeting. The participants and the investigators then met within 24 hours of the sampling session to review the samples collected. Summaries were created for each sampling session and for each participant. The overall participant summaries were then compared for common characteristics. There were no initial hypotheses.
CHAPTER 2

METHOD

The present study consisted of two phases. Phase I (questionnaire phase) involved screening and included a questionnaire. Participants completed a self-report measure designed to examine clinical symptoms. Phase I was used to screen and enlist participants with self-reported symptoms of depression and participants with no self-reported symptoms of depression for Phase II. Phase II (sampling phase) involved the investigation of the inner experiences of the participants using the Descriptive Experience Sampling method (DES, Hurlburt, 1990: 1993).

Participants

Phase I included 207 undergraduate volunteers from various psychology courses. All participants received research participation credit for their class after completing the questionnaire. Of the 207 students, 10 were asked to participate in Phase II, and eight agreed to do so. Two people were asked to participate but declined. In addition to the 10 students, one participant was recruited from a local psychologist. She did not participate in Phase I, but the psychologist had previously diagnosed her as having major depression. Her participation was also voluntary.

Materials and Apparatus

The 207 participants completing Phase I were given the Symptom Checklist-90-Revised (SCL-90-R, Derogatis, 1994). The checklist consisted of 90 symptoms
with distress over the past seven days rated on the scale of “Not at all (0)” to “Extremely (4).” The individual ratings can be assigned to scales within the checklist, and the scale of interest for this study was the depression scale, consisting of 13 questions. Internal consistency of the depression scale was reported as .90 in two studies (Derogatis, 1994). Test-retest reliability for the depression scale was reported as .75 and .82 in two studies (Derogatis, 1994). Samples of the statements rated on the depression scale include “Feeling low in energy or slowed down.” “Crying easily.” and “Feelings of worthlessness.” Participants also completed a consent form, were asked if they would be willing to participate in further research, and were asked for contact information.

Participants in Phase II were provided with a pocket-sized random-interval producing beeper device, with an earpiece. It was possible for participants to carry the beeper in a pocket and run the earpiece under the shirt in order to make the apparatus as unobtrusive as possible. The beeper was programmed to sound randomly approximately twice an hour, with a range of a couple of seconds to an hour. Participants were shown how to turn the unit on and off, how to adjust the volume, and how to reset the beeper by pressing a button. Additionally, participants were given a small notebook in which to record notes about their inner experiences at each beep.

Beck’s Depression Inventory II (BDI-II) (Beck, Steer, & Brown, 1996) was used to measure depression on two occasions, both prior to and after the sampling process. The BDI is a 21-item questionnaire with a range of scores from 0-63. Participants rated a series of statements as being appropriate to them on a scale of 0-
3. Samples of three of the statements and subsequent ratings follow: “Punishment Feelings” (0 - I don't feel I am being punished. 1 - I feel I may be punished. 2 - I expect to be punished. 3 - I feel I am being punished.), “Crying” (0 - I don't cry anymore than I used to. 1 - I cry more than I used to. 2 - I cry over every little thing. 3 - I feel like crying, but I can't.), and “Loss of Energy” (0 - I have as much energy as ever. 1 - I have less energy than I used to have. 2 - I don't have enough energy to do very much. 3 - I don't have enough energy to do anything.). Internal consistency of the BDI-II ranged from .92 for outpatients to .93 for college students (Beck, Steer, & Brown, 1996). Test-retest reliability was reported as .93 (Beck, Steer, & Brown, 1996).

Included on the BDI-II were stickers printed with a Visual Analog Scale (VAS, Luria, 1975) consisting of an eight cm line anchored with a minus (-) on the left and a plus (+) on the right. The instructions for the VAS were to rate mood at the moment of the beep. The lines were readily available to the participant when taking notes about a beeped moment. Scores were taken by measuring from the left of the line to the participant’s mark and converted to a 10-point scale; hence, higher scores indicate better moods. The range of scores possible was 0-10. Test-retest reliability was reported as ranging from .73 to .91 after two hours and from .56 to .72 after 24 hours (Luria, 1975).

Procedure

Phase I

Phase I consisted of students signing up for the experiment and then answering the SCL-90-R in exchange for research participation credit. Students
were asked to fill out a consent form and provide contact information if they wished to participate in further research.

**Phase II**

Students were selected for the experimental group of Phase II based on having a T-score of at least two standard deviations above the mean ($T > 70$) on the Depression Subscale. Participants were selected for the control group of Phase II based on having a T-score near the mean ($T \pm 50$) on the Depression Subscale. Participants were contacted by phone and asked to participate in Phase II.

Nine people contributed to Phase II of the study. Five people were included in the control group. Initially, four individuals were placed in the depression group, but one individual was eliminated from the depression group. Although he had a high score (72) on the SCL-90-R depression subscale, his scores on the BDI-II for both pretest (9) and posttest (7) were in the "minimal" range for depressive symptoms. During this phase, DES was used to explore the inner experiences of the participants. Each person completed the process individually. This author and Christopher L. Heavey, Ph. D. carried out the procedure with all subjects except for three of the control participants. Russell T. Hurlburt, Ph. D. and Les Hutchins completed the sampling procedure with the three additional control group members identified as Carl, Chris, and Cathy.

During an initial interview, the DES procedure was explained to the participant. The beeper device was provided for the participant and demonstrated. Participants were asked to wear the beeper during a time of their choosing until six moments had been collected. To record the actual thought, participants were asked
to "freeze" the current experience "in mind" (Hurlburt, 1990, p. 21). The moment that was of interest was the briefest period just prior to the beep. Participants were asked to narrow this time down as much as possible and not report on what was occurring prior to this moment or after the beep itself. The idea was to "catch a thought in flight" (Hurlburt, 1990, p. 21). They then were asked to write enough notes in the provided notebook so they could recall the moment later, and how the participant did this writing was up to the individual.

After the procedures were fully explained, each participant signed a form indicating their consent to participate. Agreement to participate was discussed with each participant. It was explained that participants could refuse to continue to participate at any time. Additionally, if there were any particular thoughts that the individual did not wish to share, he or she was asked to simply report that the thought was private. The participants were also asked to complete the BDI-II and rank their mood on the VAS at this time.

Debriefing sessions occurred the same day or the day following the sampling sessions, and they lasted approximately an hour. The objective for each debriefing session was to come to as clear of an understanding as possible about the inner experience of the participant at the moments of the beeps. During some debriefing sessions, it was not always possible to review all six beeps due to time constraints. Each sampling-debriefing session was repeated until the researchers and participant agreed that a reasonable representation of the individual's inner experience had been described. At the end of the process, the participant was again asked to complete
the BDI-II and rate mood on the VAS. Participants were paid 10 dollars for each
debriefing session with a 20-dollar bonus at completion.

The individual moments were summarized and then evaluated for dominant
characteristics and patterns. The summary of each individual beep was based off of
a set of codes developed by Hurlburt and Heavey (1999). These codes included
Inner Speech, Partially Worded Speech, Unworded Speech, Worded Thinking,
Image, Imageless Seeing, Unsymbolized Thinking, Inner Hearing, Feeling, Sensory
Awareness. Just Doing, Just Talking, Just Listening, Just Reading, Just Watching
TV, and Multiple Awareness. Only the codes present in the samples in this study
were used. If in an individual moment both a negative and a positive feeling were
present, both distinctions were given. Moreover, it was noted if an individual
tended to be critical of self or others as an added characteristic, but this was not
included as a specific code.

After each individual beep was summarized and coded, overall summaries
were created for each participant, and both experimenters present during the
sampling sessions reviewed each summary. The overall summaries were
subsequently compared between the participants and between the groups for global
patterns and characteristics.
CHAPTER 3

RESULTS

What follows are descriptions of each of the participants. The members of the control group are presented first and are followed by the depression group. All five of the control group members are identified by names beginning with “C,” and the depression group members are denoted by names beginning with “D.” Included for each participant is a description of the person, a report of the experimental process for that individual, a listing of overall codes, an account of each of the forms of experiences related by the individual with examples, and an overall summary. It is important to note that the examples provided under each type of inner experience are not necessarily pure, in that multiple codes might exist for the exemplified moment. Therefore, parenthetical notation was used to denote all codes in the samples presented. Furthermore, any clearly identifiable information about the individuals was changed to protect confidentiality.

Control 1 – Connie

Connie was a 19-year-old Caucasian female. She was a sophomore majoring in sociology at UNLV. She was single but had been in a relationship for three years at time of sampling. Her boyfriend lived in Utah, and she described her relationship as good. She had been doing well in school until the start of her sophomore year and was on the Dean’s list her freshman year. Her grades went
down last semester. She had moved out of the dorms, missed her home and family, had trouble focusing on school, and described herself as somewhat depressed. She moved back into the dorms this semester and felt better able to concentrate on school. She described herself as a strong person. Her brother also attended UNLV, and she had a good bond with her family overall. She denied any past treatment for mental health reasons and denied any medical problems.

She participated in Phase I (questionnaire phase) of the study and received a t-score of 50 on the Depression Subscale of the SCL-90-R, thus qualifying her to be a member of the control group for Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was one, in the "minimal" range of depressive symptoms, and her posttest score was zero, also in the "minimal" range. Her pretest VAS score was 9.3 and posttest was 9.4.

Connie completed four days of sampling over a two-week period. She appeared to learn the sampling process easily, and was friendly and open during the discussion sessions that followed her sampling sessions. She was able to respond to all of the 24 beeps she received during that time. We agreed to stop sampling after the fourth session, as we all felt that we had enough samples to describe Connie's inner experience at that time.

Connie's inner experience contained the following characteristics. She had nine (38%) samples with unsymbolized thinking, six (25%) samples with sensory awareness, five (21%) samples with feelings (60% of which were positive and 40% of which were negative), five (21%) samples with inner speech, three (13%)
samples with just listening, two (8%) samples with images, two (8%) samples with just watching television, and one (4%) sample with imageless seeing.

**Unsymbolized Thinking**

Connie described unsymbolized thinking in nine (38%) samples. Samples #2 and #18 provided typical examples. In sample #2, Connie was reaching into a bag of chips thinking how much she would enjoy eating them. She was in a hotel room with the radio and television on, but she was concentrating on the bag. She was looking at the bag and thinking something like, “This is going to be so good,” but no words were present (unsymbolized thinking). In sample #18, she was thinking about a luncheon she was going to attend the next day. She was appreciative that she did not have to eat at the dining commons. She was thinking this with no words and no images, and she was not aware of any feelings being present (unsymbolized thinking).

**Sensory Awareness**

Connie experienced sensory awareness in six (25%) samples. In sample #23, she was staring at the sink water while she was washing her hands. The water was flowing over her hands, and this was otherwise a blank moment. She was aware of the water, was noticing it, but had no other thoughts (sensory awareness).

**Feelings**

Connie had five (21%) samples with feelings in them, of which three (60%) of these were positive feelings, and two (40%) were negative feelings. An example of a positive feeling of contentment can be found in sample #4. She was staring at her boyfriend and thinking how sexy he was. At the moment of the beep, she was
saying out loud, "I think you're so sexy." She was feeling content and was enjoying the moment with no worries (feeling). She was smiling, and her smile captured her positive feeling. Sample #9 provides an illustration of a negative feeling of sadness, and also included unsymbolized thinking. Connie was sitting in the truck and looking at her boyfriend. She was concerned that her boyfriend was angry with her, but she was not sure why. She thought he might be angry, as he was sitting quietly and not talking. Thoughts of something being wrong were experienced mentally, but no specific words were present (unsymbolized thinking). She also felt sad that something was wrong and felt herself pouting (feeling).

**Inner Speech**

Five (21%) of the samples included inner speech. Sample #7 characterized Connie's experiences of inner speech. Connie was on her way to Lake Mead and Hoover Dam with her boyfriend. They were driving down the freeway in a truck when she saw a sign that read, "Gibson Street." She was aware of looking at the sign while thinking, "We need to get on that street." She was saying the words mentally with the same vocal qualities that she would have used if she had said the words aloud (inner speech).

**Just Listening**

Just listening occurred in three (13%) of the samples and can be illustrated by sample #24. Her friend looked at her and said, "You look like a fantasy line lady waiting for a phone call." Her friend added that she looked silly wearing the earpiece from the beeper and was in the middle of saying this to Connie. They were
in her room; she was listening to her friend, holding the beeper in her hand, and smiling (just listening). No pictures, feelings, or thoughts were present.

**Images**

Connie had images in two (8%) of the samples. In sample #22, she was balancing her checkbook and was thinking about the deposit she had just made. While she was writing the deposit into her checkbook, she was seeing a picture of herself in front of the ATM (image). The picture showed her putting the deposit into the machine. The point of view was from the left side of Connie, and she could see the envelope in her left hand going into the machine. The picture was in color and realistic. She pictured the same ATM she had been at earlier. There was no edge to the picture; it just faded out. She was saying the word "deposit" out loud.

**Just Watching Television**

Connie was just watching television in two (8%) of the samples. Sample #15 found Connie looking at the television and watching "Family Matters." No thought process was present. She was aware of what she was watching, and at the moment of the beep, a man was noticing a woman's dress on the show (just watching television).

**Imageless Seeing**

Imageless seeing occurred in only one (4%) of the samples. In sample #13, Connie was sitting at her desk tearing a piece of paper apart. She was shredding her review sheets from a test the day before. She was picturing herself in the classroom taking the test. There was something visual about this experience though she did
not have a clear visual image (imageless seeing). She was noting whether or not information from her review sheets was on the test but no words were present.

Summary

Connie collected 24 samples that included eight characteristics, including unsymbolized thinking, sensory awareness, feeling, inner speech, just listening, image, just watching television, and imageless seeing. Her inner experiences were varied but clear, and she was able to describe them easily. Connie had multiple experiences in eight (33%) samples, averaging 1.4 experiences per sample.

Control 2 – Carol

Carol was a 28-year-old Hispanic female. She was a senior majoring in criminal justice at UNLV. At time of sampling, she had been married for seven years and had two children, a three-year-old girl and a five-month-old boy. She described her marriage as good now. Her husband was out of work two years ago, and at that time she described the marriage as rough. She had attended UNLV in the past, dropped out, went to the community college to bring her grades up, then returned to UNLV again. She indicated that she was doing well in school now. Overall, her life was going well. Her husband had been recently promoted; she was able to stay home with her children, not work, and was able to finish school. She described her parents as being very religious, but she was not, and this did not appear to be a great source of conflict to her. She had three older brothers and a younger sister. She denied any past treatment for mental health reasons and denied any medical problems.
Carol participated in Phase I (questionnaire phase) of the study and received a t-score of 34 on the Depression Subscale of the SCL-90-R, thus qualifying her for the control group for Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was six, in the "minimal" range of depressive symptoms, and her posttest score was seven, also in the "minimal" range. Her pretest VAS score was 5.9 and posttest was 7.1.

Carol completed four days of sampling over a four-week period. She was friendly and open during the sessions, and she learned the process rapidly. She was able to respond to 21 of the beeps received during that time. We stopped sampling after the fourth session after all agreeing that enough samples had been accrued to describe her inner experience.

Carol's inner experience contained the following characteristics. She had 12 (57%) samples with images, eight (38%) samples with feelings (63% of which were positive and 37% of which were negative), seven (33%) samples with sensory awareness, seven (33%) samples with just doing, listening, talking, or reading, four (19%) samples with unsymbolized thinking, and one (5%) sample with inner speech.

Images

Carol had twelve (57%) samples with images. Samples #17, #18, and #19 provided examples of samples including images only. In sample #17, her professor was talking about airplane depreciation. She was visualizing the inside of an airplane and looking at it as if she were walking down the aisle (image). She saw the seats and the closed overhead compartments. There were no people on the
plane. It looked like a Southwest Airlines plane with three seats on each side. There was color and it was a realistic image. There was no specific edge; the picture just faded away. In sample #18, the professor was talking about smoothing a duck’s feathers. She visualized the professor holding a white duck and petting it (image). She saw more of the torso area of the duck and not the head. He was holding the duck and petting it from head to end on the left side. In sample #19, she was sitting before her next class started. She was looking at a handout and visualizing how to set it up on the computer (image). She was seeing the computer screen and the Excel worksheet.

Feelings

Eight (38%) samples included feelings, of which 63% were positive and 37% were negative. An example of a positive feeling of relief was found in sample #3. She was in another class, and the professor was talking about the midterm. She felt relieved because what the professor was saying was leading her to believe that the test would be easier than she had previously thought it would be (feeling). She was unable to describe fully her feeling of relief, but it concerned the thought, “I won’t have to study as hard. Won’t have to put in as much time.” She was just there in the moment, feeling relieved and taking notes. Sample #22 was another example of a positive feeling of happiness, contentment, and pride. She had taken her children to see the Easter bunny. They were standing in line. Her husband was holding the five-month-old son. The son was trying to kiss the father with a big open mouth, and the father was pulling away. She was feeling happy and content watching this and was laughing (feeling). She described the moment as very happy.
The father was playing and laughing with his son. She thought that it was nice to see them interacting, and she was proud that he would play with his son. There were no physical sensations. She felt an absence of anything and was totally in the moment.

Sample #1 exemplified a negative feeling of nervousness, apprehensiveness, and embarrassment. This sample also included an image. Carol was in the parking lot at school, had arrived late for class, and was gathering her belongings. She felt nervous, apprehensive, and had butterflies in her stomach (feeling). She had an overall uncomfortable feeling, and her stomach felt tight. All of her muscles were tense, especially in her shoulders and upper body. She indicated that her professor tended to be critical of latecomers, generally pointing them out as they walk into class. Because of this, she felt that she would be embarrassed when she walked into class, and she experienced this as if it were happening, including the emotions to come. It was like a snapshot or a mental image without sound (image).

**Sensory Awareness**

Seven (38%) of the samples had sensory awareness. Sample #11 illustrated sensory awareness in conjunction with an image. She was in class, the professor was lecturing, and she was taking notes. The classroom was very cold. She was picturing herself getting a jacket out of a closet (image). The image was from her point of view. She was actually grabbing a jacket in the image, but she did not remember a specific jacket, as the picture was not complete. She saw the portion of the closet where she was grabbing. She saw the inside of the dark closet only and no door. The picture was in color and unmoving. She was very aware of the
coldness and "felt it to the bone." She could not move her fingers, as it was so cold (sensory awareness). She was cold all over and felt the coldness on her skin and inside herself.

**Just Doing/Listening/Talking/Reading**

Carol was just doing, listening, or talking in seven (33%) of the samples. Sample #13 included a description of just listening. She was eating breakfast with her husband and talking to him about his business trip. She was focused on her husband talking about his trip times (just listening). She noted after the beep that she was feeling content and happy. Sample #14 included Carol just doing. She was getting her daughter dressed and ready to go. She was in her general routine of just getting her ready (just doing). She was not aware of any thoughts or emotions. At the beep, she was putting her daughter's shirt on. Sample #20 is an example of Carol just doing. She was driving to the mall with her husband and two children and talking with her daughter. At the beep, her daughter was talking about a stuffed alligator that was protecting her other toys at home. Carol was concentrating more on her driving than on listening to her daughter (just doing). Sample #16 provided an example of just reading and also included unsymbolized thinking. She was in class, and the professor was going over the homework assignment. She was looking at her notes and listening to the professor. She was getting ready to answer a question and was thinking how to answer the question in a nonspecific way (unsymbolized thinking). She was listening to the professor and reading her homework notes at the same time (just reading).
Unsymbolized Thinking

Unsymbolized thinking was characteristic of four (19%) of the samples. Sample #12 included unsymbolized thinking, sensory awareness, and an image. She was walking on the sidewalk and talking on a cellular phone to her husband. She had just been told some good news about his upcoming promotion, and she felt relieved. Her husband was talking at the moment of the beep. Her thought of relief was characterized by the idea, "Things are good for him, so they will be good for the family." This was a mental thought not a feeling (unsymbolized thinking). She experienced this as one less worry in her mind as if there were actually one fewer thing in her head. She felt an emptiness or lack of feeling. This was a good emptiness consisting of an absence of worry and tension (sensory awareness). She was picturing her husband on the phone at work (image). She saw him sitting in the office facing his computer with the phone to his ear. She was looking through what was his office wall in order to see him. All of the details in the picture were not present. She was focused on his face from the side.

Inner Speech

Only one (5%) sample included inner speech. In sample # 2, she was sitting in class and listening to a lecture. She was trying to pay attention to the professor and just listening. She was aware of being confused. "I hope I'm not the only one not getting this," was said in her head in her own voice, with all of the same qualities as if she said it out loud (inner speech).
Summary

Carol collected 21 samples that included six characteristics, including images, feelings, sensory awareness, just doing, listening, talking or reading, unsymbolized thinking, and inner speech. Carol had multiple experiences in 13 (62%) samples, averaging 1.9 experiences per sample. Her samples were fairly well balanced with the various characteristics, and she was clear in her presentation of them.

Control 3 – Carl

Carl was a 23-year-old Asian male. He came to UNLV from Michigan State where he had attended school for a year. He hated school there and was not pleased with the snow or living with his parents. He chose UNLV because his family comes here twice a year and would be able to visit. He worked in parks and recreation, but was hoping to go into teaching after he received his degree this semester. If he did not get a job, he might attend school as a graduate student. His friends would say that he is, “humorous and cocky,” which Carl corrected and said self-confident instead. He says “self-confident” because of his abilities and accomplishments in life. He thinks that he is an adventurous individual, which means that he travels and does a lot of out-of-doors activity.

Carl participated in Phase I (questionnaire phase) of the study and received a t-score of 54 on the Depression Subscale of the SCL-90-R, thus qualifying him to be a member of the control group for Phase II (sampling phase) of the study. He was given the BDI-II both before and after sampling. His pretest score was eight, in the
“minimal” range of depressive symptoms, and his posttest score was nine, also in 
the “minimal” range. His pretest VAS score was 9.1 and posttest was 4.4.

Carl completed five days of sampling over a two-week period. No problems 
were reported during the sampling sessions. He was able to respond to 29 beeps 
during that time. Sampling was stopped after the fifth session when it was agreed 
that enough samples had been gathered to describe his typical inner experience.

Carl’s inner experience contained the following characteristics. He had 15 
(52%) samples with inner speech, 13 (45%) samples with feelings (40% of which 
were positive feelings and 60% of which were negative feelings), eight (28%) 
samples with sensory awareness, seven (24%) samples with image, two (7%) 
samples with unsymbolized thinking, and one (3%) sample with inner hearing.

Inner Speech

Inner speech was found in 15 (52%) of the samples. Sample #25 included 
inner speech. At the moment of the beep, Carl’s boss was talking to him about 
sending an application. He was not attending to her, but instead was saying to 
himself in his mind and in his own voice, albeit in a lower tone, “I need to send my 
resume out” (inner speech). Sample #28 provided another example. A co-worker 
had called Carl’s name. At the moment of the beep he was saying, “What” in his 
mind and in his own voice and was in the process of looking up (inner speech).

Feeling

Thirteen (45%) of the samples had feelings, with 40% positive feelings and 
60% negative feelings. An example of a positive feeling of happiness and 
excitement can be found in sample #22. This sample also included unsymbolized
thinking. Carl was watching a computer monitor waiting for an email to come on the screen. He was thinking how good it would be when the sender came into town the next week without any specific elements (unsymbolized thinking). He was also experiencing feelings of happiness (feeling) and excitement in his mind and not his body.

Examples of negative feelings were shown in samples #1 and #15. In sample #1, a feeling of frustration was described. Carl had just finished taking an exam and was in the library. His fiancée wanted him to walk around campus with her, though he was feeling mentally tired and frustrated (feeling). At the time of the beep, a "wiped out" feeling was in his awareness, as was frustration located in his head (sensory awareness), which was directed at his fiancée's presence. He was also saying, "I want to be alone" at the beep. In sample #15, frustration and anger were present. Carl was walking into the student bookstore with a friend and had just finished saying, "They don't need all this space." At the time of the beep he was feeling a weight on his chest, as well as frustration and anger in his body over the exam that he had been given back earlier during the day (feeling).

**Sensory Awareness**

Carl experienced sensory awareness in eight (28%) of the samples. In sample #6, Carl had pulled into a parking place at his second job. At the moment of the beep he was saying in his mind and own voice, "I don't want to be here." His voice was more monotone than normal, but was otherwise the same in other characteristics (inner speech). He was aware of a physical tiredness in his body that in part prompted his self-statement (sensory awareness). This example includes
both inner speech and sensory awareness. Sample #23 provided an example of sensory awareness combined with inner speech. Carl had just begun typing a cover letter for a job that he had wanted. As he said the words in his mind (in the same manner as if he were saying them aloud but in a more excited voice), “Please accept this letter as a formal request for this position” the words went through his fingers to the typewriter (inner speech). He was also experiencing a physical energy boost (sensory awareness).

Images

Images were included in seven (24%) of the samples. Sample #7 was an example of an image. Carl was trying to determine where he was going to park at the Mayor’s office. He had formed a mental map, but at the time of the beep was seeing a color still image of 4th Street, with focus on where the road and parking metered spaces were (image). In the image there were no other cars, but otherwise this was a recreation of the image as had been seen in the past. Another example of an image was found in sample #29. Just after the previous beep Carl had walked to the other side of a counter from his desk to get his notepad. At the time of the beep he was looking across the counter to where he was, and though his eyes were closed he could see himself where he had just been (image). Carl stated that this image was projected into the real world.

Unsymbolized Thinking

Unsymbolized thinking characterized two (7%) of the samples. In sample #3, he experienced both unsymbolized thinking and sensory awareness. He had just sat down at the student union to eat dinner. He was thinking how good it was going
to be to eat. At the time of the beep he was opening his food dish, he felt hunger in his stomach (sensory awareness), which was strengthened by the smell of the food. He “knew” he was going to eat and that it would be good (unsymbolized thinking).

**Inner Hearing**

Only one (3%) of the samples included inner hearing. In sample #19, Carl was looking at bread to see if it was fresh. He was hearing one verse of a song being repeated over and over in his mind (inner hearing). As far as he knew, the song did not have instrumentation and there was none present in his mind. This was the last song that he had heard before he turned his truck off.

**Summary**

Carl collected 29 samples that included six characteristics, including inner speech, feelings, sensory awareness, images, unsymbolized thinking, and inner hearing. Carl had multiple experiences in 17 (59%) samples, averaging 1.6 experiences per sample. Inner speech and feeling clearly dominated his inner experience, occurring at nearly double the rate of the other characteristics.

**Control 4 – Chris**

Chris was a 22-year-old Caucasian male. He was in his first year at UNLV after transferring to Las Vegas from another university where he had finished at least two years of college. He was a biology major and had been doing quite well academically since he had been here. He was hoping to move into an apartment with his friend from back home next year. Chris was fairly unhappy with his current roommate and the neighborhood he lived in.
Chris participated in Phase I (questionnaire phase) of the study and received a t-score of 49 on the Depression Subscale of the SCL-90-R, thus qualifying him to be in the control group for Phase II (sampling phase) of the study. He was given the BDI-II both before and after sampling. His pretest score was zero, in the "minimal" range, and his posttest score was zero, also in the "minimal" range of depressive symptoms. His pretest VAS score was 7.3 and posttest was 8.0.

Chris completed four days of sampling over a two-week period. The sampling process and discussions did not appear problematic. He was able to respond to 24 of the received beeps during that time period. Sampling was stopped after we had agreed that enough samples were available to depict his inner experience.

Chris's inner experience contained the following characteristics. He had 11 (46%) samples with feelings (27% of which were positive and 73% of which were negative), 11 (46%) samples with images, nine (38%) samples with inner speech, four (17%) samples with sensory awareness, four (17%) samples with unsymbolized thinking, two (8%) samples with inner hearing, and one (4%) sample with just reading.

Feelings

Eleven (46%) of the samples included feelings, 27% of which were positive, and 73% of which were negative. An example of a positive feeling of excitement was found in sample #3. Chris was planning a strategy to talk to a female student about her friend, in order to set the friend up with one of his male friends. He reported feeling happy, but was not aware of the emotion (feeling). At the time of
the beep Chris felt an excitement in his body (sensory awareness), and was rehearsing what he would say to her. Further, there was a still image in his mind. The image was in the third person and was a view of his left side and her right side (image). He was uncertain as to whether he saw just heads or if there were full profiles in the image. This sample also included an image and inner speech.

Negative feelings were demonstrated in samples #2 and #5. In sample #2, he described disgust. Chris was in the restroom throwing away a paper towel. He had just studied social norms. At the time of the beep Chris was considering the acceptance of himself and those individuals who are not accepted. In his mind he was saying, “Am I accepted?” (inner speech). He also reported having feelings of disgust about those who do not wash after toileting or threw trash on the ground (feeling). He reported these feelings to be in his head. In sample #5, he had a bad feeling. Chris was sitting in his friend’s car. At the time of the beep he was visually attending to a female that was walking by. He was thinking “Wow,” and was aware of physical arousal in his body. He also had a bad feeling (feeling) in his head and stomach related to wondering if he would get in trouble with his girlfriend (unsymbolized thinking). He was uncertain in which order he experienced the feelings and which were present at the time of the beep.

Images

Eleven (46%) samples also included images. Samples #16, #17, and #18 included images. In sample #16, Chris was telling his girlfriend about cleaning out a fume hood with a knife. At the time of the beep, he had just said the word, “knife” as part of a sentence. He also saw an image of what he was getting ready to say
(image). In the image he saw himself in motion pushing himself up onto a ledge. He was seeing himself from behind and to the left, and even though from his perspective his view would have been obstructed by the fume-hood, it was as if it were "cut-away." He knew there was a knife in his hand, though he was uncertain as to whether it could be seen from his perspective or not. The image was somewhat fuzzy and had a dark background. There was approximately one to two seconds of "film" in the image.

In sample #17, Chris was talking on the phone with a female friend. She was in the process of saying, "Some days women can't deal without caffeine and Midol." At the time of the beep she was saying, "Midol." Chris could see an image of his friend as if he were standing in front of her and to her left (image). The image was only clear enough to be able to tell the woman was his friend and that she had a soda can up to her mouth as if drinking it. In sample #18, Chris was still talking on the phone with his friend. She was telling him a story about a party she had gone to. At the time of the beep Chris saw an image of the friend sitting between two males on a couch (image). None of them had shirts on (both in the story she was telling and in the image). His perspective was from ahead and slightly above the couch, as if he was facing it. His friend was wearing a white bra in the image, but everything else was either a very dull color or black and white.

**Inner Speech**

Inner speech characterized nine (38%) of the samples. In sample #1, Chris was studying sociology and had noticed that a section of his notes was missing. At the time of the beep he said to himself, "How did I miss that?" It was as if he were
saying it to himself, though not out-loud (inner speech). Amazement and a feeling of disappointment accompanied this feeling located in his head (feeling). This sample included both inner speech and a negative feeling. In sample #8, inner speech was paired with an image. Chris had been studying the traits of extroversion, and at the time of the beep was saying “lively” to himself in his head with his own voice (inner speech). He had been doing so approximately every second for a handful of seconds. He could also see the word “lively” in all lower case computer block letters, with exception of the “L” which may have been capitalized (image). The letters of the word were white and highly contrasted with an undescribed background. Though his eyes were aimed at the book, he was not aware of it.

**Sensory Awareness**

Chris described sensory awareness in four (17%) samples. In sample #22, Chris was playing a golf game on the computer while talking to his female friend. He was saying, “I have about a half an hour until class,” but at the time of the beep was saying, “about.” He was visually attending to the screen (sensory awareness), actively playing the game, and talking with his friend, though he was not aware of thinking about how to play the game.

**Unsymbolized Thinking**

Four (17%) samples also included unsymbolized thinking. Sample #7 included unsymbolized thinking and a negative feeling. Chris was walking in the rain hoping that the earpiece of the beeper device would not get wet. He reached up with his right pointer finger to push the earpiece in his ear. As he touched it, the
beep went off. He was still wondering (without words) if the earpiece was wet (unsymbolized thinking). Chris was also aware of his slight feelings of guilt associated with the possibility of the device getting wet (feeling). Outside of his awareness Chris knew that if the earpiece were affected, he could buy another at Radio Shack.

**Inner Hearing**

Inner hearing was found in two (8%) samples. In sample #14, Chris had been working out in the gym where a Whitney Houston and George Michael song had played earlier. He was walking back to the gym from the water fountain at the moment of the beep. In his mind he was hearing an accurate replaying of the song (inner hearing). Whitney Houston was singing “I” from the line “I told you that” at the moment of the beep. He was aware that he had been breathing heavily as a sign of his exhaustion.

**Just Reading**

Only one (4%) sample included just reading. Sample #15 provided an example. Chris was sitting at a lab computer and had just read the statement “log on” which was part of a “redneck” joke referring to putting a log on a fireplace as opposed to logging onto a computer (just reading). He was visually focused on the words on the screen, but did not report any feelings related to the joke, as he was not at the punch line yet.

**Summary**

Chris collected 24 samples that included seven characteristics, including feelings, images, inner speech, sensory awareness, unsymbolized thinking, inner
hearing, and just reading. Chris had multiple experiences in 16 (67%) samples, averaging 1.8 experiences per sample. Images, feelings, and inner speech dominated his inner experience.

Control 5 – Cathy

Cathy was a 22-year-old Caucasian female. She was in her first year of school at UNLV. She had a boyfriend and lived with a girl she knew from school. She was a very carefree young woman, and admitted that many of the images she has are exaggerations of things. She believed that she forms an image based on what she knows and fills in the details with what she thinks “could be.”

Cathy participated in Phase I (questionnaire phase) of the study and received a t-score of 62 on the Depression Subscale of the SCL-90-R, thus qualifying her for the control group of Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was two, in the “minimal” range, and her posttest score was one, also in the “minimal” range of depressive symptoms. Her pretest VAS score was 7.3 and posttest was 9.4.

Cathy completed four days of sampling over a one-week period. No problems were reported during the sampling and discussion process. She was able to respond to all 24 beeps during that time period. After agreeing that enough samples had been gathered, sampling was stopped after the fourth session.

Cathy’s inner experience contained the following characteristics. She had 10 (42%) samples with feelings (40% of which were positive and 60% of which were negative), 10 (42%) samples with sensory awareness, 10 (42%) samples with
images, five (21%) samples with inner speech, four (17%) samples with unsymbolized thinking, and one (4%) sample with inner hearing.

Feelings

Ten (42%) of the samples included feelings, 40% of which were positive, and 60% of which were negative. An example of a positive feeling of "being on top of the world" can be found in sample #4. Cathy was in class. Her professor had just finished giving her positive feedback on the introduction to her paper. She was sitting down with her eyes directed forward, though she reported having no visual focus on her surroundings in general. At the time of the beep she was feeling "on top of the world" (feeling), which manifested itself as a racing feeling in her chest, and an unsymbolized knowledge that she was ready to do [her] paper but no words were present (unsymbolized thinking).

Samples #3 and #21 provided examples of negative feelings. In sample #3, a feeling of being overwhelmed was presented. Cathy’s history class was drawing to a close when the beep sounded. She reported feeling overwhelmed (feeling), and was in the middle of a chain of thoughts something like “How am I going to get things done,” “What can be done about it,” and at the time of the beep, “When am I going to do it?” (unsymbolized thinking). No specific words were present.

In sample #21, anger was described. Cathy’s roommate had called and said she was going to be home soon, and then they could go to the movies, which they had been planning to do. She had been having a series of images about what her roommate was doing and was sure that she was probably with her boyfriend driving around while Cathy was waiting for her at home. At the time of the beep she had an
image as well. In the image she saw her roommate from behind her boyfriend’s head, which was turned to face said roommate through the driver’s side window (image). Her roommate was laughing. She had a “rage of anger” at the time that was expressed internally but not externally (feeling). This feeling was a squeezing in the chest that was like a pressure being held in.

**Sensory Awareness**

Ten (42%) samples also incorporated sensory awareness. Sample #17 illustrated sensory awareness. At the time of the beep, Cathy was driving into her parking spot at home. She was concentrating on not hitting the concrete stopper. She was looking at a neighboring car’s mirror trying to line the car up and not hit the stopper (sensory awareness). Sample #24 included sensory awareness paired with inner speech. Cathy was in the batting cage, and a ball was coming through the pitching machine at her. At the time of the beep she was focused on the ball and telling herself “watch the ball” in her own voice in her mind (inner speech). She was visually tracking the ball (sensory awareness) and not paying attention to anything else (i.e. swinging the bat, etc.).

**Images**

Images were found in 10 (42%) of the samples. Samples #6, #7, and #8 all included images. Sample #6 was paired with sensory awareness. Cathy was still in a class that had just ended. She was walking out of class with her backpack over one shoulder. At the time of the beep she was feeling hunger in her stomach as an empty feeling (sensory awareness). Further, she was picturing the sandwich she was going to eat for lunch (image). In the image, she was holding it in her hands.
from the first person perspective. The sandwich was much larger in the image than it was in reality.

In sample #7, Cathy was in her room listening to the radio morning show. The topic of conversation was Julia Roberts. At the time of the beep Cathy saw an image of Julia Roberts as she appears on the cover of the videotape “Best Friend’s Wedding.” The image was in color and was very sharp (image). There were no accompanying thoughts.

In sample #8, Cathy was driving in her car with the radio turned up loud. She was singing lyrics to a song that she had never seen a video for. Though she was singing and listening at the time of the beep, she was focused on the video she was making up in her head (image). The image was of an African-American couple. The man in the image was singing to the woman and making overly dramatic gestures with his arms and hands at the same time. The woman was batting her eyelashes and responding to his vocalizations in an overdramatic way by rocking her shoulders left to right, clasping her hands together, and shying to one side. The image was in motion and was interpreted by Cathy to be quite a literal interpretation of the song’s lyrics.

Inner Speech

Inner speech characterized five (21%) of the samples. In sample #9, at the time of the beep, Cathy had just dropped the beeper on the floor during a lecture. She was thinking that people are. “probably thinking I am listening to the radio.” This verbalization was in her mind and in her own voice (inner speech). She was also picking up the beeper and conveying through physical posture “sorry,” though

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she was not actively aware of picking up the beeper or her behavior. Sample #19 provided another example. Cathy was lying on her couch and was listening to the television with her eyes closed. At the beep, Cathy was telling herself in her own voice and vocal characteristics, “I should be doing my homework” (inner speech).

**Unsymbolized Thinking**

Cathy experienced unsymbolized thinking in four (17%) of the samples. Sample #1 provided an example. Cathy had left her car a minute or two prior to the beep and was walking across the parking lot toward her first class. She was aware of her surroundings, but was not attending to them. She had just looked at the sky and was contemplating the weather with no words (unsymbolized thinking).

**Inner Hearing**

Inner hearing was noted only once (4%). In sample #11, Cathy was in class, and a classmate was giving a speech on basketball’s greatest players. A clip of an all-star game was being viewed and Ian Iverson was talking. At the time of the beep, she was not attending to the video, but instead was seeing an image of her boyfriend’s face looking excited (image). Separate from the image was his voice with a consistent tone and inflection in her head saying, “Ian Iverson is the greatest” (inner hearing).

**Summary**

Cathy collected 24 samples that included six characteristics, including feelings, sensory awareness, images, inner speech, unsymbolized thinking, and inner hearing. Cathy had multiple experiences in 16 (67%) samples, averaging 1.7
experiences per sample. Sensory awareness, images, and feelings were all evenly balanced across the samples.

Depression 1 – Dolores

Dolores was a 35-year-old Hispanic female. She was a senior majoring in special education at UNLV. At time of sampling, she had been married for 15 years and had two sons, ages 10 and 3. Dolores had worked as a paralegal for several years before going back to school. Her medical concerns included fibromyalgia and osteoarthritis. She lived with almost constant pain. Approximately two years ago, her internal organs began to shut down. Her heart stopped, she had a near death experience, and then her heart spontaneously began beating again. At time of sampling, she had severe chronic pain and took morphine daily, attempting to balance pain relief with alertness. Her physical challenges often brought her down, she had suicidal ideation, and she was seeing a therapist for depression. She felt “outside” of her family due to her illness and long-term bed rest. She was taking Effexor daily for depression and Klonopin for anxiety as needed.

Dolores participated in Phase I (questionnaire phase) of the study and received a t-score of 82 on the Depression Subscale of the SCL-90-R, thus qualifying her for Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was 37, in the “severe” range of depressive symptoms, and her posttest score was 40, also in the “severe” range. Her pretest VAS score was 2.5 and posttest was 1.9.

Dolores completed five days of sampling over a three-week period. She was friendly and willing to discuss her samples and life openly. She appeared to learn...
the process quickly and reported no problems. She was able to respond to 28 beeps during that time. After coming to an agreement that enough samples were gathered, sampling was stopped after the fifth session.

Dolores' inner experience contained the following characteristics. She had 21 (75%) samples with feelings (11% of which were positive and 89% of which were negative), 16 (57%) samples with sensory awareness, 10 (36%) samples with inner speech, nine (32%) samples with unsymbolized thinking, three (11%) samples with images, and one (4%) sample with just doing or just reading.

**Feelings**

Twenty-one (75%) of the samples included feelings, 11% of which were positive and 89% of which were negative. An example of a positive feeling of enjoyment, contentment, and pleasure was found in sample #18, which also included unsymbolized thinking and sensory awareness. Her friends were at her house, and she was holding her seven-month-old godson sitting on the table in front of her. He had projectile vomited on her just before the moment of the beep. She was saying, "He got me," out loud as the beep went off. She was laughing. She read the thoughts of her friends as being, "you got what you wanted." She knew that was what they would think, and they were all laughing at the moment of the beep. She had a sense that the laughter meant the above phrase, and they actually said it afterward (unsymbolized thinking). She was feeling content with the baby, pleasure, and had no negative reaction (feeling). She was aware of wetness on her shirt (sensory awareness).
Most of the feelings Dolores reported had a negative valence. For example, in sample #4, the negative feeling of frustration was described in conjunction with possible unsymbolized thinking. Dolores was back to studying and was trying to concentrate. By trying to concentrate, she meant that she was trying to block out the clock and the barking dog. She was attempting to block out the noise and focus on reading her notes. She felt frustrated as the dog kept barking and breaking her concentration (feeling). She added that she wanted to kick the dog. She was thinking, “I wish that stupid dog would shut up.” The words were not actually present (unsymbolized thinking). She felt the frustration mentally and not in her body.

In sample #11, sensory awareness was found with the negative feeling of concern. Dolores was at her 73-year-old mother’s house. A dog had bitten her mother earlier in the day, and her mom was showing her the bite mark on her shoulder at the moment of the beep (sensory awareness). She felt an intense concern (feeling), which was experienced in her head and summarized as “I wish I could do something.” She said out loud, “Are you all right?” In sample #15, unsymbolized thinking was also present with the negative feeling of sadness and depression. Dolores was on the computer reading a newspaper article about an accident with a military plane dropping a bomb in the Middle East during a training exercise. “It’s not fair to blame the pilot. He was only following directions,” was the thought in her head, but no words were actually present (unsymbolized thinking). She felt bad for the incident happening, bad for the pilot, and bad for
what might happen to his career. She felt sadness as a feeling of depression, and her chest felt heavy (feeling).

**Sensory Awareness**

Sensory awareness was also included in 21 (75%) of the samples. In sample #3, she described sensory awareness and a negative feeling. Dolores was lying down on an ice pack to control the pain she was feeling in her back and hip. She was experiencing a great deal of pain (sensory awareness). She felt angry that she was in pain during the day as her hips usually hurt only at night (feeling). She described the pain in her back as the sensation that someone was pushing down on her shoulders (sensory awareness). The pain was centralized in her spine from her shoulders to her midback. She described the pain in her hip as a burning sensation primarily in her right hip that was flat and about six-inches around. She felt overwhelmed by the pain. She was frustrated with herself for feeling overwhelmed by the pain and she was saying out loud, “I should be stronger than this.”

In sample #10, the sensory awareness was accompanied by unsymbolized thinking. Dolores was at her aunt’s house sitting at the table and had just taken a bite of spaghetti. She vocalized the sound “Mmmm” meaning the spaghetti was good. She was aware of people around her, and the sound was an effort to let her aunt know that she enjoyed the food. She did not have any specific words associated with this thought (unsymbolized thinking). She was focused on the taste, which was pleasant (sensory awareness). This was the first thing she had eaten in some time, and she was pleased to finally be getting food.
Inner Speech

Inner speech was found in 10 (36%) of the samples. Samples #12, #19, and #25 all included inner speech. In sample #12, a negative feeling and sensory awareness were also present. Her entire family had converged at her mother’s house, and there were 25-30 people in the room. She was having a panic attack and was feeling claustrophobic and anxious (feeling). Her heart was racing, her body was tense, sweat was dripping down her back, and her face and chest felt flushed with warmth. In her mind, she vocalized, “Michael, we need to leave now.” She could hear the sense of urgency in her own voice in her mind (inner speech). She was experiencing pain down her spine, with the focal point experienced as something like a flat bar about three inches wide running from the base of her neck to the middle of her back (sensory awareness). Tension was also felt in her shoulders and as tightness in her chest. She felt closed in and like she could not get a good breath in, although she was really able to breathe without problem. She was aware of having a panic attack at the moment of the beep. Responding to the beep had no effect on the feeling of panic.

In sample #19, again, a negative feeling and sensory awareness were present. Dolores was waking up her son for school, and he had a fever. At the moment of the beep, she was pulling back the covers and feeling his head. “Should I send him to school?” she was thinking (inner speech). She was saying this to herself in a concerned manner and was worried and anxious about how he was feeling. She had her hand on him, he was hot, and she was aware that he was hot as a physical
sensation (sensory awareness). Her overwhelming feeling was concern, a mothering type feeling (feeling).

In sample #25, sensory awareness was described with inner speech. Dolores had just arrived home from picking her son up. She was lying in bed with her laptop and surfing the Internet. She was looking at a running ad, thinking, “What’s this all about?” She said this to herself in words and was confused (inner speech). This was described as an intellectual experience and not a feeling. She also experienced both pain and fatigue. She described stabbing pain in her hips, and even more so in her left hip (sensory awareness). Her legs felt heavy and tired from thighs to feet.

Unsymbolized Thinking

Nine (32%) samples incorporated unsymbolized thinking. In sample #13, Dolores was looking at an Excel sheet. She was sorting papers into piles, and at the moment she was placing one document with one hand and grabbing another with the other hand. She described her thought as “That goes in this pile.” There were no specific words present (unsymbolized thinking). Sample #26 provided another example. She was lying on the bed with her laptop, and had just hit the print button. She was printing an article for her sociology teacher. At the beep, she was thinking, “I hope this prints right.” No words were present (unsymbolized thinking).

Images

Images were described in three (11%) of the samples. In sample #30, she described an image and a negative feeling. She was in the kitchen peeling potatoes. “If I knew I had to make dinner, I would have started earlier,” her husband had said
in a joking manner. At the beep, she was seeing red and orange and was very angry (feeling). She had a visual image of red/orange in her head (image). The color had depth like flames or fire without the shape of the flames. The color was uneven and was both orange and red. She was feeling used and abused. She did not find his joking amusing.

**Just Doing/Just Reading**

One sample (4%) included just doing or just reading. Sample #22 found Dolores working on her research paper and looking at a page in the APA guidebook. She was looking up the correct way to write a citation and was browsing the page for the correct example. No feelings were present. She described this as a functional task to complete. She was focused on the page only without any thoughts (just reading).

**Summary**

Dolores collected 28 samples that included six characteristics, including feelings, sensory awareness, inner speech, unsymbolized thinking, images, and just doing, listening, talking, or reading. Dolores had multiple experiences in 25 (89%) samples, averaging 2.1 experiences per sample. Feelings and sensory awareness were by far the most common elements to her inner experiences, and 25 (89%) of the 28 samples had one or the other. Twelve (43%) of the beeps had both a feeling and sensory awareness. Another aspect of her inner experiences included being critical of either herself or another person approximately half of the time.
Depression 2 – Donna

Donna was a 27-year-old Caucasian female. She was a junior majoring in art at UNLV. She had been living in Las Vegas for 23 years. At the time of sampling, she had been married for five years. She had two children, a boy aged five and a girl aged two. Her husband had been a waiter for many years, but now he was working as a medical courier. They met at a party the first time she was in school. Her first try at school when she was 18 ended with her dropping out due to partying too much. She grew up with her mother and various stepfathers, as her mother was married five times. She suffered sexual and physical abuse during childhood. After the age of five, she saw her biological father only three times. He had not been supportive of her, and she no longer wanted to contact him. She had one brother and one half brother that she had seen only once.

Her own marriage had never been good. She was married in 1995, and she had a miscarriage in 1996. At that time, her past abuse came back to her, she shared it with her husband, and the relationship went downhill from there. Her husband left last summer, and they talked of divorce. He had since come back to the family, but she still thought of divorce often. She had had thoughts of suicide in the past, and she had a plan to kill herself before she became pregnant with her daughter. She still has thoughts of suicide so takes precautions such as not keeping too much medication in the house. At the time of sampling, she had a “no-suicide” contract with her therapist. She was feeling better at the time of sampling than she had three years before. She had been in counseling for four years and had been taking Prozac for about one year. She found the Prozac to be helpful at first but not anymore.
Donna participated in Phase I (questionnaire phase) of the study and received a t-score of 82 on the Depression Subscale of the SCL-90-R, thus qualifying her for Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was 46, in the "severe" range of depressive symptoms, and her posttest score was 45, also in the "severe" range. Her pretest VAS score was 2.0 and posttest was 2.1.

Donna completed four days of sampling over a two-week period. She was willing and open and she seemed able to describe her inner experiences with relative ease. She responded to 23 samples during that time period. We stopped sampling after the fourth session after agreeing that enough samples had been collected to gain a sense of her inner experience.

Donna's inner experience contained the following characteristics. She had 19 (83%) samples with feeling (16% of which had a positive valence and 100% of which had a negative valence), 12 (52%) samples with unsymbolized thinking, nine (40%) samples with sensory awareness, seven (30%) samples with inner speech, four (17%) samples with images, one (4%) sample with inner hearing, and one (4%) sample with just reading.

**Feeling**

Feelings were demonstrated in 19 (83%) of the samples. Of those 19 occurrences, positive feelings were described in three (16%) and negative feelings were described in all (100%) instances. A positive feeling of love and amazement can be found in sample #15. Her daughter had told her what show she wanted to watch on television, and she turned it on for her daughter. At the beep, she was
looking at her daughter (sensory awareness) with amazement and awe, and was feeling a lot of love for her (feeling). Her daughter was standing, and she was kneeling next to her. Her daughter was smiling and had big blue eyes. She was feeling both a strong love and a nonspecific fear for her child’s future. The love was experienced as a strong feeling in her chest, a pressure inside pushing out. The fear was experienced as general nausea. In this sample, sensory awareness was also present. Donna never described positive feelings by themselves; they were always paired with negative feelings as in the example above.

An example of negative feeling of guilt and anger paired with unsymbolized thinking was found in sample #18. She was finished doing research on the computer and was just turning the computer off. She had a hard time pinning down the thoughts, as her mind was wandering, but she was thinking about an upcoming dinner with her friend (unsymbolized thinking). She was not going to tell her husband about this dinner and she felt both guilt and anger about this (feeling). The guilt was about not telling her husband, and the anger was directed toward herself and toward her husband for the fact that this deception was necessary. She was not able to describe these feelings other than they were medium to strong.

Another example of a negative feeling of depression, this time with unsymbolized thinking, was sample #23. She was on the computer and had been reading a poem that had been sent to her in an email about mothering. She had just typed a response and was getting ready to move the mouse to click send. The poem was about mothering and how all moms were good moms. She was depressed about how things had been going with her children, feeling like she was failing as a parent.
(feeling). She was trying to focus on the big picture and keep everything in perspective. This was an attempt to convince herself that she wasn’t really failing as a parent. The depression and perspective taking were both present. The depression was like a sadness, or feeling as a failure, or not being worthy as a parent. The perspective taking was a thought and not a feeling (unsymbolized thinking). There was a bodily component but she did not know how to describe it.

Unsymbolized Thinking

Unsymbolized thinking was found in twelve (52%) of the samples. In sample #10, unsymbolized thinking occurred with feelings. This also provided another example of negative feelings always being present with positive feelings. She was reading about the similarities of Kelly and Freud and the concept of transference. She was thinking about her own therapist and if transference applied. She did not know how she was thinking this thought, but it was clear to her what she was thinking (unsymbolized thinking). She felt like there were a lot of distinct thoughts present at the same time. She was unable to pull them apart. Emotions were present too, but she was not sure how they were present (feeling). There was, however, a sense that there were both positive and negative emotions present.

Sample #13 included an image and a negative feeling, in addition to unsymbolized thinking. She was working on an assignment for her literature course on the computer at the house. She was writing an autobiography and was including her biological father in New York. She remembered when, at the age of 10, she saw a letter in her mother’s closet saying that her dad did not want anything to do with them anymore. She was still typing, as she knew what to type, so she never
stopped. She was typing, "My father was a baker," at the moment of the beep. The image was of her sitting in her mother’s walk-in closet as seen from an outsider’s perspective (image). The view was from the bedroom looking through the closet door, seeing the side of Donna facing left. The picture was in color but was not vivid. The image was a little blurry, but she was able to tell what she was doing. She felt as she did when she first read the letter, hurt and abandoned and was thinking something like, “What did I do for him to say that?” No words were actually present for her (unsymbolized thinking). She felt sadness as a medium heaviness throughout her body and nausea in her stomach (feeling). She felt like she was a kid again.

**Sensory Awareness**

Twelve (52%) samples incorporated sensory awareness. Samples #20 and #17 were examples. In sample #20, she was on the couch and was tired (sensory awareness). She had had a long night with her children, as they were scared of the windstorm. Her children were near her playing, but she was not paying attention to them. She was thinking about a conversation with her stepfather whom she normally avoids. She called to invite her brother to her children’s birthday party. Her stepfather answered the phone and said, “Hey, Kiddo.” She felt caught off guard. At the beep, she was replaying his voice in her head. There was no auditory aspect to this, but she was re-experiencing the emotions (feeling). She was unsure how to respond. She felt surprise and at a loss for words; she was not able to say anything and she felt uncomfortable. There was no physical sensation to these feelings. She was aware of feeling tired and sleepy and wanted to fall asleep.
(sensory awareness). Her eyes were closed, and she wanted to be alone. She was not feeling relaxed as she was re-experiencing the moment. She was trying to convince herself to relax, and she felt tense all over. This example included feelings.

In sample #17, she was working on a children’s literature project. She had personalized a page as an autobiography with pictures of her family and her favorite quotes. “Isn’t that the truth” she said in her head as if saying this out loud (inner speech). She said this in relation to a quote she had just read: “The right to do something doesn’t mean that doing it is right.” She was looking at pictures of her children and book covers that were part of her picture, specifically she was looking at a book cover about a boy who was abused and became a survivor not a victim (sensory awareness). She felt sad (feeling). It felt as if weight had been added to her body, and she felt heavy all over. She felt sadness as the quote was seen as a reflection on her own life. She was thinking about bad things that had happened to her during her life, but she didn’t want to discuss them. She added that her mind tends to wander between good and bad, and the beep disrupts this wandering. This example also included inner speech and a feeling.

*Inner speech*

Seven (30%) of the samples included inner speech. Sample #21 was an example. She was folding laundry and was thinking about what she wanted to talk about in her counseling session that night. “For a change I decided to bring a list,” she said in her head in words as if she was in session with her counselor (inner speech). She had an image in her mind. She was able to see her therapist but not
herself (image). He was sitting and facing her in a green chair. The picture was in color but had no background. She was feeling like she did in session when trying to talk about something difficult and cannot. She felt shame, guilt, fear, and inadequacy (feeling). She had tightness in her chest, nausea, and the beginning of a headache (sensory awareness). She felt dirty, but not as a physical sensation. She felt judgmental as a physical sensation, but she was not sure how to describe it. She was not focusing, but was off in a different place. She was immersed in the image at the moment of the beep. This example also included sensory awareness, an image, and negative feelings.

Images

Four (17%) samples were described as images. Sample #5 included an image and a negative feeling. She was finished with her work and was lying on the couch. She had decided to take some pain medication. She was thinking about when she had come out of the anesthesia on Saturday morning and was trying to make sense of what happened. She was reliving the experience, re-experiencing it, and it was like being there again (image). She had woken up crying “like a small child” and had been asking the doctor whom he was, but she knew the answer somewhere in the back of her head. She felt like someone else was doing these things. There was a visual aspect to this. She had an outsider’s point of view and her own point of view. She felt the separateness, and she was reliving the sensation of separateness. She was feeling confused (feeling). She felt the bad feelings that had occurred that day.
**Inner Hearing**

Only one (4%) of the samples included inner hearing. In sample #3, she was changing her daughter’s diaper. She was angry with her husband not helping when he knew that her daughter needed to be changed. He had been criticizing her about the earpiece, and she was still thinking about his criticism. He was critical of her participation as this took time away from him. She was thinking about his criticism. She was hearing his words replay in her head in his voice as he had said them (inner hearing). She was also thinking about her reaction to him and why she had been so defensive. She was just wondering this, and no words were present (unsymbolized thinking). She was not sure when this occurred. “My thoughts are crazy anyway,” she thought a few seconds before the beep. “Doesn’t matter if I’m on pain medication,” she was saying these words to herself (inner speech). The anger was felt like frustration as before but there was no physical sense (feeling). This sample was rather complex, and included inner speech, unsymbolized thinking, and feeling in addition to the inner hearing of her husband’s words.

**Just Reading**

In one (4%) sample, Donna was just reading. In sample #22, she was looking up some medications and their side effects on the computer for her mother. She was on the computer, on the Internet, on a site, and had just started to look at it when the beep went off. The site had just come up and she was just about to start reading (just reading).
Summary

Donna collected 23 samples that included seven characteristics, including feelings, sensory awareness, unsymbolized thinking, inner speech, images, inner hearing, and just reading. Donna had multiple experiences in 20 (87%) samples, averaging 2.3 experiences per sample. Her samples were rather complex, and 10 (43%) had four or five components to them. When reporting feelings, she never described positive feelings without a negative feeling being present as well. She also had a tendency of being critical of herself or another person nearly half of the time.

Depression 3 – Debra

Debra was a 45-year-old Caucasian female. She was living with her husband and grandson in an apartment. She said that she has had depression since her teens but was never treated until she was an adult. She described her depression when she was younger as not severe and not including suicidal ideation. Her condition worsened as an adult, and she sought treatment. Her history of mental health treatment for depression began about seven years ago. She had attempted suicide two times since. She had been hospitalized six times over the eight years, with her last hospitalization occurring last year. Over the last year, she received several treatments of ECT. She started out receiving three treatments a week, then two, then one treatment. She was on maintenance of one session per month when she had a heart attack in the spring. She was waiting for the cardiologist to approve her return to the ECT sessions. She indicated that she found them helpful but now had some memory problems. She felt that she was doing better now but had
recently been diagnosed with Bipolar Disorder. Her current medications included Depakote, Zyprexa, Effexor, as well as diabetes related medications.

She changed jobs during the time of the sessions. Initially, she was working at a restaurant, but she went back to her old job as a secretary. She felt less depressed due to the change in job. When less depressed, she felt less of a weight on her shoulders and felt more whole and in touch. When more depressed, she felt less able to concentrate and less able to be organized. By session four, her mood had been up and down. She was not extremely depressed at that point, and she felt that her medications had helped. She had moments of feeling down, but they were not too bad. In general, she felt better. Her dose of Depakote had been increased a month ago. At session five, she reported that her new job was going well, and she was feeling less depressed. She liked her work better now, her daughter was leaving her alone, and her medication had been increased a month ago. She felt that her depression had been lifted. She added that she had not felt that good in the four years since she moved to Las Vegas from Chicago, Illinois.

Debra participated in Phase II (sampling phase) of the study. She was given the BDI-II both before and after sampling. Her pretest score was 31, in the "severe" range of depressive symptoms, and her posttest score was 16, in the "mild" range. Her pretest VAS score was 3.0 and posttest was 6.3. The posttest score was taken from her last sample (sample #30), as a posttest score was not available.

Debra completed five days of sampling over a two-week period. She was slower to learn the process, but by the second session, had a good grasp and did not report any further difficulties. She responded to 26 beeps during that time. After
the fifth session, we agreed to stop sampling as enough samples to describe her inner experience had been gained.

Debra's inner experience contained the following characteristics. She had 13 (50%) samples with sensory awareness, 12 (46%) samples with feelings (33% of which were positive and 67% of which were negative), 11 (42%) samples with unsymbolized thinking, nine (35%) samples with images, two (8%) samples with just watching television, and one (4%) sample with inner speech.

**Sensory Awareness**

Sensory awareness was present in 15 (58%) of the samples. Sample #1 found Debra resting and watching television on the couch in her apartment. She was trying to wind down from work and was just watching television. She did not remember what she was watching and was only semi-paying attention. She was following the show at the time, but did not remember when we met what she had been watching. She felt tired and relaxed (sensory awareness). Her feet hurt and were throbbing, and she felt sluggish. In sample #8, she was talking to a woman from work on the phone. Debra had given notice and was talking about her new job. She was thinking about her new job as she was talking, and she was excited about sharing her news. She was not listening to what the other person was saying. At the beep, Debra was talking. She was thinking at the same time without specifics (unsymbolized thinking) and felt excitement, which was experienced as tingles in her stomach (sensory awareness). She described this as a pleasant experience.

Sample #8 also included unsymbolized thinking.
In sample #19, she was talking to her husband about her grandson going to bed. Her grandson was still awake and was not tired yet. She was talking at the moment of the beep and saying, “Why on earth is this kid still going?” She said that he should have been in bed by that time. In the back of her mind, she was feeling tired herself. She had a physical awareness of her tiredness (sensory awareness). In sample #30, sensory awareness was paired with an image. She was lying in bed with her eyes closed. She was listening to a man play a horn on the television (sensory awareness). She was wondering, “What kind of horn is he playing?” The words were visibly burned out in her mind and were streaming by (image). They were as if they had been printed on a computer in block print in all capitals. She was not sure of the background, and there was no punctuation. She also had mental images of two different horns, both gold colored (image). The images of the horns flipped back and forth so that only one was present at a time.

Feelings

Twelve (46%) of the samples incorporated feelings, 33% of which were positive, and 67% of which were negative. An example of a positive feeling of enjoyment was shown in sample #14. She was watching a commercial on television for Hanes underwear. The scene included two women in a park guessing if the passing men had on boxer or brief underwear. She was focused on Michael Jordan’s good-looking body at the moment of the beep (sensory awareness). She stated that she had a humorous, enjoyment reaction (feeling). This sample also included sensory awareness.
Negative feelings were found in samples #17 and #18. In sample #17, she described the negative feeling of grief and guilt. She was watching a movie about an arsonist, and a boy had been murdered. At the beep, she was focusing on a real picture on her nightstand of her sister who had since died taken the last time they were together (sensory awareness). The picture of the two of them was taken at her sister’s house at the porch table where they smoked. This fluctuated with a mental image of her sister’s dead body (image). The dead body was an unpleasant and made-up image, as she never really saw her sister’s body. The image included her sister sitting in the bedroom on the floor with blood everywhere. She had fallen over when she died. This image was in graphic color. Emotionally, she felt grief and guilt at the moment of the beep (feeling). She described the guilt as thinking something like, “Why couldn’t I have done something to prevent her death?” The grief was described as a feeling of loss and emotional emptiness. It was not felt physically. After the beep she remembered having felt jealous of all the things her sister had in life. This sample also included sensory awareness and an image.

In sample #18, the negative feeling of ashamed but forgiving was paired with unsymbolized thinking. She was watching a television show called “Golden Girls.” They were discussing communism on the show. Debra was thinking back to being in school and having a fear of communism. This gave her a knot in her stomach. It was difficult for her to say how this thought was manifested (unsymbolized thinking). When she was in junior high school, she was told there was nothing good about communism and felt she was brainwashed. Communists were considered a threat to the world. She no longer had those same thoughts. She
thought that she was so naïve at that time and now views the world in a different way. She felt ashamed that she had been that naïve, but she was forgiving of herself due to her youth at the time (feeling).

Unsymbolized Thinking

Unsymbolized thinking characterized 11 (42%) of the samples. In sample #3, she was looking through a catalog and thinking about doing some embroidery to keep busy. She was absorbed in the embroidery catalog. She was sitting at the dining room table and flipping the pages. She did not remember what she had been looking at. She was thinking how she could do something similar to what she had been seeing but not exactly the same (unsymbolized thinking). She was just looking at the catalog, and she could not say what her exact thought was.

In sample #12, she was feeling tired (sensory awareness). She was watching a television program about an event from a couple of years ago when some Sudafed was laced with Arsenic. Her thoughts went back to when she overdosed. She felt good that she did not succeed and that she was still here. At the beep, the show was demonstrating how the capsules had been laced, but her mind was wandering. After the beep, she thought about the people that took those pills and died. She stated how she felt good that she had not died. She did not have the sense that clear words or images were present (unsymbolized thinking). She was feeling good after the beep. This sample also included sensory awareness. In sample #16, she was watching a movie and paying more attention. She watched an arsonist destroy a warehouse. She was thinking the arsonist was evil as she was getting recent college graduates involved in illegal activities (unsymbolized thinking). She was intently
watching the movie and thought the word “evil.” This was not seen or said, but she was thinking it.

Images

Images were found in nine (35%) of the samples. In sample #13, she had just spent a rough day with her daughter and had not eaten properly. She had a visual image in her mind of a homemade beef and cheese burrito on a flour tortilla (image). She could see the roast beef and the cheese on the unfolded tortilla on a plate. The white rim of the plate was showing. She was looking down at the plate which was in color and realistic. Emotionally, she felt drained (feeling) and almost exhausted (sensory awareness). This was a physical feeling. She added that she did not want to do any real cooking. She was lying on the bed with the television on, but she was not paying attention. This example also demonstrated a negative feeling and sensory awareness. Sample #23 also demonstrated a typical image. She was watching a commercial on television about cheap airline tickets. She was thinking about flying to New York. She was visualizing actually being on the plane to New York (image). She was sitting on the plane in a seat with people around her, but they were not distinguishable. She was aware of the windows and clouds. The image was from her own point of view, and she was seeing her own arms and legs. She was sitting in an aisle seat as she normally would. The picture was in color. The plane was large with three seats on either side of the aisle.

Just Watching Television

She was just watching television in two (8%) of the samples. In sample #4, she was watching a television movie. She was engrossed in what she was watching,
but was not able to remember what she had been watching at the discussion meeting (just watching television). She was lost in the movie. In sample #11, she was watching the end of ER on television (just watching television). She was confused as she had tuned in for the last 15 minutes of the show and did not know what was going on. She was not concentrating on the television, but was just relaxing. She added that she generally falls asleep with the television on. She saw one woman apologizing to another, but she could not figure out what they were doing. She did not really care to know, though. She described this as a neutral moment. She was just watching television and nothing more.

**Inner Speech**

One (4%) sample included inner speech. In sample #7, she was watching a movie about a deaf and illiterate girl. The girl's father had just burned her with an iron. She was actively thinking, "How could someone do that to a child?" This was said to herself (inner speech). She could see a big scar on the back of the girl from the scalding iron on the television. Her reaction was that it was grotesque (feeling), but she had no other emotional reaction. This example also provided an illustration of a negative feeling.

**Summary**

Debra collected 26 samples that included six characteristics, including sensory awareness, feelings, unsymbolized thinking, images, just watching television, and inner speech. Debra had multiple experiences in 18 (69%) samples, averaging 1.8 experiences per sample. Debra reported an improvement in her symptoms of depression over the course of the sampling sessions. Three (75%) of
the four positive feelings were reported during the last session. Overall, she had a balance of several characteristics, and although sensory awareness was present most frequently, other aspects occurred often as well.
CHAPTER 4

COMPARATIVE RESULTS AND DISCUSSION

This was an exploratory study of the inner experience of people with depression using the Descriptive Experience Sampling method. Nine subjects were sampled with eight being included in the final summary. Table 1 includes each participant's scores on the SCL-90-R, BDI-II, and VAS. Because of the exploratory nature of the inquiry, no a priori hypotheses were proposed. The frequency of the characteristics of the participants' inner experiences is presented in Table 2 for the control group and Table 3 for the depression group. Eight characteristics overall were noted with the individuals in this study. Due to the small sample size, qualitative statistics were considered to be inappropriate. Instead, a quantitative approach was used to describe the data.

The most commonly occurring characteristic reported for both groups was the feeling code. "A feeling is an emotional experience, including sadness, happiness, humor, anxiety, joy, fear, nervousness, anger, embarrassment, and so on" (Hurlburt & Heavey, 1999). The depression group, however, reported a much higher rate of feelings, with 68% of the samples including feelings versus 38% of the control group samples including feelings. Moreover, the depression group reported more feelings with a negative valence (85% negative and 20% positive).
whereas the control group's report of feelings was more balanced (54% negative and 46% positive).

Table 1

Participants' Scores for the SCL-90-R, BDI-II, and VAS

<table>
<thead>
<tr>
<th>Participants</th>
<th>Phase I (t-score)</th>
<th>Phase II</th>
<th>Phase II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCL-90-R (Pre)</td>
<td>BDI-II (Post)</td>
<td>BDI-II (Pre)</td>
</tr>
<tr>
<td>Connie</td>
<td>50</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Carol</td>
<td>34</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Carl</td>
<td>54</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Chris</td>
<td>49</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cathy</td>
<td>62</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Dolores</td>
<td>82</td>
<td>37</td>
<td>40</td>
</tr>
<tr>
<td>Donna</td>
<td>82</td>
<td>46</td>
<td>45</td>
</tr>
<tr>
<td>Debra</td>
<td>–</td>
<td>31</td>
<td>16</td>
</tr>
</tbody>
</table>

The second most common characteristic for the depression group was sensory awareness. "A sensory awareness is a sensory or perceptual experience (itch, hotness, pressure, visual taking-in, hearing) that is itself a primary theme or focus for the subject" (Hurlburt & Heavey, 1999). This occurred 49% of the time in
the depression group and only 30% of the time in the control group. Sensory awareness was the third most reported experience for the control group.

The characteristic coded third most frequently for the depression group was unsymbolized thinking. "Unsymbolized thinking is the experience of thinking some particular, definite thought without the awareness of that thought's being represented in words, images, or any other symbols" (Hurlburt & Heavey, 1999). This attribute was reported in 42% of the samples in the depression group and 19% of the samples in the control group. The depression group reported more than twice the amount of unsymbolized thinking as the control group.

Inner speech was the fourth most frequent experience within the depression group. "Inner speech is the experience of speaking words in the person's own voice, with the same vocal characteristics (timbre; rate; inflection for commas, question marks, etc.; pauses; accents; stutters; etc.) as the person's own external speech, but with no external (real) noise" (Hurlburt & Heavey, 1999). Both groups reported inner speech approximately the same percentage of time, with the depression group noting inner speech 23% of the time and the control group 27% of the time.

Image was the fifth most common feature recorded by the depression group. "An image is the experience of seeing something that is known to be not actually present" (Hurlburt & Heavey, 1999). Image was found in 21% of the depression group samples and 35% of the control group samples. This was the second most common trait observed in the control group.
### Table 2

**Percent of Participants' Samples with Each Characteristic (Control Group)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Connie</th>
<th>Carol</th>
<th>Carl</th>
<th>Chris</th>
<th>Cathy</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling</td>
<td>21</td>
<td>38</td>
<td>45</td>
<td>46</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Positive</td>
<td>60</td>
<td>63</td>
<td>40</td>
<td>27</td>
<td>40</td>
<td>46</td>
</tr>
<tr>
<td>Negative</td>
<td>40</td>
<td>37</td>
<td>60</td>
<td>73</td>
<td>60</td>
<td>54</td>
</tr>
<tr>
<td>Sensory awareness</td>
<td>25</td>
<td>33</td>
<td>28</td>
<td>17</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>Inner speech</td>
<td>21</td>
<td>5</td>
<td>52</td>
<td>38</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Unsymbolized thinking</td>
<td>38</td>
<td>19</td>
<td>7</td>
<td>17</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Images</td>
<td>8</td>
<td>57</td>
<td>24</td>
<td>46</td>
<td>42</td>
<td>35</td>
</tr>
<tr>
<td>Inner hearing</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Just doing</td>
<td>21</td>
<td>33</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>Imageless seeing</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

**Note.** Percentage totals for each participant will exceed 100% due to multiple characteristics in each sample. Just doing includes just doing, just talking, just listening, and just watching TV (or movie or play).
Table 3

Percent of Participants' Samples with Each Characteristic (Depression Group)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Dolores</th>
<th>Donna</th>
<th>Debra</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling</td>
<td>75</td>
<td>83</td>
<td>46</td>
<td>68</td>
</tr>
<tr>
<td>Positive</td>
<td>11</td>
<td>16</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Negative</td>
<td>89</td>
<td>100</td>
<td>67</td>
<td>85</td>
</tr>
<tr>
<td>Sensory awareness</td>
<td>57</td>
<td>39</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>Inner speech</td>
<td>36</td>
<td>30</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Unsymbolized thinking</td>
<td>32</td>
<td>52</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Images</td>
<td>11</td>
<td>17</td>
<td>35</td>
<td>21</td>
</tr>
<tr>
<td>Inner hearing</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Just doing</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Imageless seeing</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Percentage totals for each participant will exceed 100% due to multiple characteristics in each sample. Just doing includes just doing, just talking, just listening, and just watching TV (or movie or play).
Because of the low frequency and similarity of the “Just” codes, all were included together for the final percentages and were labeled as “Just doing” on Table 2 and Table 3. These were the sixth most reported elements of the samples by the depression group. “Just doing is being engaged in some activity but with no awareness of thinking about it. Furthermore, no other aspect of inner experience is in awareness” (Hurlburt & Heavey, 1999). The rest of the “Just” codes are a variation of the above with only the activity differing. Although the depression group presented this code with half the frequency (5%) of the control group (12%), just doing was the sixth most common for both.

The seventh most noted characteristic for the depression group was inner hearing. “Inner hearing is the paying attention to the auditory characteristics of an inner phenomenon” (Hurlburt & Heavey, 1999). Inner hearing was reported just once (1%) in the depression group, and this was by Donna. Although not common in the control group either, inner hearing was found 3% of the time.

Only one individual, Connie in the control group, reported imageless seeing, the eighth characteristic noted among participants in general. “Imageless seeing is the experience of seeing (of looking at, of visually apprehending) in inner experience, except that the thing seen (usually called the image) is not itself directly in awareness” (Hurlburt & Heavey, 1999). This occurrence was not present in any of the depression group individuals.

In summary, the people with depression sampled for this study tended to report a much higher number of feelings with a far greater predisposition toward
negative feelings. The depression group reported more sensory awareness and more than twice the amount of unsymbolized thinking. The depression group was similar to the control group in reports of inner speech. Fewer images and less just doing overall were noted. Inner hearing occurred with a similar low frequency. The individuals in the depression group reported no imageless seeing. In general, the most predominant traits for the depression group were feelings, sensory awareness, and unsymbolized thinking.

Finally, the depression group tended to have more experiences per sample overall. The depression group averaged 2.1 (ranging from 1.8 to 2.3) codes per sample, and the control group averaged 1.7 (ranging from 1.4 to 1.9) codes per sample. Considering the small sample size, it is difficult to know if these differences are indeed reliable, but some speculations may still be made. It is possible that fewer samples and more simple moments are indicative of feeling better. The group may have been more aware of feelings in general and may have been more sensitive to bodily sensations. It is difficult to say if there is a cause and effect relationship.

Review of Theories

Four prominent classifications or theories of depression including DSM-IV criteria, Cognitive Theory, Affectivity Theory, and Hopelessness Theory were reviewed. Each has a different focus regarding the nature and expression of depression. A comparison of the results of this study with these four perspectives follows.
The six intrapsychic aspects of the DSM-IV diagnosis of depression include depressed mood, diminished interest in daily activities, fatigue or energy loss, feelings of worthlessness or guilt, diminished ability to think or concentrate, and recurrent thoughts of death or suicidal ideation. The depression group clearly had a stronger tendency toward feelings with a negative valence, and this included emotions beyond depressed mood including guilt, frustration, anger, regret, and disappointment. This showed agreement with depressed mood and feelings of worthlessness or guilt as presented by the DSM-IV. The depression group also had a higher occurrence of unsymbolized thinking and a lower occurrence of images. This may suggest a lack of clarity or preciseness in the inner experience of people with depression, and may relate to the aspect of diminished ability to think or concentrate. The one aspect clearly not present in the samples gathered was recurrent thoughts of death. Only Debra mentioned death, and only as an image of her sister's death by suicide. Suicidal ideation is not a requirement for the DSM-IV diagnosis and was not found here. Overall, the information gained in this exploration does not appear to be contradictory to the criteria set out by the DSM-IV.

Cognitive Theory can be summarized as negative, distorted thoughts creating negative schemas or worldviews of the self, the future, and experiences. Beck described the specific types of distorted thoughts that an individual with depression might have (Beck et al., 1979). Although these specific distorted thoughts were not typically found in isolation within the samples, the summaries of many of the samples could be called distorted and would fit into Beck's
delineations. For example, in sample #2, Dolores was standing in the hallway looking into her 8-year old son’s bedroom. She was feeling anxious, inadequate, and frustrated about her failings as a mother and specifically about the fact that she was studying when there was so much work she felt she should be doing around her house. At the moment of the beep, she was saying out loud, “What the hell am I doing?” By this she meant that she should be taking care of her family responsibilities instead of studying. A distorted thought was not clearly present in a specific way, but the idea of the distortion was. When summarizing the moment, Dolores used distortions such as labeling and should statements. Thus, while specific distorted thoughts were not present expressly, there was a tendency toward distorted thinking in general and a negative worldview overall.

Affectivity Theory posits that depression consists of a combination of low positive affectivity and high negative affectivity. Clearly, the depression group reported a predominance of negatively charged feelings (85%) over positively charged feelings (20%). This illustrates the low positive/high negative blend suggested by this theory. The control group was more balanced in the presentation of feelings, with a closer split between negative (54%) and positive (46%) feelings. Again, when looking at the theory in general, the data reported here were supportive.

The final model presented was Hopelessness Theory, which starts with the assumption that there are many types of depression, hopelessness depression being one of them. The theory defines hopelessness depression as including two aspects or criteria, negative expectations about outcomes and helplessness to change those
outcomes. Only one sample included the explicit description of hopelessness. In sample #20, Dolores reported that she had a flush of depression and a feeling of hopelessness permeating her body. She continued by summarizing the moment with, “What’s the point?” This illustrated both of the criteria of hopelessness and helplessness.

Overall, the data reported here were supportive in general of the classifications and theories of depression reviewed. The samples did not seem to support one theory over the rest, or an entire theory, but instead different samples corroborated various aspects of each model. This may be due to the four theories being fairly similar in nature in that they all address depression.

Difficulties, Value, and Future Recommendations

The primary difficulty with this study was the small sample size. Generalizations cannot be made to the general population without further research and with larger samples. Additionally, the majority of the individuals sampled were college students thus limiting generalizability to other groups. By sampling from individuals with varying levels of depression and from various groups in the population, a clearer picture might emerge.

A second issue is related to the lack of homogeneity of depression. Various researchers have suggested different views on types of depression as alluded to earlier when discussing Hopelessness Theory. There is the potential difficulty of understanding the inner experience of those with depression as inner experiences may vary greatly between individuals and types of depression.
A final problem is that DES research, along with all other self-report research, is limited by a reliance on honest participation by individuals. The data reported here are only as accurate as that presented by the individual, by the understanding of the process by the individual, and by the understanding of the evaluators of what is said by the participants.

This study was valuable for a number of reasons. First DES was shown to be a viable method of studying depression in general. The data collected were supportive of the major theories of depression and so appear to have high validity. As certain codes were found to be more prevalent or less prevalent with the depression group, with further study, DES might be able to be used as a tool to discriminate between people with depression and subsequent alleviation of depressive symptoms.

Second, people with depression were clearly able to utilize this method. DSM-IV included “diminished ability to think or concentrate” as part of the criteria for depression. This deficit did not appear to be problematic for the people with depression sampled here. The individuals in the depression group appeared to learn the process with the same speed as the control group. The samples presented by the depression group were, in general, more complex in that more components were present in each thought, but they were able to examine their inner experience with seemingly similar clarity.

It is then possible that if a person with depression is having difficulty using other introspective methods, DES offers an alternative. This gives both researchers
and clinicians other avenues of exploration. This also allows for tailoring treatment to the individual.

Third, people with depression were shown to primarily exhibit feelings, sensory awareness, and unsymbolized thinking in their thought processes. This information may aid researchers and practitioners in future work with individuals with depression. The current theories of depression primarily address the content of a person's thoughts. For example, cognitive theory suggests distortions of content. Affectivity theory focuses on the content and valence of feelings. Hopelessness theory examines an individual’s thoughts for hopelessness and helplessness. DES looks at the way in which these thoughts are present, or the process of thinking. DES goes beyond just “thought” and “feeling,” including clarity, presentation, and multiple experiences.

Fourth, although there were some dominant characteristics reported, the analysis shows the wide variability in inner experiences of those with depression. This supports taking an individualized perspective when assessing depression. While feelings, sensory awareness, and unsymbolized thinking were the dominant characteristics for the depression group, they appeared with differing frequencies for each person. By further understanding the individual inner experience of a person, treatment can be more specific.

Future research would include replication of this study utilizing a larger and more varied sample. A second possibility would be to compare different types of depression including hopelessness depression. A third recommendation would be to explore the possible therapeutic properties of DES. Although there was no marked
reduction in symptoms among the depression group as a whole. DES was only used for a couple of weeks with each individual. Therapies for depression are typically longer-term, and use of DES over the same time period might also result in changes in symptoms.
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