## "RIGHT WORDS" IN THERAPY

by

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#### **Abstract**

Philosopher and psychotherapy theorist Eugene Gendlin proposes that clients' autonomic somatic responses during therapy provide a trustworthier gauge of the experiential usefulness of therapist interventions than do clients' consciously mediated assessments. Building on this basic proposition Gendlin argues that therapists should only pursue moments in therapy that provoke a subtle, embodied, signature response within clients, or what he labels a "carrying forward" reaction. The validity of Gendlin's description of small carrying forward responses has never been rigorously investigated. In this work two separate articles address this gap in the literature through complementary approaches. The first article considers the theoretical plausibility of Gendlin's central claim that human beings can effectively evaluate abstract social stimuli (like therapist verbalizations) through nonconsciously mediated processes enacted in the body. In order to speak to this plausibility issue the first article considers Gendlin's carrying forward construct in light of Antonio Damasio's somatic marker hypothesis, a parallel model of human evaluation processes that has amassed compelling validity support. The second article describes an experiment that used both psychophysiological monitoring and assessment of subjects' perceptual self reports in order to directly investigate the validity of Gendlin's description of the carrying forward construct.

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#### Article One

#### Introduction

Eminent philosopher and psychotherapy theorist Eugene Gendlin posits that the key to helping a client progress in therapy lies in pursuing therapeutic directions that lead to deepened experiencing. Further, Gendlin proposes that therapists can help guide sessions toward such experiential depth by pursuing moments in therapy that generate an unconsciously controlled, somatic stirring response within clients, and by abandoning those that do not. Gendlin labels moments that provoke such somatic responses as moments that have carried forward. The carrying forward construct would seem to offer clinicians an invaluable therapeutic "compass". As such, this article will start by explaining carrying forward and outlining its possible value for practitioners. Despite its potential usefulness however, the carrying forward construct has never been empirically investigated. The plausibility of carrying forward as Gendlin describes it could appear questionable, particularly within a culture that tends to separate emotion from reason and to privilege logic over the wisdom of the body. However, neuroscientist Antonio Damasio's somatic marker hypothesis is a significantly validated model of human evaluation processes that rests, as does the carrying forward construct, on the fundamental contention that we are capable of effectively evaluating social stimuli through the body without the need for conscious control or even awareness. Therefore, in the second half of this article the somatic marker hypothesis will be explained and supported as an indirect means of supporting the plausibility of the carrying forward construct, ultimately strengthening Gendlin's directive to mind the clients' body during therapy.

### Gendlin's Change Model

One highly developed and profoundly influential line of inquiry into the question of how psychotherapy works holds that it is the variable of client experiencing that ultimately underlies the process of therapeutic change. Although the experiencing construct was originally formulated by Carl Rodgers (Klein, Mathieu-Coughlan, & Kiesler, 1986) it has been most fully explicated by Gendlin (Klein, Mathieu-Coughlan, & Kiesler, 1986), and it is his conceptualization of experiencing that will be presented in this article. Experiencing continues to be a central construct in the thinking of many leading psychotherapy theorists, such as Les Greenberg (Watson, Greenberg, & Lietaer, 1998) and Michael Mahoney (Mahoney, 2003).

## Felt Sense and Experiencing

To have a basic understanding of experiencing and its role within Gendlin's general model of change, one must first have a grasp of the felt sense. A felt sense is "...a bodily sense of some situation, problem, or aspect of one's life..." (Gendlin, 1996, p.20). A felt sense contains implicit meanings before they have been symbolized or divorced in any way from directly lived, holistic experience. In explaining the internal complexity of a felt sense, Gendlin says that "...in a felt sense emotions are not split from other facets of experience such as thought, observation, memories, desires, and so on. As these contents form and emerge from the felt sense, they become separated..." (Gendlin, 1996, p.59). It is essential to underline that a felt sense is not an emotion, though these two classes of phenomenon both have a manifestation in the body. When we have an emotion (of sadness for example) the meaning of this experience has an explicit quality, as evidenced by the fact that a generic symbol (the word "sad") is able to satisfactorily describe this emotion each time we feel it.

Conversely, each felt sense is fully rooted in the present, is completely unique, contains highly intricate meaning, and contains this meaning implicitly rather than explicitly. Therefore, satisfactorily describing or symbolizing a contacted felt sense through language tends to be a struggle. In fact, it is this struggle that Gendlin believes should form the core of the therapy process. For example, "... if one cries, one can turn one's attention inward and sense ' the crying place' from which the tears are welling up..." (Gendlin, 1996, p. 16). One would be contacting the felt sense in this example if one were consciously and directly attending to the texture and quality (e.g., heavy, choppy, scratchy) of 'the crying place' itself, rather than attending to one's conceptualizations or feelings *about* the crying place.

In turn, experiencing is the act of attending to a felt sense and then transforming implicit meaning within it into explicit meaning through the use of language or some other form of symbolization. At low levels of experiencing one creates explicit, symbolic meaning almost entirely "from the head" in a process that involves little or no inner contact with a felt sense. Conversely, at the highest levels of experiencing one is in almost constant contact with a felt sense during the process of symbolization, as one moves fluidly back and forth between the implicit meaning contained within the somatic felt sense and the explicit meanings created during symbolization (Gendlin, 1996; Matieu-Coughlan & Klein, 1984). Gendlin holds that experiencing is an inherently therapeutic, tension-reducing mode of processing (Gendlin, 1996, Gendlin & Berlin, 1961). Crucially, Gendlin argues that it is this tension-reducing quality of experiencing that underlies psychotherapy's ability to heal.

### Carrying forward

Gendlin posits that clients' moment-by-moment bodily reactions during sessions are an invaluable resource because, if they are attended to appropriately, they can help steer therapy in the direction of deeper experiencing. For Gendlin says that only therapist verbalizations that point in the direction of deeper experiencing will cause the client to have an immediate, subtle, autonomic, somatic "stirring" reaction, usually centered within the stomach or chest. Such a response will arise when the client is attended to in the "right" way. Gendlin holds that, on the whole, these non-consciously controlled carrying forward responses are a more clinically trustworthy means through which to evaluate the helpfulness of therapist verbalizations than are those evaluations that a client arrives at through effortful, logical consideration.

Gendlin's carrying forward construct is valuable because it seems to offer a constant indicator of where to head (in terms of deepened experiencing) in therapy. From within this paradigm the therapist can use essentially any style of intervention she chooses as long as she maintains a focus on her primary goal of carrying the client's experience forward (Gendlin, 1996; Mathieu-Coughlan & Klein, 1984). In order to achieve this overarching goal it is essential that the therapist check out the client's somatic, felt sense level reaction to *each* intervention in therapy (be it a cognitive restructuring, interpretation or any other form of therapist behavior). Gendlin unequivocally asserts that only those interventions that promote a somatically manifested change in how the client experiences their issue should be pursued (Gendlin, 1996).

For clients who are already highly sensitive to their own somatic reactions this process of "steering" in therapy can simply amount to frequently inviting them to take a moment to silently check in with and then report back on their felt sense responses to events as they arise in therapy. However, clinical experience clearly shows that many clients have difficulty consciously knowing what is arising subtly in their bodies during therapy. In fact,

for many clients it may be partly a difficulty with listening to themselves in just this way that has brought them (directly or indirectly) in for help. For clients like these there can be tremendous value in suggesting that helping them to develop this kind of sensitivity becomes a central project for therapy. This kind of work can not only speed and deepen the work of therapy itself, but the benefits can also readily generalize to clients' lives outside of session. There are a large number of accessible methods through which to help clients develop this kind of self-awareness, including ones such as vipassana mediation that have arisen from different wisdom traditions. However, one method that could well be considered is Gendlin's focusing technique (Gendlin, 1981), since it has been well validated as a means of helping people to become more sensitive to their felt sense reactions (Klein, Mathieu-Coughlan, & Kiesler, 1986).

Using Damasio's Work to Consider the Plausibility of Carrying Forward

For many, there could be doubts about the *plausibility* of Gendlin's central assertion that as a matter of course non-consciously mediated, somatically based evaluations can be discriminating in response to subtle, symbolic stimuli such as different forms of therapist verbalization. However, a number of neuroscience researchers are finding growing evidence that the body indeed seems to play a vital, non-logically mediated role during human evaluation processes in a manner that is generally consistent with Gendlin's theory (Zajonc, 1980; LeDoux, 1996; Bechara, Damasio & Damasio, 2000). Antonio Damasio's somatic marker hypothesis is the piece of work that has most powerfully convinced us of the plausibility of carrying forward as Gendlin describes it.

Reasoning - The Traditional View

Damasio suggests that the process of reasoning can be largely understood as a process of deciding (Damasio, 1994). For what is reasoning, if not a systematic process of deciding on particular answers to a series of questions that will together allow one to solve a problem? So how do human beings go about deciding things? The common sense view, and the view that has traditionally been offered by science, is as follows. In response to a situation that requires a choice or decision, the brain of a typical adult will react by quickly generating a series of potential response options, each paired with an imagined outcome (Damasio, 1994). "Higher", evolutionarily newer parts of the brain then make use of conscious, cognitive, logical processes in order to perform a cost-benefit analysis on the outcomes contained within each of the previously generated scenarios. Finally, the option assessed to be the most promising is selected.

Damasio argues that if we really reasoned in this way then it would take far longer than it actually does for us to make each of our many daily decisions, and that both our attention and working memory capacities would be constantly on the verge of becoming overloaded (Damasio, 1994). Damasio reaches this conclusion because the "common sense" reasoning process described above would demand execution of a highly demanding neural sequence involving: the generation of a series of imaginary scenes for each considered option/consequence scenario; and then the performance of a detailed, cognitive cost/benefit analysis on all of the imagined scenarios. The heavy demands of this kind of process become clear when one considers that there is an overwhelming number of solutions that one could potentially imagine while reasoning through each one of the kind of problems encountered

constantly in daily life. As such, Damasio offers the somatic marker hypothesis as an alternative to the traditional model of reasoning.

Primary/Secondary Emotions and Feelings

An explanation of the somatic marker hypothesis must be prefaced with a differentiation between "emotions" and "feelings" in Damasio's terms. Essentially, he defines emotions as physical level reactions -either conscious or unconscious- to stimuli, and feelings as cognitions arising from conscious awareness of these physical level, emotional reactions. Damasio posits that we have three classes of emotions, two of which are relevant to this discussion: primary and secondary emotions. Both of these classes of emotion, and the feelings that Damasio believes to arise from them, will need to be briefly explained before the somatic marker hypothesis can be presented.

Damasio suggests that human beings are hard wired to experience six universal, "primary" emotions. These primary emotions are held to include: happiness; sadness; fear; anger; surprise; and disgust (Damasio, 1999). Damasio suggests that we are pre-programmed to have particular primary emotions when we encounter stimuli with a particular set of features. As an example, Damasio asks us to imagine a person who has just perceived a growling sound (Damasio, 1994). This stimulus would be recognized by a part of the limbic system in the person's brain. This same brain area would then initiate enactment of a body state typical of fear, and would also initiate a manner of cognitive processing typical of fear (Damasio, 1994). These internal state changes would then be "read back" by the brain (with or without conscious awareness) and in turn this would trigger the person to engage in one (or a number) of a set of associated behavioral responses (e.g., running away). It is important to recognize at this point that such an "emotion" of fear, and even the behavioral responses

that tend to flow from it, would be primarily somatic experiences whose impact would not depend on consciousness awareness of the process itself. A whole other set of neural processes would need to be enacted for this emotion of fear to be consciously recognized and labeled as such, or in other words for the emotion of fear to become a feeling of fear.

Damasio holds that a higher percentage of our emotional experiences are of the secondary than of the primary variety. Secondary emotions are held to be enacted through the same basic processes as are primary emotions. However, there are two key differences between these classes of emotion. Firstly, secondary emotions are believed to have developed much more recently in evolutionary terms. Secondly, secondary emotions are not universal, but rather reflect the unique life experiences of each individual. Each individual's palate of secondary emotional responses is established in the following manner. When similar kinds of stimuli are initially experienced, one's brain naturally tends to enact relatively similar body state/cognitive processing changes in response. Once a particular type of stimuli has been consistently paired with a particular set of internal changes frequently enough (particularly in early development), the brain remembers this relationship. From this point on, each time a stimulus of a type that has been previously conditioned in this way is encountered, Damasio argues that the brain will automatically and unconsciously generate the associated internal changes (Damasio, 1994; Damasio, 1999). Damasio believes that the nature of our most essential secondary emotional reactions is formed by the time we reach adolescence. However, he also holds that the nature of these responses continues to evolve throughout the life span, reflecting each individuals' evolving relationships with the stimuli that he or she encounters (Damasio, 1994).

### The Somatic Marker Hypothesis

Essentially, the somatic marker hypothesis is a model of decision making that starts with the traditional, "common sense" decision making model but then fundamentally alters it by positing a vital role for secondary emotions. Damasio suggests that when we make a decision we indeed mentally generate a range of repose/outcome scenarios. However, before individual scenarios are laboriously processed through cost/benefit analysis, they are first evaluated through the use of secondary emotions. The imagined outcomes in scenarios that produce negative emotional/somatic states are somatically "marked" as being negative, or as Damasio says "... when the bad outcome connected with a given response option comes to mind, however fleetingly, you experience an unpleasant..." response in your "...gut..." (Damasio, 1994, p. 173). Outcome scenarios somatically marked in this way are immediately rejected, and therefore never need to be logically analyzed for degree of cost/benefit. Conversely, the imagined outcomes in scenarios that produce pleasant emotional/somatic states are "marked" as being worthy of special attention during cost/benefit analysis. The tremendous advantage of secondary emotional marking over processes of logical, cost/benefit analysis is speed. Secondary emotional reactions are automatically generated and evaluate the overall profile of a given stimuli, rather than relying on element by element analysis as is the case with consciously controlled, logical processing. By taking advantage of the speed of secondary emotional processing we are able to efficiently harness our cognitive resources by focusing in on a manageable number of promising options during cost/benefit analysis. It should be added that the somatic marking process is held to be particularly designed to guide responses of the personal or social variety, both because of the tremendous complexity/ambiguity typically involved in decisions within the social domain,

and because of their central role in survival (Damasio, 1994). This later feature strongly heightens the relevance of Damasio's work to psychotherapy because the psychotherapy process is so essentially personal and social in nature.

If somatic markers themselves become the objects of conscious attention then the marking process occurs overtly. However, if they do not then this whole process of somatic marking occurs both automatically and beneath conscious awareness. The ability of our embodied, emotional reactions to shape our conscious awareness in this way is a powerful illustration of how our emotions are "...foundations and filters for much of our consciousness..." (Mahoney, 2003, p. 180). Drawing attention to the body is to help bring these potentially covert ordering processes to awareness, and it is to help both our clients and ourselves to gain greater trust in these moment to moment reactions as a resource in the process of change. Most important for this article however, is the fact that the somatic marker hypothesis is like Gendlin's construct of carrying forward in that it rests on the essential premise that autonomically controlled, somatic reactions can play a crucial role in the process of evaluating abstract, social stimuli.

Selected Support for the Somatic Marker Hypothesis

A body of varied evidence has been developed that offers significant support for the somatic marker hypothesis (Damasio, 1994; Bechara, Damasio & Damasio, 2000). A substantial portion of this evidence has emerged from the study of people who are believed to be unable to make use of somatic markers. Damasio's theory posits that the ability to effectively engage in somatic marking is essential to the ability to make normal decisions within the social domain. From this, it holds that the *in*ability to effectively generate somatic

markers should lead to a profound handicap in life functioning. In fact, evidence to this effect provides some of the strongest support for the somatic marker hypothesis.

Damasio and his colleagues have attempted to chart out a neural pathway through which they believe the somatic marking system functions. A complete explanation of this pathway is beyond the scope of this article, but the ventromedial prefrontal cortex (vpc) is held to be an essential brain area for making use of somatic markers. As such, Damasio and his colleagues have extensively tested a small number of identified patients that have profound or total vpc damage, but whose brains are otherwise normal. These tests have involved a wide range of measures including those for I.Q., memory, language, and morality. The participants tend to score exactly as they presumably would have prior to suffering their brain damage, often scoring well above average on all measures. In fact, in a first meeting these people do not appear to be handicapped in any way. In reality however, their brain damage tends to have two basic consequences. Firstly, these people typically develop a subtle affective flattening. Secondly, their lives tend to fall apart. People who were previously highly competent or even accomplished both professionally and socially are soon unable to hold down a job, to maintain a life partnership, to live in accordance with their stated values, or ultimately to function in the social realm competently at all. Damasio claims that, robbed of normal emotional functioning through their bodies, these people lose the ability to effectively make the myriad of complex daily decisions that define existence in the social domain.

An anecdote that Damasio recounts constitutes one succinct and affecting piece of validity evidence (Damasio, 1994). In it, Damasio and several of his colleagues ask one of his patients with vpc damage to choose between two possible dates for a next meeting. In

response, the client weighs out this mundane decision for almost half an hour, considering his decision from almost every possible angle and in an absurd degree of detail. Finally, in frustration Damasio tells the patient to come in on one of the two days, at which point the patient calmly agrees and walks off. Damasio argues that the debilitating nature of this patient's response was not only created by his need to rely exclusively on cognitive, logical processes in order to reach a decision. Instead, the patient's emotional handicap also prevented him from conceiving of the task in a socially appropriate manner. A neurologically normal person would never have taken so long with such a routine decision in the presence of other people because an unconsciously controlled somatic marker would have forcefully informed him or her of the social inappropriateness of doing so (Damasio, 1994).

#### Conclusion

It should be stressed that the two models presented in this article have a range of core differences in addition to their similarities. Among the most relevant of these differences is that, unlike Gendlin, Damasio does not suggest that the evaluations of the body are typically more or less trustworthy then those arrived at through logical processes. However, Damasio's work has been presented here because it is a related model of decision making that rests on some of the same essential suppositions as Gendlin's construct of carrying forward does. The fact that the somatic marker hypothesis has been substantially validated (in a way that Gendlin's carrying forward construct has not) proves to indirectly heighten the plausibility of the evaluative role that Gendlin ascribes to felt sense stirrings during therapy. This in turn strengthens Gendlin's claim that therapists should pay great heed to clients' moment-to-moment somatic reactions during therapy.

There is no doubt that experiencing has been a broadly influential construct across a range of approaches to psychotherapy. However, it also seems clear that Gendlin's theories have been largely accepted as being substantially metaphorical. This is evidenced by the fact that, beyond a small body of research conducted mostly in the nineteen seventies, there has been very little research into Gendlin's theories that have investigated felt sense level behaviour as a physiological phenomenon. One wonders if this understanding of Gendlin's work developed because, until recently, commonly accepted scientific understandings of the brain, body and mind precluded the possibility that a non-consciously controlled form of somatically manifested intelligence such as the felt sense could actually exist. As these broader scientific paradigms evolve it now seems time to reconsider Gendlin's ideas and to directly investigate the validity of his theories about how psychotherapy heals. A range of questions could be posed within this process of inquiry. For example, the authors are currently conducting an experiment that will use the monitoring of clients' psychophysiological responses during focusing oriented therapy to investigate whether or not they follow the pattern of activity predicted by Gendlin's theories. Ultimately, it would be fascinating to use emerging neuroimaging technology such as fMRI to investigate whether or not particular patterns of brain activity are consistently correlated with moments of high and low experiencing during psychotherapy. If such neural correlates are indeed found to exist, research attention could then be turned to investigating whether "good moments" in therapy tended to be correlated with these neural patterns, regardless of the brand of therapy being practiced.

#### Article Two

#### Introduction

There is strong empirical evidence that an embodied process called "experiencing" plays a crucial role in determining the success of psychotherapy (Klein, Mathieu-Coughlan, & Kiesler, 1986; Greenberg, Korman & Pavio, 2002; Whelton, 2004). In his review of studies that looked at emotional processes in therapy, Whelton (2004) reports that depth of client experiencing is one of the few process variables that consistently correlates robustly with positive therapy outcome. It is striking that in some cases (Goldman, 1997; Pos, Grenberg, Goldman, & Korman, 2003) depth of client experiencing has been found to be an even stronger predictor of success then the widely cited 'strength of the therapeutic alliance' variable. These findings stress how important it is that therapists be capable of effectively facilitating experiencing with their clients.

The experiencing construct was originally described by Carl Rogers and has been most fully explicated by philosopher and psychotherapy theorist Eugene Gendlin (Klein, Mathieu-Coughlan, & Kiesler, 1986). It is Gendlin's change model that will be addressed in this article. Gendlin posits that the experiencing process is based on the functioning of a non-consciously controlled yet highly sophisticated entity called the "felt sense". The felt sense can generally be understood as a kind of core "inner self" or "inner voice." Or as Gendlin says, "...the felt sense...is the center of the personality...", that part of the self that feels most strongly "... like 'really me" (Gendlin, 1984, p. 81).

The felt sense generates *implicit* meaning, or meaning that has not yet been symbolized in language but is still formed on a pre-linguistic level and that can be *directly* contacted through bodily sensations (Gendlin, 1996). When the felt sense judges that a

portion of this implicit, bodily felt meaning has been addressed with words that are "right" Gendlin holds that the implicit meaning will evolve slightly in a manner that takes the client "down" a single step into deeper experiencing. This kind of change step is called an episode of "carrying forward" (Gendlin, 1996). Gendlin claims that if one looks in a very fine-grained way at how experiencing deepens over the course of an entire therapy session, one finds that it does so through the enactment of many such small, carrying forward steps (Gendlin 1996). Therefore, from the therapist's perspective the key to promoting deepened client experiencing lies in facilitating these downward carrying forward steps, one after the other.

Gendlin claims that only those words spoken by the therapist that will lead to such a downward step, or what Gendlin calls "...right words..." (Gendlin, 1996, p.58), will provoke a signature response within clients. The central element of this is signature response is a distinctive physical sensation called a felt give (Bohart, 2001) that arises within the torso. The signature response also includes an emotional component in that Gendlin holds that it feels more pleasant to hear the "right" words than to hear other words. The fact that this signature response *only* occurs after "right" words means the therapist can use it to precisely assess where the client's experiencing process stands on a moment-to-moment basis (Gendlin, 1996). In turn, this detailed knowledge allows the therapist to facilitate the next step into deeper experiencing in a much more honed, purposeful and thereby efficient manner. Therefore, Gendlin's central clinical contention is that therapists must use the feedback offered by the felt sense through this signature response as a primary means of orientating during therapy.

To some it may seem implausible that an unconsciously controlled entity like the felt sense could routinely and effectively evaluate whether highly abstract social stimuli (such as

therapist verbalizations) are "right" or not. However, research from the field of neuroscience is producing a growing body of evidence that human beings are indeed capable of evaluating abstract social stimuli in sophisticated ways through means that do not require conscious control or *even awareness*, and that these evaluations routinely manifest as sensations within the body (Ohman, Esteves, Flykt, & Soares, 1993; Damasio, 1994; Compton, 2003; Myers, 2004). For a more detailed comment on this emerging paradigm within neuroscience and it's relationship to Gendlin's work see Ozier and James (2004).

Based on the consulted literature, the validity of Gendlin's description of the signature response that theoretically occurs only after the "right" words has never been tested. Such a test deserved to be conducted considering the essential role that this signature response is held to play in facilitating the experiencing process. Therefore, this study asked the following question: "How valid is Gendlin's description of the signature carrying forward response and his explanation of how it functions during psychotherapy?" In order to address this research question the author developed and implemented a experiential protocol with a small, purposive sample. This process allowed assessment of the participants' perceptual and physiological responses to hearing words rated as being of differing degrees of "rightness." This data was then compared to the pattern of responses that would be predicted from Gendlin's theoretical description.

## Overview of Gendlin's Model of Change

Felt Sense

As briefly mentioned above, Gendlin believes that human beings have an essential element of consciousness called the felt sense that manifests within the center of the body. Despite its supposed importance, Gendlin claims that the felt sense entity is not a widely

recognized or acknowledged because it manifests within the body in a very subtle manner and is therefore easy to overlook (Gendlin, 1981; Gendlin, 1996). In a potentially confusing set of terms, the felt sense as an entity or element of consciousness generates individual "felt senses" (much as the emotional system produces individual emotions). Each such individual felt sense is "... a bodily sense of some situation, problem, or aspect of one's life." (Gendlin, 1996, p.20) Said another way each specific felt sense is "... an implicit higher level meaning, the sense of something that includes thoughts, feelings, perceptions, internal actions, and context." (Greenberg, Rice, & Elliot, 1993, p.165).

Equating felt sense level experience with that of emotion is a common mistake. This is an easy mistake to make because both of these classes of phenomenon manifest within the body, However, a felt sense tends to manifest in a far less distinct or intense manner then an emotion does. Further, when we have a feeling such as sadness the meaning of this experience is explicit, as evidenced by the fact that a generic symbol (the word "sad") is able to satisfactorily describe such a feeling each time we feel it. Conversely, a felt sense is a challenge to explicitly symbolize, since each one contains an intensely rich and complex mosaic of meanings and contains these meanings implicitly rather than explicitly. *Experiencing* 

As outlined earlier, addressing a felt sense with words that are "right" produces a change step in which implicit, bodily felt meanings carry forward. The process of using "right" words to carry forward in this way is the process of experiencing. Gendlin emerges from the client-centered tradition, so in the examples he provides he often defines words as being "right" to the extent that they accurately reflect the client's implicitly felt meaning. Empathic reflections were also used as the mode of therapist intervention in the experiential

protocol within this study. However, Gendlin is clear that many different linguistic means can be used to generate a carrying forward step. For example, a therapist's interpretation would constitute "right" words if the felt sense judged it to resonate with, or relate very meaningfully to, the implicit meaning being contacted. As such, a therapist can use any form of intervention he or she chooses and still work comfortably within Gendlin's model, as long as his or her primary focus lies in using these interventions as a means of carrying forward the client's experiencing.

The EXP Scale (Klein, Mathieu-Coughlan & Keisler, 1986) is a 7-point scale that has been used extensively to measure depth of experiencing during psychotherapy. Reference to the stages of the EXP Scale should help to better illustrate the nature of experiencing. From stages one (the lowest level) through three meaning is being processed entirely through conceptual, top down processes and there is no implicitly felt meaning evident. At these stages words have relatively fixed meanings because they function as abstract symbols that refer exclusively to that which they symbolize. Therefore, two highly synonymous words are functionally interchangeable because they are simply different symbols that refer to the same thing. The crucial shift from conceptual processing to experiencing happens at stage four of the EXP Scale because it is in this stage that the felt sense level of processing first becomes engaged and first produces a felt sense (also referred to as an "inner referent" in Gendlin's early work). Once a felt sense has arisen words cease to be purely abstract symbols that refer to things "out there". Instead, words become means of "pointing to" or "referring to" the meanings that are *already* implicitly present within the body (Sundararajan, 1997).

Following from the ideas above, it becomes clear that in the presence of a felt sense the effectiveness of any particular attempt at symbolization can no longer be judged through reference to a predetermined and abstract system of related word meanings (e.g., the kind of system found in a dictionary). The effectiveness of symbolization can only be judged in reference to the implicit meanings contained within an individual felt sense. Only those words that are judged to be "right" by the client's felt sense are truly right on an experiential level. Words that are synonymous according to a dictionary cease to be interchangeable. As such, much more linguistic preciseness is now required if the goal of inducing a step of carrying forward is to be achieved. Or as Gendlin says, therapist responses must now begin to "... point more precisely. Not enough is gained if the response is more or less right. A good response points and makes contact with *that*, from which the client spoke, rather than restating what was said." (Gendlin, 1984, p. 90)

The Signature Response to the "Right Words"

Gendlin's description of the signature response that he claims will follow only "right" words has two components. Firstly, there is the felt give, a sensation level response that typically manifests within the client's stomach, chest or throat or abdomen (Gendlin, 1981; Gendlin, 1996). Gendlin repeatedly describes the felt give as a distinctive sensation that involves both a quality of "...stirring..." (Gendlin, 1996, p.58) and a simultaneous quality of "...easing..." (Gendlin, 1984, p. 82) or "...physical relief..." (Gendlin, 1996, p.26).

Secondly, hearing the "right" words brings an immediate, good feeling like the one brought by a gust of "...fresh air..." (Gendlin, 1996, p.26).

### Focusing

While it is the therapist's responsibility to facilitate the orientating process by regularly directing attention to the client's body and asking about felt sense responses, it is only the client who can authoritatively say whether an event in therapy has caused a felt give

or not. As such, in order for this therapeutic method to function as it is designed to the client must be consciously sensitive enough to their own felt sense reactions to be capable of cognitively recognizing and accurately interpreting these typically subtle somatic responses. By the mid 1960's Gendlin's extensive process-outcome research findings had led him to believe that, not only was this kind of sensitivity to the felt sense the key to success in therapy, but that certain people were naturally better at it then others (Gendlin, 1981). Therefore, Gendlin developed the focusing technique as a structured activity designed to help people increase their facility with each of the naturally occurring experiencing sub-processes, and thereby to improve their overall experiencing abilities. Focusing is a six-step process and it was used as the basis for development of the experiential protocol in this study. In particular, the fourth or resonating stage was used as a model for the experiential task.

#### Related Literature

No published studies have been identified that investigate, as the current study did, the perceptual or physiological correlates of small instances of carrying forward. However, Don (1977) investigated the EGG correlates of very large, palpable felt gives (technically a special class of felt give called a felt shift) (Gendlin, 1981). Don found that seventeen of twenty two felt shifts experienced by his participants were indeed correlated with a signature pattern of physiological (EEG) activity, one marked by "... transient bursts of alpha and theta activity..." (Don, 1977, p.15). Don's finding that large felt gives tended to have a consistent physiological correlate is strongly supportive of the findings of this study.

Two relevant anecdotal articles have also been identified. In their article Toomin and Toomin report on their use of Skin Conductance Level measurement as a means of monitoring clients' levels of arousal during therapy. These authors state that "...a sharp rise

in conductance level beyond that which is usual for the individual indicates that emotionally meaningful material is at or near the conscious level and is ready to be dealt with..."

(Toomin & Toomin, 1975, p.36). In her article, Guest (1990) reports that SCR fluctuations are often seen to occur after an area of content has arisen for potential consideration in therapy. Strongly echoing Toomin and Toomin, Guest has found that the presence of these rapid fluctuations indicates that "... meaningful material is just below the level of the client's conscious awareness, and is ready to come to the surface..." (Guest, 1990, p.86).

A study published by Silberschatz, Fretter & Curtis (1986) also has relevance to this study. Like the current study, the Silberschatz, Fretter, and Curtis experiment looked at the effects of individual therapist verbalizations on the degree of deepening in clients' immediately subsequent experiential levels (as measured by the EXP Scale). These authors found that the *quality* of therapist verbalizations (based on how well each verbalization "fit" with the client's case conceptualization) was significantly correlated with degree of immediate deepening in client experiencing. The quality criteria of "fit" used by Silberschatz, Fretter, and Curtis strongly echoes the current study's criteria of therapist verbalization "rightness".

Finally, the findings of another process study (Elliott, Shapiro, Firth-Cozens, Stiles, Hardsy, Llewelyn & Margison, 1994) also have important relevance to the current study. In this study the authors conducted a thick, detailed, qualitative analysis of a number of key change events that occurred during Interpersonal Therapy. The authors found that the key step that initiated the subsequent change sequences tended to center around the finding of a very particular word, one capable of perfectly symbolizing the clients' internal experiences. At these key junctures it seemed that it was only after such a key word had been found that

"... what appeared to matter was the specific word and its connotative network of associations, that is, a lexically indexed emotion scheme..." (Elliott et al., 1993, p.461).

## Statement of Hypotheses

In order to answer the research question participants were presented with empathic reflections during the experiential task that were "right", "close" to, or "far" from right. Following from Gendlin's theory it was hypothesized that the signature response that he describes would follow only after the "right" responses. In order to test this overall hypothesis the following five sub-hypotheses were tested.

- 1.) That participants' would report perceiving greater increases in arousal immediately after hearing statements rated as being "right" than they would after hearing statements rated as being "close" or "far."
- 2.) That statements rated as being "right" would also correlate with greater increases in participants' immediately subsequent levels of physiological arousal than would statements rated as being "close" or "far."
- 3.) That participants' would report perceiving greater feelings of easing or physical relief immediately after hearing statements rated as being "right" than they would after hearing statements rated as being "close" or "far."
- 4.) That participants' would report having more positive emotional responses to hearing statements rated as being "right" than they would to hearing statements rated as being "close" or "far."
- 5.) That statements rated as being "right" would also correlate with greater increases in participants' subsequent levels of a physiological correlate of positive valence than would

statements rated as being "close" or "far."

#### Method

### General design issues

The research design used in this study has two notable features that deserve explanation. Firstly, there is the fact that a standardized protocol was used in lieu of taking the more traditional approach of studying therapy sessions. Secondly, there is the fact that an "expert" sample was used because only people who had extensive training in the experiencing process were recruited as participants.

Firstly, a standardized protocol was used to overcome the challenges arising from the fact that Gendlin's theory holds that emotions are physiologically and phenomenologically more intense than felt sense responses, meaning that that the former can profoundly obscure the latter (Gendlin, 1996). Within the very "noisy" emotional environment of traditional therapy it would have been very difficult to identify any pattern of very subtle "felt sense type" physiological and perceptual responses that occurred in response to differing qualities of therapist verbalization. This measurement problem was heightened by the almost total lack of specifically relevant work to draw on. Conversely, within the developed protocol the therapeutic interaction could be simplified to the point that the only obvious emotion inducing stimuli became the phrases being offered by the experimenter at consistent intervals.

Secondly, expert participants were used in order to overcome another key methodological challenge faced by this study. Determining the effects of words of relative "rightness" obviously necessitates establishing what the "right" words *are* at particular points in time. However, making such determinations is greatly complicated by the fact that, for

reasons discussed at length in earlier sections, relative "rightness" during experiencing can only be made in reference to the implicit meanings within a specific felt sense. These meanings are only directly accessible to the person who is experiencing so it is therefore only the experiencer who can authoritatively determine the "rightness" of words. For this reason, in this study it was the participants who determined what the "right" words were, and it was the participants who made all subsequent judgements of symbolization "rightness".

Therefore, it was essential that the participants in this study be experts in interpreting the communications of the felt sense. Only in this way could it be credibly argued that the ratings offered during the experiential task were accurate reflections of the supposedly unconsciously controlled, covert felt sense behaviour that supposedly occurred during task completion.

### **Participants**

For reasons described above an expert, purposive sample was used. The ability to accurately interpret the communications of the felt sense is a trainable skill (Gendlin, 1996) so it is reasonable to argue that people who have been appropriately trained in this skill can be considered experiencing "experts". Focusers were targeted as participants both because focusing is the discipline that most specifically trains the requisite experiencing skills and because it has been shown to be an effective means of developing experiencing ability (Hendricks, 2002). A solicitation email was sent out to approximately 50 trained focusers through the electronic mailing lists of two local focusing groups. Additional attempts at recruitment were made through word of mouth inquiries within the local psychotherapy community. All interested parties were then contacted by telephone and the demands of the study were explained for them. A pilot test of the protocol was conducted with four of these

participants. At the end of this stage the protocol was consolidated and a further sample of eight participants was recruited.

All eight of these participants were Caucasian Canadians. Seven of the participants were female and one was male. Their ages ranged from 39 to 57 with an average age of 47. Professionally, three of the participants were practicing psychotherapists, three others were graduate level Counselling Psychology students, one was a Ph.D. in an area other than psychology, and one worked in information technology. The majority of these participants (5 of 8) had substantial focusing experience ranging from one up to seventeen years of training and practice. The remaining three participants had much less focusing training (a minimum of five hours of formal focusing training) but all of these later participants also had extensive expertise in related bodily based therapeutic disciplines such as Self Regulation Therapy. Upon completion of data collection participants' interview responses were consulted in order to ensure that all of the participants had indeed experienced in the designated ways during the experiential task, and this was used as the final inclusion criteria.

One participant's interview results made it ambiguous if he had truly been engaged in the required form of experiential processing during the experiential task. As such, this participant's results were eliminated from the study. During work with another participant, Joan, a significant physiological data collection error was made. As such, Joan's physiological results were unusable. However, her interview data were included. *Facilitator* 

The author functioned as the facilitator in this experiment under the guidance of a highly trained and experienced focusing teacher. The author drew on his graduate level training as a Counseling Psychologist in order to lead the data collection focusing sessions in

an ethical and sensitive manner.

Materials

Protocol

As protocol was developed (see appendix 1) that involved leading participants through four separate tasks. These included a primary task, a control task, an interview involving drawing, and a rating procedure.

Task 1. The experiential task began with the preparatory "clearing space" process almost exactly as it is outlined in Gendlin's focusing instructions (Gendlin, 1981). Following this, participants were asked to choose a particular life issue to work with and then to contact the felt sense for that issue. When they had contacted the initial felt sense of their issue they were asked to silently find a label (referred to as a handle in focusing) for the quality of this felt sense. As in the resonating stage of focusing, participants were then asked to silently repeat this handle to themselves several times and ensure that the signature response arose after each repetition, thereby verifying these to indeed be "right" words. Participants were then asked to say their "right" handles out loud. Beyond being asked to announce their handles in this way, participants were only asked about the *process* of completing the experiential task and not at all about the contents of the issue that they were focusing on.

Once a participant had announced the "right" words, the author then reflected these words back multiple times but also reflected back two alternate handles multiple times. These alternate handles were generated extemporaneously and were created according to the following guidelines. One alternate handle was an attempt to produce a phrase that was as synonymous as possible to the "right words" without actually using any of the same words.

The second alternate handle was an attempt to create a phrase that had a very different meaning from the "right words" but that was matched to them in terms of valence and arousal properties. In some cases more than two alternate phrases were generated if a particular phrase intended to generate a "close" or "far" response failed to do so. (See appendix 2 for a complete list of the phrases used during this task). The order in which these three handles were repeated back to each participant was predetermined according to one of two standardized charts (see appendix 3). Random selection of the order of presentation was used to create these charts on a line-by-line basis. The exception to this randomization was that it was predetermined that the first "far" handle would appear third in the first line of each. This step was taken because during pilot testing it was found that presenting the "far" handle too early tended to disrupt rapport, which then made it very difficult to facilitate a "yes" response. Randomized selection was used to determine which of the charts was to be followed with each particular participant.

During the rating process participants were instructed to remain open to their sensation level responses as they would during focusing so that they could fully experience their felt senses' reactions to hearing each handle. Participants were then asked to consciously interpret their felt sense responses in order to assess whether each handle had resonated with their implicitly felt meaning, had almost resonated, or had been far from resonating. Participants were then asked to overtly say "yes", "close, "or "far" as was appropriate in each case.

Participants were asked to complete their ratings as quickly as possible.

As outlined in the theoretical section above, meaning is constantly evolving during experiential processing. Therefore, a crucial element of the instructions was that participants were explicitly asked to rate in response to the dynamic evaluations of the felt sense and *not* 

in response to the static words themselves. For example, because of a subtle shift in implicitly felt meaning a particular handle that almost resonated the first time it was heard (leading to a "close" rating) might no longer resonate at all by the time it was heard again a minute later (leading to a "far" rating).

The process of offering handles continued for as many rounds as occurred before the participant eventually answered with a "close" or a "far" to their original handle. Such a rating was used to define the boundary of the experiential task because this event was taken to indicate that the implicit meaning being felt by the participant had shifted substantially. As such, at this point there was no longer a clear anchor of solidified implicitly felt meaning present that would allow the participant to meaningfully assess the "rightness" of various symbolization attempts.

During the focusing based task (and the control task described below) a silence of at least five seconds was taken following each participant response before offering another handle (Larsen, Norris, & Cacioppo, 2003). This pause was taken in order to allow the participants' levels of physiological activity to return closer to baseline before the next stimuli. The experimenter digitally marked the computer record at the point when each handle that was offered in order to facilitate subsequent data analysis.

The following transcript of the latter portion of William's focusing task should make the experiential task procedure more tangible for the reader. After initially contacting the felt sense of his issue in this example, William had earlier declared that "tethered" was the exact "right word" to symbolize his implicitly felt meaning.

Experimenter: Shooting Pain.

William: Far.

Experimenter: Tethered.

William: Yes.

Experimenter: Tied down.

William: Close.

Experimenter: Tethered.

William: Close.

Experimenter: Thank you. We have now reached the end of the focusing task.

A short note should be made explaining the rationale for including a Task 2. control task. The conceptual task was designed to mirror the experiential task in that participants also responded to language of varying degrees of "rightness", but to do so while in a conceptual rather then an experiential mode of processing. This task served as a validity check because, as explained earlier, Gendlin theorizes that the felt give responses only operate during experiential processing when a felt sense is present (Gendlin, 1996). Therefore, if the signature response had been found to also follow the "right" words in the control task this would have suggested that any identified felt give type responses were not the result of exclusively experiential processes of evaluation as Gendlin describes, but instead an artifact generated by participants responding to "hearing the right answer."

During the control task participants were led through seven rounds of a word evaluation activity. In each round two words written on prepared index cards were held up to the participant and the participant was asked to choose one of these words. This word became the "anchor" word for that round of the task. This anchor word was then repeated back to the participant two times but so were two alternate words (see appendix 4 for a complete list of the control task items). One of the alternate words was synonymous with the anchor word.

The second alternate was matched to the anchor word in terms of valence and arousal but had a very different meaning. Each of these three words (e.g., sports, athletics, zoo) was repeated twice in a predetermined order (see appendix 4 for this order). Randomized selection on a line-by-line basis was used to determine presentation order. Unlike in the experiential task, participants were instructed to automatically say "yes" when they heard their anchor word repeated back to them. They were also asked to judge whether the meaning of each alternate word was close or far from the meaning of the anchor word. In the former case they were asked to say "close" and in the latter to say "far." The essential element of the standardized instructions for this task was as follows. "Unlike in the focusing task please make these evaluations purely cognitively rather then in response to any felt sense or physiological reactions you may have to the words. Your analysis of closeness should be based on the meaning of the word as they would be defined in a dictionary."

Interviews. The interviews had two functions. Firstly, the "rating scale" and "closed" interview questions produced data that could serve as a validity check on the research design. Secondly, the open-ended interview questions produced data that could be used to directly address the hypotheses.

During the drawing task participants were offered a range of colored markers and were asked to make four drawings, each one drawn on an identical blank body diagram. In the first drawing participants were asked to draw their felt senses as they had manifested in the instant before the participants stated the "right" words out loud for the first time. In this drawing, as with each of the others, participants were asked to place the felt sense on the diagram in the physical location in which it had manifested and to use colour and pattern as means of

visually expressing how the felt sense was experienced on a sensation level. This first drawing served as a kind of visual baseline against which to depict how the felt sense responded on a sensation level to hearing handles of differing quality. These reactions were depicted in three more drawings made in a similar manner to the first.

The drawing task was primarily designed to facilitate the interviews. While the drawings (see appendix 6 for the drawings) are also a form of data in their own right, they were not formally analyzed. Therefore, they should be viewed only as a supplementary source of data. It should also be noted that two participants did not engage in the drawing task as it was added to the protocol after their participation.

Rating Task. The rating task using the Self Assessment Mannequin (SAM; Lang, 1980) was designed to ensure that the phrases used during the two tasks were matched in terms of their arousal and valence qualities. This matching was assess whether any observed pattern of differences in participant response to therapist verbalizations of differing "rightness" could have been caused by systematic differences in the emotion inducing properties of the phrases being used.

SAM

The Self-Assessment Manikin (SAM; Lang, 1980) is a psychometric measure that uses pictograph based rating scales in order to allow participants to make self-report ratings of their emotional reactions. SAM has three scales and each one measures a construct theoretically underlying emotion. These scales are for the dimensions valence, arousal, and dominance. Only the valence and arousal scales were used in the current study. Each of the scales is anchored by a series of 5 visual icons representing a character displaying progressively greater degrees of the respective dimension. These icons anchor a 9-point scale

and participants can mark an X over any of the points in order to represent how much of that quality they feel. For example, the valence scale includes 5 pictographs ranging from a smiling figure at one end to a frowning figure at the other.

SAM has been used to effectively measure participants' emotional responses in a wide range of contexts including responses arising from images, sounds, advertisements, and painful stimuli (Bradley & Lang, 1994). The valence and arousal scales of SAM have been shown to correlate very highly with corresponding scales on another widely used self report measure of emotion, the Semantic Differential Scale (Mehrabian & Russell, 1974). Bradley and Lang (1994) found that the respective valence ratings for these two measures correlated at .97 and the arousal ratings correlated at .94.

Physiological monitoring equipment and data analysis software

The ProComp system produced by Thought Technology was used in order to monitor physiological responses. The ProComp system also includes software that, along with Excel, was used during data analysis.

### **Procedure**

On the day of arrival participants were given a detailed overview of the process. Any questions were answered and then participants were asked to fill out an informed consent. They were then seated in a comfortable chair and the physiological monitoring equipment was attached. The experimenter sat directly in front of the participant several feet away as in a typical therapy session. SCR electrodes were attached between the second and third knuckles on two fingers of the non-dominant hand (Andreassi, 1995) after the selected fingers had been thoroughly cleaned with alcohol. The area around the right brow was then also cleaned with alcohol and a fresh EMG tri-electrode was placed on the corrugator muscle

according to the positioning indicated in the diagram offered by Andreassi (Andreassi, 1995). A second "dummy" electrode was then attached to the back of the neck. Participants were then asked to sit quietly for several moments so that they could acclimatize to the room and to the monitoring equipment. Video recording was then started and the two tasks were completed, one immediately after the other. At the start of each task a digital clock visible on screen was started simultaneously with the computer clock. After the monitoring equipment had been removed the interviews were conducted. Finally, SAM was explained and the participants used it to rate the phrases that they had heard.

## Physiological measurement issues

Measurement of arousal. Participants' levels of autonomic arousal were measured through the monitoring of skin conductance response (SCR), a form of monitoring used to measure quick, phasic changes in electrodermal response. A large number of studies over the years in general psychology have found SCR to be positively correlated with autonomic arousal in a highly linear fashion (Bradley, Cuthbert, & Lang, 1990, Lang, Greenwald, Bradley & Hamm, 1993). SCR has also been demonstrated to be a highly and linearly correlated with ratings of affect intensity during psychotherapy (Roessler, Brunch, Thum, & Collins, 1975; Glucksman, Quinlan, & Leigh, 1985).

Measurement of Valence. EMG monitoring is a process in which the electrical activity within particular muscles is monitored. Through this process muscular activation can be measured that may be too subtle to be noted by the human eye (Cacioppo, Petty, Losch, & Kim, 1986). A wide variety of studies have shown that EMG activity in the corrugator muscle (the "frown" muscle located in the brow) is strongly and linearly correlated with emotional valence (Cacioppo, Petty, Losch, & Kim, 1986; Larsen, Norris, & Cacioppo, 2003;

Bradley & Lang, 2000; Lang, Greenwald, Bradley, & Hamm, 1993). Specifically, there is an inversely linear relationship between positive valence and corrugator activity. This strong and linear relationship made monitoring corrugator EMG activity an excellent approach to measuring physiological correlates of valence. One potential drawback of using corrugator EMG monitoring is that activation of the facial muscles is under conscious control, making the results more prone to the effects of social desirability. As such, special care was taken to ensure that the participants did not learn the study's hypothesis. Participants attention was also diffused away from the brow area by attaching a "dummy" electrode to the back of neck (Cacioppo, Petty, Losch & Kim, 1986).

## Data Processing and Analysis

### Physiological Data

Item matching procedure. In order to control for the emotional effects of the stimuli it was important that the control task phrases used during analysis be matched as closely as possible to the experiential task phrases in terms of valence and arousal ratings. Therefore, phrases used as stimuli during the control task were selected from a range of words included in a list of words (Bradley & Lang, 1999) normed to be of high, medium, and low valence and arousal. See appendix 4 for a complete list of these items. As a first step in data analysis a matching procedure (described in appendix 7) was used to identify control task items that could serve as matches for the experiential task items. Only these selected control task items were then used in subsequent analysis.

Video Screening. Once all of the primary and control task items to be analyzed had been identified, all of these items were watched on videotape in order to identify any offer-response sequences that needed to be eliminated due to problematic participant

movement (Larsen, Norris, & Cacioppo, 2003). The phenomenon of interest in this study very much included the kind of facial reactions and small head movements that clients frequently exhibit in response to therapist statements during therapy. Therefore, a liberal definition of "problematic" head movement was adopted such that in order to be eliminated a sequence needed to involve movement that was either quite large or clearly non-phenomenon related (e.g., scratching, stretching). Based on these criteria less then 1% of the total data windows were eliminated.

Averaging. Due to the design of experiential task (e.g., rating continued for however long it took until the participant rated their original handle as "close" or "far") participants had widely varying numbers of data points within the twelve categories.

Unweighted means were used to arrive at participant means within all categories.

SCR data. During data collection the ProComp+ amplified and processed the raw SCR signal with a sample rate of 32 times a second within a signal range of 0-30 microseimens and with an accuracy of +/- .2 microsiemens (Thought Technology, 2003). As a next step in analysis each participant's videotape was watched and the on screen time at which each handle was offered was noted. These times were then matched to the appropriate marks made on the computer record time code. The highest SCR peak evident within five seconds following each such mark was then identified (Winton, Putnam & Krauss, 1984). The peak number identified in this manner was then subtracted from the baseline value (value at time of handle offer) and then divided by the baseline value in order to control for individual differences within resting EDR levels (Harris, Aycicegi, & Gleason, 2003; Zumbo, 1999). Each of a participant's SCR change scores was then sorted into one of three categories ("Yes", "Close" and "Far") and three category means were calculated for each

participant. Finally, the resulting twenty-one means were averaged into three grand category means. Three grand SCR means were calculated in the same manner from the control task data.

During data collection the ProComp amplified and Corrugator EMG data. processed the raw EMG signal with a sample rate of 32 times and a bandpass filter of between 0 - 500 Hz with an accuracy of =/- 4% of reading (Thought Technology, 2003). As a next step in analysis the videotapes were watched and the onscreen times of each offer and of each response were noted. As above, these times were then matched to the appropriate marks on the computer record time code. For each offer-response interchange a two second prestimuli baseline window (Fitzgibbons & Simons, 1993) was identified as was a window for the period between each offer mark and the time that the corresponding participant response was provided. Raw change scores were then calculated by subtracting the average EMG activity during the post-stimuli windows from the average EMG activity during the baseline periods (Lang, Greenwald, Bradley & Hamm, 1993). These raw scores then divided by the baseline values in order to control for individual differences in baseline EMG levels (Zumbo, 1999). The same sorting and averaging strategy used with the SCR data was then used to convert these individual EMG data points into six grand EMG means (e.g., experimental and control means for "Yes", " Close" and "Far" responses).

Analysis revealed that the average response times were markedly different across the three experiential task categories (see table 4). Therefore two alternate, standardized methods of defining post stimuli windows were employed within the experiential task in order to ensure that any identified pattern of differential EMG activity was not an artifact being caused by these differences in average response time. In the first alternate method, EMG

reactions were calculated using a 6 second window because this is the standardized poststimuli period most frequently cited in the affective facial EMG literature (Bradley, Cuthbert
& Lang, 1990; Lang, Greenwald, Bradley & Hamm, 1993; Larsen, Norris & Cacioppo,
2003). In the second alternate method 4-second time windows were used, as 4 seconds was
the overall, experiential task mean response time (rounded to the nearest second). As table 5
reveals the mean response times across the three response categories in the control task were
almost identical. Therefore, because since it was the within task patterns of response that
were of interest in this study, the non-standardized time window method was the only
method used to define the response window within the control task.

Outliers. Once participant means had been calculated for each of the 12 categories, these means were inspected to identify any figure that fell three standard deviations or more above or below it's pooled task mean. It was decided a priori that any means meeting this description would be pulled back to three z above the overall category mean. Upon analysis it was found that only one participant mean met this outlier criterion. This average is identified in the note beneath table 2.

#### Interview data

Firstly, each interview was transcribed. The constant comparative approach to data analysis as outlined by Lincoln and Guba (1985) was then used to draw out the major themes found to arise in response to each question. Two measures were taken to strengthen the validity of the interview results. Firstly, member checks were conducted as advised by Merriam (1998). All participants were emailed the interview themes. Seven of the eight participants responded to this email and all seven communicated their endorsement of these results. Secondly, as recommended by Stiles (1993) a naïve sorter was provided with a

description of the themes developed for each question and was asked to re-sort a randomly selected twenty- percent of the items. On her initial attempt this sorter correctly placed 85% of the items within their designated theme categories.

#### Results

Verbal rating scale question interview results

Question 1: "Please recall that moment during the focusing task when you had contacted your felt sense, had identified and internally resonated your handle, and were just about to say it our loud. At that precise moment, how tangibly could feel your felt sense as sensation within your body?" The response options ranged from "very tangibly" (1) to "not at all" (5). The mean response to this question was 1.75 and the standard deviation was 1.04

Question 2: "At this same moment in time, how well did the handle that you offered match your felt sense?" The response options ranged from "completely" (1) to "not at all" (5). The mean response to this question was 1.5 and the standard deviation was 0.53.

Question 3: "Please reflect over what happened during the entire experiential task and consider the means through which your felt sense communicated how right each handle was for you. Now please decide how similar these means of communication were to those means through which it normally does this, either when you are focusing or when you are consulting your felt sense during daily life." The response options ranged from "completely similar" (1) to "totally different" (5). The mean response to this question was 2.13 and the standard deviation was 0.83.

Closed question interview results

Question #1: " Overall, how similar was what happened for you during the two tasks?"

In their responses all participants used the words "different" or "very different." When asked about these differences all participants referred in some way to the idea that they had been much less aware of their embodied responses during the control task then they were during the experiential task.

Physiological Results

SCR Results

Table 1

SAM Arousal Ratings (with 9 being the most arousing)

,		Experiential Task		Control Task		
Response Type	# of Items	Mean	SD	# of Items	Mean	SD
Yes	20	6.42	0.79	17	6.57	0.78
Close	20	6.81	1.39	16	6.42	0.79
Far	24	5.72	2.10	23	5.76	2.15

Table 2

Mean SCR Change

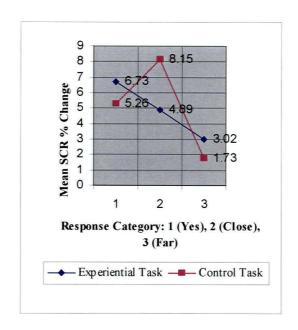
	Experiential Task	Control Task	
Response Type	Mean SD	Mean SD	
Yes	6.72 * 9.53 *	5.26 5.99	
Close	4.88 5.16	8.15 6.79	
Far	3.02 2.94	1.74 2.33	

Note: The figures marked with an \* were adjusted in order to bring one outlying participant mean back to 3z above the pooled average. The unadjusted value were a mean of 7.44 with a SD of 11.33.

SCR effect sizes. In the experiential task the Yes mean was larger than the Close mean with a d of .25, the Yes mean was larger than the Far mean with a d of .51., and the Close mean was larger than the Far mean with a d of .32. In contrast to the experiential task results, in the control task the Close mean was larger than the Yes mean with a d of .50. In the control task the Yes mean was larger than the Far mean with a d of .61, and the Close mean was larger than the Far mean with a d of .61, and the Close

Figure 1

Mean SCR % Change Across Both Tasks



EMG results

Table 3

SAM Valence Ratings (with 1 being the least pleasant)

_	Experiential Task		Cont	Control Task		
Response Type	# of Items	Mean SD		# of Items	Mean SD	SD
Yes	20	1.43	0.79	20	1.86	0.90
Close	20	2.0	1.0	20	1.86	0.90
Far	24	2.14	1.14	24	2.10	1.13

Table 4

Response Times in Seconds

Response Type	Experie	ntial Task	Control Tas	sk
	Mean	SD	Mean	SD
Yes	3.05	1.39	1.97	0.40
Close	6.30	2.67	2.11	0.44
Far	4.12	2.12	2.29	0.55

Table 5

Experiential Task EMG % Changes

	Non-Standardized Wi	indows	4 Second Win	ndows	6 Second W	Vindows
Response Type	Mean	SD	Mean	SD	Mean	SD
Yes	8.46	12.59	8.44	10.80	7.87	9.67
Close	18.04	24.07	14.62	20.41	15.37	24.35
Far	12.72	17.70	11.44	15.80	13.88	16.83

Table 6

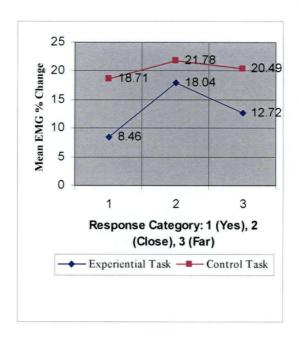
Control Task EMG % Changes

	Non-Standardized Windows				
Response Type	Mean	SD			
Yes	18.15	28.06			
Close	21.78	28.78			
Far	20.43	46.51			

EMG effect sizes. In the experiential task with non standardized windows the Close mean was larger than the Yes mean with a d of .53, the Far mean was bigger than the Yes mean with a d of .23, and the Close mean was larger than the Far men with a d of .30. In the experiential task with four second windows the Close mean was larger than the Yes mean with a d of .40, the Far mean was bigger than the Yes mean with a d of .19, and the Close mean was larger than the Far men with a d of .21. In the experiential task with six second windows the Close mean was larger than the Yes mean with a d of .43, the Far mean was bigger than the Yes mean with a d of .43, the Far men with a d of .09. In the control task with the Close mean was larger than the Yes mean with a d of .11, the Far mean was bigger than the Yes mean with a d of .07, and the Close mean was larger than the Far mean with a d of .04.

Figure 2

Mean EMG % Change Across Both Tasks/ Non-Standardized Windows



Open Ended Question Interview Results

Question 1: "What was experienced by subjects on a sensation level immediately after hearing handles that were rated as being "right"?

- 1.) Sensation became more distinct (mentioned at least once by 8 subjects; 26 total mentions): The items within this theme fall within one of three sub-themes. Each sub-theme represents a specific way in which sensation became more distinct in the physical area within which the felt sense was manifesting.
- A.) Sensation became more intense (8,20x): All eight subjects mentioned that sensations in the area of the body where the felt sense was manifesting became more intense. For most subjects this increased intensity was felt as a sudden shift from diffuse sensation to more tangible and substantial sensation. For example, Jill said this shift made sensation, "... more clear... not as fuzzy, like solid now..." Similarly, Linda said that sensation became

- "...richer..." after the "right" words. Other participants experienced the shift as a simple surge in sensation intensity, or as William said " sort of an increase in intensity...it's like a pulse becoming bigger."
- B.) Area of sensation became more compact (3, 4x): The area where the felt sense was manifesting shrunk and became more localized. Jill said her area of distinct sensation "...kind of shortened up..." and Denise said her's "... became more compact."
- C.) Boundaries around the area of sensation became more defined (2,2x): The borders around the area of sensation were felt to become clearer and more distinct. Jill said, "...not as jagged edges, maybe not as scribbly..."
- 2.) Radiating of diffuse sensation out through the body (2,5x): Two participants sensed a radiating out of diffuse energy from the centre out through the body. Beth described this as a "...glow or radiating..." of energy. Anne experienced this radiating energy as having a "tingly" quality and said that she particularly sensed it flowing through her hands and shins. Interestingly, both of these participants sensed this outward flow of diffuse energy while simultaneously sensing the kind of core solidification of energy described in the category above.
- 3.) Sensation response was brief (2,3x): Beth said that her sensation level responses to the "right" words lasted for only a "nanosecond". Though only two participants specifically mentioned that the sensations experienced in reaction to the "right" words were very fleeting, this quality seemed to be implicit in the descriptions offered by all of the participants.
- Question 2: What meaning was made on a feeling or narrative level from the experience of hearing handles that were rated as being "right"?
  - 1.) A feeling of fitting (6,12x): Almost all of the participants mentioned that the "right"

words were judged as "fitting" their experience or "feeling right." Anne had the following kind of thoughts after hearing the "right" words. "That's kind of a hit. That's right on, that's bang on." To Yvette hearing the right words not only felt right but also seemed to confirm the meaning which was already there, or as she thought "...yes... that's right, this *is* how it is."

- 2.) Felt validating/understood (4, 11X): Half of the participants said that it felt validating to hear the "right" words. Participants used words like "seen", "heard" and "recognized." William used the word "resonance" to explain how it felt for him to hear the "right" words, and equated this feeling to the one that he gets when someone close to him deeply and accurately empathizes with him. Yvette said the experience was "...almost like a child...finally someone recognizing... it's been heard.."
- 3.) Felt positive (4, 8x): Half of the participants mentioned that hearing the "right" words evoked a positive feeling for them. "Pleasant" was the most commonly used descriptor but other words like "satisfying', "soothing" and "relaxed" were also used.
- 4.) Immersion of conscious awareness into sensation (3,11x): Three participants said that hearing the "right" words caused an immersion of their conscious awareness into their bodily felt sensations. It was almost as if for a moment these participants experienced an immersion of their conceptual selves into their experiential selves. Anne said that in those moments she was "... very much in touch with my body...I'm not outside of it looking at what I'm going through..." Linda described this occurrence as "...a kind of letting down..." or "...going into..." and Denise said it was like a "...quieting..." or a "...sinking into that feeling."

Question 3: "What was experienced by participants on a sensation level immediately after hearing handles that were rated as being "close"?

1.) Diffusion or lessening of sensation (5, 9x): Over half of the participants mentioned that immediately after hearing words rated as being "close" sensations in the area were the felt sense was manifesting became less intense and/or more diffuse. Jill said that hearing "close" words made her sensations become "... a little thinner..." and more "... flimsy." Denise said her sensations responded to "close" words by becoming "... not as dense... more diffuse..." and that the sensations suddenly spread out over a larger area.

Question 4: What meaning was made on a feeling or narrative level from the experience of hearing handles that were rated as being "close"?

- 1.) Understood as not fitting (7, 32x): Almost half of the items in answer to this question were part of this theme, falling within one of three sub-themes. Each sub-theme is a variation on the feeling that the "close" words didn't fit for the participants.
- A.) Understood as simply not fitting (7, 22x): All but one of the participants made reference to having the feeling that the "close" words simply did not fit with their experience. Most of these statements were similar to Joan's when she said that the close words "...were not a click..." for her. Other participants used more strongly metaphorical means of expressing similar reactions. For example, Beth said that her implicitly held meaning and the "close" words were like "...puzzles that didn't fit..." or "...like keys that didn't fit in locks..."
- B.) A specific part of the phrase understood as not fitting (4, 6x): This sub-theme is identical to the one above, except that in these cases it was only specific words from among those in the relevant phrases that participants reacted to. For example, in reaction to hearing

the phrase "muted gritty" Denise said, "...the gritty part wasn't exactly right."

- C.) Understood as not fitting yet as still helpful (2, 4x): Two participants mentioned that they understood the "close" words to be helpful, despite the fact that they did not fully fit. Joan said that the close words felt like they were "...getting to something..." or "...were on the way to something." For Yvette the "close" words were helpful because they validated the "right" words by making it "...more clear what it was..." because "...it wasn't that..."
- 2.) Felt to be frustrating or irritating (4, 9x): Half of the participants said that it felt irritating or frustrating to hear the "close" words. All of these participants used the actual words "irritating" or "frustrating" in their responses within this theme.
- 3.) Doesn't take conscious awareness completely away from sensation (2, 3x): These participants explained that, despite the lack of a complete fit, hearing "close" words did not totally pull their conscious awareness away from their inner sensations. Anne said that she"... didn't feel as present ..." after hearing "close" words but that these words "...did not take me away from what I was feeling totally..."
- 4.) Lessened immersion of conscious awareness into sensation (2, 2x): These participants said that hearing the close words drew them out of their bodies and into their heads. Beth said that after hearing the close words she experienced a "... quick flip into my brain."
- 5.) Feeling of not being validated or understood (2, 2x): Beth said that the "close" words gave "...that sense of not being understood." Denise explained that the "close" words gave her a feeling of "...not being seen."

Question 5: "What was experienced by participants on a sensation level immediately after hearing handles that were rated as being "far"?

1.) A lack of sensation response (6, 9x): Six of the participants stated that they had no sensation level response to hearing the "far" words. Jill said, "...I think it was just the same...it didn't change anything." Beth said that the "far" words "...didn't even register there..." (said while pointing to her body).

Question 6: What meaning was made on a feeling or narrative level from the experience of hearing handles that were rated as being "far"?

- 1.) Understood as not fitting (7, 16x): All but one of the participants mentioned that that they understood the "far" words as not fitting for them. Anne said, "...that's not what my felt sense is about..." and Denise said that the "far" words "...just didn't fit..."
- 2.) Felt to be irritating (6, 9x): These participants explained that hearing the "far" words led them to experience irritation or some closely related feeling. Linda said that it was "...irritating..." and "...not satisfying..." to hear the "far" words. Beth used the image of herself as a cat to express how it felt for her to hear the "far" words. She said, that hearing the far words gave her "...rough fur..." that "...would have been standing up, bristling, bristling..." because she felt "...irritation at being a distraction...irritation and annoyance at being so far off."
- 3.) A hindrance (2, 2x): Two participants mentioned that they judged the "far" words to be a hindrance in their meaning making process. Beth said that hearing the "far" words forced her to put her implicitly felt meaning "...momentarily on the back shelf..."

#### Discussion

This discussion will start with consideration of those results that speak directly to the validity of the design used in this study. Each of the hypotheses will then be independently

addressed. Finally, the paper will close with a general discussion, a suggestion of future directions, a review of limitations, and a conclusion.

Results related to general design validity

The current design was chosen despite the fact that it's adoption means that data gained through the use of a standardized, focusing-based protocol with expert participants must be used to make inferences about how typical clients experience during actual therapy. While the reasons for this choice were outlined at length in the methods section, it is undeniable that these added inferential leaps are a limitation of this study. However, two linked factors support the validity of the adopted approach. Firstly, focusing was developed through intensive analysis of the way in which non-expert clients experience naturally during therapy (Gendlin, 1981). Secondly, the results of this study indicate that the experiential protocol successfully induced participants to experience in a similar manner to the way in which people experience while focusing. Specifically, results from the first and second rating questions indicate that the experiential task successfully induced the participants to engage in authentic experiencing. Additionally, results of the third rating scale question indicate that during the experiential task participants also evaluated the "rightness" of language through means similar to those used during focusing. When taken together, these rating scale results indicate that during the experiential task the participants experienced in much the way that focusers do, who in turn experience in a manner that is similar to the one evidenced by clients during psychotherapy. As an additional note, the results of closed question one indicate that participants did not experience during the control task suggesting that, as desired, the results of this task can be validly understood to have resulted from conceptual level processing.

Validity relating to SAM rating scale results

The SAM rating scale results reported in tables 1 and 3 indicate that in terms of valence and arousal properties the items were matched relatively successfully across tasks and response categories. As such, it is appears unlikely that the identified differences in the participants' patterns of perceptual and physiological response were caused by systematic differences in the valence and arousal properties of the items themselves. That said, it must be noted that the "far" items in both the control and experiential tasks were rated to be somewhat less arousing then were the corresponding items in the "yes" and "close" categories. These differences were each only of approximately one point over a nine-point rating scale. However, these differences may partly account for the lower group level arousal responses to the "far" items, particularly in the control task where the "far" items produced markedly lower SCR responses.

#### Hypothesis 1

The interview results support hypothesis 1 in an unequivocal manner. It is striking that to various extents all eight participants indicated that after hearing the "right" words they became aware of an increase in sensation intensity in the bodily area that the felt sense was manifesting (theme # 1,1). Of all the themes, this was the only one that was referred to by all 8 participants. Meanwhile, over half of the participants mentioned that there was a *lessening* of sensation intensity in this same physical area in response to hearing the "close" words (#3,1). Finally, 6 of the eight participants mentioned that there was simply *no* sensation level response to hearing the "far" words (#5,1). Taken together, these themes describe a pattern of perceived arousal response that strongly echoes Gendlin's description of a differential "stirring" response. The drawing series made by William, Yvette and Beth (appendix 6)

illustrate this differential pattern of arousal response centered in a particularly evocative manner.

### Hypothesis 2

Figure 1 clearly shows that, at the group level, participants' had stronger SCR responses to hearing the "right words" during the experiential task then to hearing either the "close" or "far" words. This pattern of response was not duplicated during the control task, indicating that this reaction was not an artifact created by participants "hearing the right answer". A mention must be made about the size of the group level difference between the SCR responses to the "right" and the "close" words during the primary task. This effect size was .254 (based on the adjusted "yes" mean), generally considered to be small difference (Cohen, 1969). However, in considering this number one must take into account the role of habituation. It is well understood that repetition will habituate the SCR to a stimulus (Andreassi, 1995). Prior to the initiation of rating the participants repeated the "right" words to themselves covertly a numerous times during the resonation process. Conversely, participants heard words of the other two categories for the first time during rating. There is evidence that this kind of covert stimuli repetition leads to the habituation of SCR just as quickly as does actually hearing a stimulus out loud (Yaremko, Glanville, Leckart, 1972). Therefore, all things being equal, one would have expected the "right" words in the experiential task to generate a SCR that was lower than the others. From this vantage, even the relatively small effect size (Cohen, 1969) found is interpreted here as being clearly supportive of hypothesis 2.

There was substantial variability in SCR response at the individual level, as evidenced by the standard deviations found in table 2. During the experiential task 3 of the 7

participants fulfilled the hypothesis by having their strongest mean arousal response come after "yes" handles. An additional participant had SCR responses that were equal across the three categories. Given the role of habituation discussed above, this latter participant's results could be interpreted as a being weakly supportive of the hypothesis. It is notable that Anne and Linda were 2 of the remaining 3 participants whose SCR results failed to fulfill this hypothesis. This is notable because it was only in these two cases the author mistakenly used an actual word from the "right" handle in the "close" handle (e.g., anxious waiting /nervous waiting). Based on the very rapid, priming type nature of the SCR response an overlapping word could have substantially influenced these two participants' SCR responses away from the hypothesis. No other clear factor, such as participants' focusing experience, clearly accounts for these individual SCR differences.

# Hypothesis 3

The interviews offered very limited support for the third hypothesis. No participant referred directly to perceiving a sensation of "easing" / "physical relief". Nor did any participant use descriptors that could be unambiguously interpreted as referring to a perception of this kind. There was only one theme that could potentially be interpreted as directly supporting this hypothesis. Two participants mentioned feeling a radiating of diffuse, light energy through the body only after hearing the "right" words (theme #1,2). This response could reasonably be interpreted as being akin to an "easing" in that it also involves a perceived change from heavier to lighter sensation. However, even this theme was only mentioned by only 2 participants.

### Hypothesis 4

In surveying the interview results it is clear that this hypothesis received strong support. While 4 participants said that it was pleasant to hear the "right" words (#2,3), 4 participants found it irritating to hear the close words (#4,2), and six participants found it irritating to hear the "far" words (#6, 2). In more abstracted yet similar vein, half of the participants mentioned that it felt validating to hear the "right" words (#2,5) while a pair of participants said that hearing the "close" words felt *in*validating (#4, 5). Taken together these two thematic sequences clearly indicate that it felt more positive for participants to hear the "right" words then to hear either the "close" or "far" words.

## Hypothesis 5

Figure 2 clearly shows that, at the group level, participants' had notably smaller corrugator EMG responses to hearing the "right words" during the experiential task than to hearing either the "close" or "far" words. This supports the conclusion that the "right" words were experienced as being more pleasant. There are differences in the relevant experiential task EMG effect sizes depending on which of the three time window lengths is considered. However, the overall pattern of responses remains consistent regardless of which of the three of response time window lengths is considered and the relevant differences between "yes" and "close" responses only vary within a narrow range. This indicates that the identified EMG response pattern within the experiential task was not caused by differences between category response times. The group EMG effect sizes for the different time windows ranged from .53 to .40. This equates to a range from low medium to medium effect sizes as defined by Cohen (1969). As such, the group level EMG responses are clearly supportive of hypothesis 5.

Further, the results indicate that the experiential EMG results were not an artifact caused by the participants simply "hearing the right answer". This interpretation is supported by the fact that (though the basic pattern of the experiential task EMG response was nominally duplicated during the control task) the slope of the line between the "yes" and "close" words can be seen to be much sharper in the experiential task than in the control task.

At the individual level however, the EMG results are markedly more equivocal. As with the SCR results only three of the seven participants fulfilled the hypothesis by having their smallest EMG response follow the "right" words in the experiential task. The author suggests that this variation in individual EMG response patterns may have been caused by differences in how the participants related to the task. EMG is sensitive to a participant's degree of effort and mental attitude toward a task in a way that the autonomically controlled SCR is not (Andereassi, 1995). At the same time, the task of rating the original handle required the participants to make very fine-grained assessments about when "right" was no longer quite "right" enough. Instructions around rating the original handle were also stressed during the pre-task instructions so that the participants would be sure to rate their own words dynamically. Therefore, it is reasonable to deduce that some participants may have perceived rating their original handles to be both the most challenging and the most "important" element of the experiential task. On a separate front, during the interviews two of the three participants who strongly failed to fulfil the EMG hypothesis, William and Yvette, both reported having feelings of general, performance type anxiety during the experiential task.

The author suggests that the two factors described above, acting in parallel, may account for the individual differences identified in participants' patterns of EMG response within the experiential task. In other words, if particular participants who were already more

reactive because of general performance anxiety also perceived rating of the "right" words to be disproportionally challenging and/or important, this could have elevated these participants' EMG reactions following the "right" words. Whatever EMG correlate there may have been to these participants having a good feeling at perceiving the "right" words would have been cancelled out when it was averaged in with the EMG reaction caused by trying to rate these words appropriately. In this interpretation the EMG responses of these participants were distorted by the task itself, because clients in therapy would presumably feel much less pressure while providing self-ratings within the context of an established therapeutic relationship. In the current study participants were not asked to systematically rate either their levels of anxiety during the tasks or their perceptions of which elements of the task were most challenging. The lack of this kind of data means that, while plausible, the given interpretation of the individual variability within the experiential task must be considered speculative. Future research should assess the described forms of participant perceptions in order to aid in the interpretation of future EMG results.

#### General Discussion

This study produced findings that allow for several key inferences to be made around how "right" words spoken by a therapist may impact a client as he or she experiences during psychotherapy. The clearest of these inferences emerged from the findings from hypotheses 1 and 2 investigating participants' arousal responses while they responded to language during experiencing. Though very preliminary, the SCR results from hypothesis 2 can be inferred to offer the first known experimental support for Gendlin's claim that when clients are experiencing during therapy a disproportionately large "stirring" will tend to occur after words that are "right". These findings are generally consistent with those reported by both

Toomin and Toomin (1975) and Guest (1990). The SCR is understood to be pre-attentively controlled response (Ohman et al., 1993). Therefore, the findings from hypothesis 2 also infer some preliminary support for Gendlin's wider claim that during experiential processing human beings reliably evaluate the meaningfulness of linguistically symbolized meaning through an non-consciously controlled process that is capable of making discriminations between words that are highly synonymous in a conceptual sense. Meanwhile, the results from hypothesis 1 can be inferred to offer preliminary support for Gendlin's claim that with appropriate attention clients can accurately *perceive* these evaluative "stirrings" as they occur. This supports the credibility of Gendlin's claim that it is partly through conscious assessment of these "stirring" responses that clients with good experiencing ability decide when particular words are "right" for them.

The second key result of this study was support for Gendlin's prediction that hearing words that are "right" feels better then hearing other words. The narrative support for this claim from hypothesis 4 was reinforced by the group level EMG results from hypothesis 5 which suggest that the "right" words had relatively more positive valence.

The third key result of this study is the *lack* of support found for the Gendlin's prediction that participants' will reliably perceive a sensation of physical "easing" after hearing words that are "right". This finding is particularly striking in regards to the 3 participants who showed a strong pattern of reduced corrugator EMG activity following the "right" words. For, to the extent that a relative reduction of the corrugator activity can be taken to represent a subtle relaxation response, one would have expected that these participants in particular might have perceived at least a subtle degree of physical easing. This finding means that the group of experiencing "experts" in this study claim to have know

what was "right" for them on a felt sense level while simultaneously failing to report perceiving *any* sensation of easing at all. This finding appears to contradict a key element of Gendlin's explanation of how the carrying forward process occurs.

In reflecting on this finding the author considered the fact that participants did consistently describe having a "feeling of fitting" when they heard the "right" words. In fact this feeling of "fitting" was the second highly consistent and prominent thematic strand that emerged from the interviews (the first being the described themes around differential perceptions of "stirring"). Six participants said that the "right" words felt like they "fit" (#2,1), 7 participants said that the "close" words did not feel like they "fit" (#4,1), and 7 participants said the "far" words did not feel like they "fit" (#6, 1). However, when directly asked several participants were unable to describe the sensations that went with the feeling of fitting. Participants' struggles to move in such a way from description of a constructed level meaning to description of the sensations associated with such a meaning was one of the most striking elements of conducting the interviews. At some stage during the interviews almost all of the participants commented that it was very challenging to describe the sensations that they perceived during the experiential task in direct, non-metaphorical terms. Without exception the participants also seemed to quickly "jump" from describing sensations (e.g., "an area in my chest relaxed") to offering more narrative descriptions of linked meanings (e.g., "it was right for me").

The author interprets the evident difficulty that participants faced in this regard to simply reflect how deeply intertwined bottom-up and top down processes are during meaning making and how difficult it is to artificially separate these processes during phenomenological self-reflection, as participants were asked to do in this study so that the

research question could be addressed. The effects of this same underlying challenge can be very clearly seen in the emotion literature. After hundreds of years of inquiry there remains rampant debate within this literature not only about how to define what a feeling/emotion/affect *is*, but also about the roles that bottom-up and top down processes play in generating conscious states of emotion/feeling/affect (Van Reekum, 2000).

From the ideas outlined above, the author suggests the possibility that the sensation level "easing" that Gendlin describes may have been experienced phenomenologically by the participants only in a more constructed form, as a "feeling of fitting". In other words, the sensation of "easing" itself may not have been distinct enough to be recognized by participants as an independent component of the abstracted meaning of which it may have been an essential initiator. Conversely, the sensation level arousal changes experienced by clients, the "stirring" that Gendlin refers to, may have been distinct enough to be consciously recognized and linguistically labeled *as* sensations. In sum, the author suggests the possibility that the participants in this study used a perception of stirring to cue them that their "felt sense" may have judged particular words to be "right", and that they then reached a final judgment by assessing for both an immediate, good feeling and for a "feeling of fitting". This interpretation must clearly be viewed as speculative based on these results. As a central theoretical issue the question of an "easing" reaction during experiencing deserves more focused attention in future research.

The fact that participants did not report perceiving an easing also seems to have direct clinical ramifications for therapists who are drawing on Gendlin's model to facilitate experiencing with clients during therapy. These findings suggest that when assessing for instances of carrying forward therapists should ask clients if they have feelings of immediate

of immediate "goodness" and "rightness" along with a perception of relatively increased sensations of arousal. It seems that this will be a more reliable means of assessing for carrying forward then it will be to ask about clients' perceptions of both a stirring and an easing sensation as Gendlin suggests. Crucially, the alternate strategy being suggested here is still based on the assessment of a non-consciously controlled, signature, physiological response. For this reason this strategy should still allow a client's felt sense level evaluations to remain distinguishable from his or her more effortful, conceptual level judgments. However, the strategy being suggested does not depend on asking clients to report on a physiological response that, if it in fact occurs, may be too subtle for clients to perceive directly.

#### Limitations

This study has four key limitations. Firstly, the small n used in this study limited power to the point that significance testing could not be meaningfully performed on the physiological results. As such, any inferences made from the physiological results of this study are limited by the fact that it has not been demonstrated to traditionally acceptable levels of confidence that that these results were not the result of chance. Secondly, as has been discussed previously, the use of both purposive sampling and an experiential protocol mean that any inferences made from the results of this study to understanding how typical clients may carry forward during psychotherapy must be made with strong caution. Thirdly, this study is limited by whatever degree of added measurement error resulted from the fact that during data collection the author performed the cognitively demanding task of independently performing all concurrent protocol administration and technical data collection procedures. Finally, it was the author who operationalized Gendlin's words and who also

collected, analyzed, and interpreted all of the data from this study. As such, the biases and values of the author inevitably affected the findings of this study, particularly in terms of analysis of the interview results.

#### Future directions

There are a number of future directions suggested by this study. In an immediate sense, a logical next step would be to replicate this study with a large enough sample size to allow for meaningfully significance testing and for broader generalization. Ideally, the sample in such a study would involve participants who were not experts in experiencing but who were instead given just enough training that they could competently complete the experiential protocol. This approach to sample recruitment would heighten the direct relevance of the findings to the process of typical psychotherapy. Special attention during this phase of research might fall on investigating the causes of individual response differences during carrying forward, particularly in terms of EMG and SCR responses. Further, more specific questioning might be used to follow up on the current study's surprising finding that participants did not perceive an easing sensation during carrying forward. Ideally, sufficient perceptual and physiological data would be collected through these follow-up studies that it would become feasible to begin studying the carrying forward process during traditional therapy process research.

In broader terms, the author also feels that Gendlin's basic ideas about the role of the body and of non-consciously controlled processes in meaning making deserve continued rigorous investigation. Through its use of SCR monitoring the current study can be understood to have, in simple terms, investigated how people use pre-attentive, embodied processes to evaluate linguistic meanings. As pointed out at the outset, there has recently

been an upsurge in scientific interest in the role that non-consciously mediated, embodied processes play in human consciousness and functioning. As such, the time may be ripe to combine data gained through technically sophisticated means (such as brain imaging) with assessment of people's phenomenological self reports so that more may be learnt about the multiple ways in which human beings process complex patterns of symbolic meaning. The knowledge of human functioning gained through this kind of research could have broad implications in a range of fields outside psychotherapy including the arts, business and education.

In summary, this study took a first step toward investigating the validity of Gendlin's theoretical description of how psychotherapy clients take discrete steps into deeper experiencing. The results of this study support the finding reported elsewhere (Elliott et al., 1993; Silberschatz, Fretter & Curtis, 1986) that the highly precise linguistic symbolization of clients' internal experience can play a crucial role in promoting these experiential microsteps. Ultimately, this study provides tentative support for the validity of Gendlin's theoretical description of the carrying forward process. In turn, this support lends credibility to Gendlin's directives around how therapists should go about assessing clients' reactions during the facilitation of carrying forward. This support also strengthens Gendlin's broader position that therapy clients should be trained as needed in how to become sensitive enough to their own felt sense reactions that they will be capable of the kind of invaluable and subtle self awareness demonstrated by the participants in this study. The results of this study also demonstrated the usefulness of the developed protocol and design for studying the carrying forward phenomenon. It is hoped that both the results and the methodological developments

presented in this paper will aid future studies in learning more about the nature of the experiencing process.

#### References

- Andreassi, J. L. (1995). *Psychophysiology: Human behavior & physiological response* (3<sup>rd</sup> Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bechara, A., Damasio, H., & Damasio, A. R. (2000). Emotion, decision making and the orbitofrontal cortex. *Cerebral Cortex*, 10(3), 295-307.
- Bohart, A. C. (2001). A meditation on the nature of self-healing and personality change in psychotherapy based on Gendlin's theory of experiencing. *The Humanistic Psychologist*, 29, 249-))).
- Bradley, M. M., Cuthbert, B. N., & Lang, P. J. (1990). Startle reflex modification: Emotion or attention. *Psychophysiology*, 27 (5), 513-522.
- Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: The self-assessment manikin and the semantic differential. *Journal of Behavior Therapy and Experimental Psychiatry*, 25 (1), 49-59.
- Bradley, M. M., & Lang, P. J. (1999). Affective norms for English words (ANEW):

  Instruction manual and affective ratings (Tech. Rep. C-1). Gainesville, Florida: The

  Center for Research in Psychophysiology, University of Florida.
- Bradley, M. M., & Lang, P. J. (2000). Affective reactions to acoustic stimuli.

  \*Psychophysiology\*, 37, 204-215.
- Cacioppo, J. T., Petty, R. E., Losch, M. E., & Kim, H. S. (1986). Electromyographic activity over facial muscle regions can differentiate the valence and intensity of affective reactions. *Journal of Personality and Social Psychology*, 50 (2), 260-268.
- Cohen, J. (1969). Statistical power analysis for the behavioral sciences. New York:

  Academic.

- Compton, R. J. (2003). The interface between emotion and attention: A review of evidence from psychology and neuroscience. *Behavioral and Cognitive Neuroscience Reviews*, 2 (2), 115-129.
- Damasio, A. (1994). Descartes' error: Emotion, reason, and the human brain. New York:

  Quill.
- Damasio, A. (1999). The feeling of what happens: Body and emotion in the making of consciousness. New York: Harcourt.
- Don, N. S. (1977). The transformation of conscious experience and its EEG correlates.

  Journal of Altered States of Consciousness, 3 (2), 147-168.
- Elliott, R., Shapioro, D. A., Firth-Cozens, J., Stiles, W. B., Hardy, G. E., llewelyn, S. P. & Margison, F. R. (1993). Comprehensive process analysis of insight events in cognitive-behavioral and psychodynamic-interpersonal psychotherapies. *Journal of Counseling Psychology*, 41 (4), 449-463.
- Fitzgibbons, L., & Simons, R. F. (1993). Affective response to color-slide stimuli in participants with Anhedonia: A three-systems analysis. *Psychophysiology*, 29 (6), 613-620.
- Gendlin, E. T. (1981). Focusing. New York: Bantam.
- Gendlin, E.T. (1984). The client's client: the edge of awareness. In R.L. Levant & J.M. Shlien (Eds.)., Client-centered therapy and the person-centered approach. New directions in theory, research and practice (pp.76-107). New York: Praeger.
- Gendlin, E. T. (1996). Focusing-oriented psychotherapy: A manual of the experiential method. New York: Guilford.

- Gendlin, E. T., & Berlin, J. I. (1961). Galvanic skin response correlates of different modes of experiencing. *Journal of Clinical Psychology*, 73, 73-77.
- Glucksman, M. L., Quinlan, D. M., & Leigh, H. (1985). Skin conductance changes and psychotherapeutic content in the treatment of a phobic patient. *British Journal of Medical Psychology*, 58, 155-163.
- Goldman, R.N. (1997). Theme-related depth of experiencing and change in experiential psychotherapy with depressed clients. Unpublished doctoral dissertation. Toronto, Ontario, Canada: York University.
- Greenberg, L. S., Rice, L. N., & Elliot, R. (1993). Facilitating emotional change: The moment to moment process. New York: Guilford Press.
- Greenberg, L. S., Korman, L. M., & Pavio, S. C. (2002). Emotion in humanistic psychotherapy. In D. J. Cain & J. Seeman (Eds.)., *Humanistic psychotherapies:*Handbook of research and practice. (pp.221-252). Washington, DC: American Psychological Association.
- Guest, H. (1990). Sequential analysis: Monitoring counselling sessions via skin resistance.

  Counselling Psychology Quarterly, 3 (1), 85-92.
- Hendricks, M. N. (2002). Focusing-Oriented/Experiential Psychotherapy. In D. J. Cain & J. Seeman (Eds.)., *Humanistic psychotherapies: Handbook of research and practice.*(pp. 221-252). Washington, DC: American Psychological Association.
- Harris, C. L., Aycicey, A., & Berko Gleason, J. (2003). Taboo words and reprimands elicit greater autonomic activity in a first language than in a second language. *Applied Psycholinguistics*, 24, 561-579.

- Klein, M. H., Mathieu-Coughlan, P., & Kiesler, D. J. (1986). The experiencing scales. In L.Greenberg & W. M. Pinsoff (Eds.), *The psychotherapy process: A research handbook* (pp. 21-72). New York: Guilford.
- Larsen, J. T., Norris, C. J., & Cacioppo, J. T. (2003). Effects of positive and negative affect on electromyographic activity over zygomaticus major and corrugator supercilii.

  \*Psychophysiology, 40, 776-785.
- Lang, P. J. (1980). Behavioral treatment and bio-behavioral assessment: computer applications. In J. B. Sidowski, J. H. Johnson, & T. A. Williams (Eds.), *Technology in mental health care delivery systems* (pp 119-137). Norwood, NJ: Ablex.
- Lang, P. J., Greenwald, M. K., Bradley, M. K., & Hamm, A. O. (1993). Looking at pictures: Affective, facial, visceral, and behavioral reactions. *Psychophysiology*, *30*, 261-273.
- LeDoux, J. (1996). The emotional brain: The mysterious underpinnings of emotional life.

  New York: Simon and Schuster.
- Lincoln, Y. S. & Guba, E. G. (1985). Naturalistic inquiry. Thousand Oaks, CA: Sage.
- Mahoney, M. J. (2003). Constructive psychotherapy: A practical guide. New York: Guilford.
- Mathieu-Coughlan, P., & Klein, M. (1984). Experiential psychotherapy: Key events in client-therapist interaction. In L. Rice and L. Greenberg (Eds.), *Patterns of Change: Intense analysis of psychotherapy process* (pp.213-248). New York: Guilford.
- Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology.

  Cambridge, MA: MIT.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.

- Myers, D. G. (2002). *Intuition: It's powers and perils*. New Haven, Connecticut: Yale University Press.
- Ohman, A., Esteves, F., Flykt, A., & Soares, J. J. F. (1993). Gateways to consciousness:

  Emotion, attention, and electrodermal activity. In J. C. Roy, W. Boucsein, D. C.

  Fowles, & J. H. Gruzelier (Eds.), *Progress in electrodermal research* (pp. 137-158).

  New York: Plenum.
- Ozier, D. P., & James. S. (2004). Honouring the body in psychotherapy: Using neuroscience to strengthen Gendlin's directive. *Constructivism in the Human Sciences*, 9 (1), 19-29.
- Pos, A.E., Greenberg, L.S., Goldman, R., & Korman, L.(2003). Emotional processing during experiential treatment of depression. *Journal of Consulting and Clinical Psychology*, 71(6), 1007-1016.
- ProComp Manual. (2003). Retrieved on December 1, 2004 from http://www.thoughttechnology.com/down/sa7510\_rev.3.0.pdf
- Roessler, R., Brunch, H., Thum, L., & Collins, F. (1975). Physiologic correlates of affect during psychotherapy. *American Journal of Psychotherapy*, 29, 26-36.
- Silberschatz, G., Fretter, P. B., & Curtis, J. T. (1986). How do interpretations influence the process of psychotherapy? *Journal of Consulting and Clinical Psychology*, *54* (5), 646-652.
- Stiles, W. B. (1993). Quality control in qualitative research. *Clinical Psychology Review*, 13, 593-618.

- Sundararajan, L. (2001). Alexithymia and the reflexive self: Implications of congruence theory for treatment of the emotionally impaired. The Humanistic Psychologist, 29, 223-248.
- Toomin, M., & Toomin, H. (1975). GSR biofeedback in psychotherapy: Some clinical observations. *Psychotherapy: Theory, Research, and Practice, 12 (1)*, 33-38.
- Watson, J. C., Greenberg, L.S., & Lietaer, G. (1998). The experiential paradigm unfolding:

  Relationship and experiencing in therapy. In J. C. Watson (Ed.), *Handbook of experiential psychotherapy* (pp.3-27). New York: Guilford.
- Whelton, W. (2004). Emotional processes in psychotherapy: Evidence across therapeutic modalities. Clinical Psychology & Psychotherapy, 11 (1), 58-71.
- Winton, W. M., Putnam, L. E., & Kraus, R. M. (1984). Facial and autonomic manifestations of the dimensional structure of emotion. *Journal of Experimental Social Psychology*, 20, 195-216.
- Van Rekkum, C. (2000). Levels of processing in appraisal: Evidence from computer game generated emotions. Unpublished doctoral dissertation, University of Geneva.
- Yaremko, R. M., Glanville, B. B., & Leckart, B. T. (1972). Imagery-aided habituation of the orienting reflex. Psychonomic Science, 27 (4), 204-206.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35(2), 151-175.
- Zumbo, B. D. (1999). The simple difference score as an inherently poor measure of change some reality, much mythology. *Advances in Social Science Methodology*, 5, 269-304.

## Appendix 1:

#### Protocol

Thank you for taking the time to come today. I'd like to fully explain the process we have planned for today so that you will be clear on what you will be asked to do. I will be reading from this script so this process will take several minutes. At different points in this explanation I will stop to answer any questions that you may have.

Let me start by giving you an overview of the process.

As we discussed on the phone we are interested in learning about what happens for you as an experienced focuser as you respond to language, both while focusing and while not focusing. As such, I will ask you to complete two separate tasks today that involve responding to language. During these tasks we will use two different methods to investigate what happens for you physically. The first method will be to monitor the activity of muscles in your face and neck by attaching electrodes to these areas and sending the information we gather from these sensors to this machine (*indicate ProComp+ system*). Secondly, during completion of the tasks we will use another set of electrodes to measure the electrical activity in one of your hands.

Sensors of this kind are very sensitive to movement. Therefore, in order to allow us to collect this data properly I will ask that during the two tasks you let the hand we are monitoring rest like this (*demonstrate*). Could you please try? (*Check*) Thank you. I will also ask that you keep your head and neck relatively still during the two tasks. Don't feel that you have to stay totally motionless, but try to keep larger movements to a minimum.

I will lead you through two different tasks today. I will start bt giving you a detailed explanation of the focusing task. I will then attach the electrodes. Next I will ask you to sit

quietly for several minutes so we can collect baseline data. I will then lead you through the focusing task. I will then give you a detailed explanation of the non-focusing task. After you have completed both tasks I will help you to take off the electrodes, will then ask you several questions about your experience during the tasks, and will invite you to answer these questions freely in your own words. Finally, I will ask you to use two simple paper and pencil rating scales to rate the list of words that you will have heard during the two tasks. I will explain how to use these scales in more detail at that time.

Do you have any general questions at this time? (General questions answered).

Now I would like to explain the focusing task to you. At the end of this explanation I will give you a chance to take a trial run so don't feel you need to completely understand what will be required of you the first time I explain it.

I will start the focusing task by using common instructions to lead you through "clearing a space". Once you have cleared a space I will ask you to choose one of the troubling issues that arose during clearing a space to focus on. At no time during the focusing task will I ask you to tell me what the issue that you have chosen is, or to tell me anything about the content of this issue. Once you have selected an issue I will use common focusing instructions to help you to form a felt sense for the issue. At this point in the process I will ask you to signal to me silently when you have contacted the felt sense for your issue by raising the index finger of your non-monitored hand (demonstrate). Would you please try that motion now? (Have them demonstrate) Thank you. Once you have signaled that you have contacted the felt sense I will then use common focusing instructions to help you to silently find and resonate a handle for the quality of your felt sense. Once you have resonated

your label successfully several times silently to yourself I will ask you to say the label out loud so that I can hear it.

At this stage I will stop following common focusing instructions and instead do something quite different then in the normal focusing procedure. I will reflect back your handle to you a number of times. However, I will also say back two different handles to you a number of times as well. Please allow in each handle that I offer you and see how it resonates with your felt sense. Say "Yes" if it matches your felt sense completely, say "Close" if it feels close to your felt sense but does not match it completely, and say "Far" if it does not match your felt sense well at all. The words "Yes", "Close" and "Far" will be written on cards in front of you in case you forget your response options. Please state your responses as soon as you have sensed how your felt sense has responded to each handle.

Let me clarify an important point. Please be with what is and rate in response to the felt sense as it is in each moment. So for example, if you find that in any of the times that you hear your original handle reflected back to you that it no longer matches your felt sense, please don't feel you should say "Yes". I'll give you a concrete example. Imagine that the original handle that you offered me was "a cold day". Imagine that by any one of the times that you heard "a cold day" reflected back to you that your felt sense had shifted to the point that "a cold day" was no longer a match for you. In this case, please say "Close" (or possibly even "Far") rather than "Yes", depending on how far your felt sense had shifted from being like "a cold day" by that *particular* moment in time. As another example, imagine that I reflected back "a frozen day" to you and that you found it fully matched your felt sense, despite the fact that the actual words I used were a little different than the ones you found yourself. In this case you should say "Yes", not "Close".

Eventually your responses will indicate to me that the handle you originally gave me no longer fully matches your felt sense. At some point after this I may say "It seems that your felt sense has now shifted." If I say this then this will signal the beginning of a second round of the focusing task, and we will repeat the same procedure as in the first round for a second and final time with this new felt sense.

Let's give it a dry run take sure that you understand the process. Again, imagine that you told me that the handle for your original felt sense was "a cold day". Imagine that I then reflected back to you "a cold day" and that when you let in this handle you found that the felt sense fully resonated with it. As soon as you felt this response you would say...? Imagine that I then said "a hot rain" and that when you let in this handle you found that it did not resonate at all. As soon as you sensed this reaction from the felt sense you would say ...? Imagine that I then said "a frozen rain" and you found that this alternate handle was a match for the felt sense. You would then say...? Imagine that I then said "a frozen rain" again. Imagine that this time when you let in this handle you found that it was still close but that it was no longer a match for your felt sense, you would then say...? I might then reflect back your original handle "a cold day" again. Imagine that this time when you allowed in your original handle you found that it was close to resonating but that it was no longer a full match. You would then say...? (Correct and explain as necessary)

Having heard your original handle now answered back with something other then "Yes" I may or may not at this stage choose to say "It seems that your felt sense has now shifted" and if I did at this point we would cay on to a second round of the focusing task.

Do you have any questions at this stage? (Answer as needed)

One more thing. Unlike in usual focusing I will not go on to help you work through or resolve your issue. Therefore, at the end of the focusing task I will offer you time and guidance in order to help you end your work with your felt sense in a healthy way.

Do you have any final questions or are you ready to begin?

I will now attach the electrodes. (Attach electrodes, test, start camera recording, and have participant wait quietly for tow minutes for collection of baseline data).

Do you have any last questions about the focusing task, or are you ready to begin?

(Answer questions).

We will now begin the focusing task.

I will now lead you through the first four stages of focusing. "Ask yourself 'How am I?' What's between me and feeling fine?/ / Don't answer; let what comes in your body do the answering" (Gendlin, 1981, p.173). / / Observe and sit beside each issue that comes. Put each one aside at the distance that feels right to you. / / Please continue clearing space until I speak again (wait 40 seconds). Please continue clearing space for as much more time as you need to. Please signal to me when you are ready to move on by raising your index finger (Wait until signal is given). Now please pick one issue to focus on. When you have chosen your issue please signal to me again. (wait until signal is given and mark here) "Don't go into the problem. What do you sense in your body when you recall the whole of that problem?" (Gendlin, 1981, p.173) (Mark here) / / When you feel that you have contacted the felt sense of your problem please signal again (Wait until signal is given-Mark here). "What is the quality of the felt sense? What one word, phrase or image comes out of this felt sense?" (Gendlin, 1981, p.173) / / When you have found a handle take it back in and check that it resonates with your felt sense. / / When you have found your handle please say it out

loud. (Wait until handle is stated out loud-Mark here). Please allow in each handle that I will now offer you and see how it resonates with your felt sense. Please say "Yes", "Close" or "Far" as soon as you have sensed how well each handle matches your felt sense. (Wait for handle to be offered and then offer handles according to selected order with 10 second pauses after each response. Continue until the original handle is offered back with something other then "Yes" at which point finish the appropriate order chart line and then carry on).

(If the previous round has not produced at least one "Yes", "Close" and "Far" then initiate a second round of focusing task. Otherwise move to end of task).

(It seems that your felt sense has now shifted.// What do you sense in your body when you sense into this new felt sense?/? What is the quality of this new felt sense? What one word, image or phrase comes out of this felt sense?// When you have found a handle, take it back in a nd check that it resonates with your felt sense. When you have found your handle please say it our loud. (Wait for handle and Mark here).

Please allow in each handle that I will now offer you and see how it resonates with your felt sense. Please say "Yes", "Close" or "Far" as soon as you have sensed how well each handle matches your felt sense. (Wait for handle to be offered and then offer handles according to selected order with 10 second pauses after each response. Continue until the original handle is offered back with something other then "Yes" at which point finish the appropriate order chart line and then carry on).

We have now reached the end of the focusing task. Please take as long as you need to settle whatever may need settling within you. / / I encourage you during this time to say whatever you may need to say to your felt sense to complete this experience in a way that is ok for you. / / You may want to say that you will take some time again later to spend with

your felt sense. / Whenever you feel ready to re-enter this space please do so. (Wait until they re-engage). Do you need to do anything further to renter the room? (Wait for them to rearrange, sip water, etc.). (Thank them and move on to either the word task or the interview, depending on the sequencing.)

I will explain the non-focusing task to you. Again, you will have a chance to give it dry run at the end of the explanation.

I will start this task by holding up a pair of words written on cards like these (hold up two word cards). I will then ask you to choose one of these words to work with, and then to say that word out loud. Within the word task it is not important which particular word you choose, so please try to make this choice without giving it too much thought one way or the other. Once you have chosen a word I will place the card with that word on it in front of you. The word that you have chosen will become your "anchor word" for this round of the word task. I will then say your anchor word to you a number of times. However, I will also say two alternate words to you a number of times. These alternate words may be quite close or quite far from you anchor word. These three words will be said in random order. When you hear your anchor word said back to you please say "Yes." When you hear one of the two alternate words please decide if the meaning of this alternate word is close or far from the meaning of your anchor word. If you decide that it is close please say "Close", and if you decide that it is far please say "Far". Unlike in the focusing task please make these evaluations purely cognitively rather than in response to any felt sense or physiological reactions you may have to the words. Your analysis of closeness should be based on the meaning of the words as they are commonly understood or as they would be defined in a dictionary.

Once each of these words had been repeated a number of times and you had rated each one, this round of the word task would be finished. I would then lead you through six more rounds of this task in exactly the same manner.

Let's give one round a dry run just to be sure that you are clear on this task. Imagine that I had held up these two words (hold up two cards with Sports and Hinder on them).

Please choose one of these words and say it out loud. (Put chosen word card there). Ready? Sports, Athletics, Zoo, Athletics, Sports, Zoo/ or/ Hold Back, Hinder, Invader, Hold Back, Invader, Hinder (Allow them to answer and correct as necessary).

Do you have any final questions about the word task? (answer any questions)

1. We will now begin the word task. (Hold up two word cards). Please choose
one of these words. (Put the word card for their choice in front of them). Thank you. I will
now say the word several times but will also say two alternate words several
times as well. When you hear the word please say "Yes". When you hear one of
the alternate words please decide if its meaning is close or far from and
then say "Close or "Far." (Go through procedure 6 times). Thank you. Now please take a
short break before the next round. (Wait 20 seconds).
2. (Hold up two word cards). Please choose one of these words. (Put the word
card for their choice in front of them). Thank you. I will now say the word
several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times). Thank you. Now please take a short break before the next round
(Wait 20 seconds).

1. (110th up two word edites). I lease choose one of these words. (1 in the word
card for their choice in front of them). Thank you. I will now say the word
several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times). Thank you. Now please take a short break before the next round.
(Wait 20 seconds).
4. (Hold up two word cards). Please choose one of these words. (Put the word
card for their choice in front of them). Thank you. I will now say the word
several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times). Thank you. Now please take a short break before the next round.
(Wait 20 seconds).
5. (Hold up two word cards). Please choose one of these words. (Put the word
card for their choice in front of them). Thank you. I will now say the word
several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times). Thank you. Now please take a short break before the next round.
(Wait 20 seconds).
6. (Hold up two word cards). Please choose one of these words. (Put the word
card for their choice in front of them). Thank you. I will now say the word

several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times ). Thank you. Now please take a short break before the next
round. (Wait 20 seconds).
7. (Hold up two word cards). Please choose one of these words. (Put the word
card for their choice in front of them). Thank you. I will now say the word
several times but will also say two alternate words several times as well. When you hear the
word please say "Yes". When you hear one of the alternate words please decide
if its meaning is close or far from and then say "Close or "Far." (Go
through procedure 6 times ). Thank you. Now please take a short break before the next
round. (Wait 20 seconds).
Thank you. We are now finished with both tasks. I would now like to ask you some
questions about your experience during the two tasks that you just completed. I'll ask you to
answer a few questions freely in your own words and I'll ask you to answer a few questions
with verbal ratings. I will also ask you to make a few simple line drawings on this diagram.
The point of the drawing is just to help me understand your experience in a really concrete
waydon't worry it is not about your artistic abilities n any way. So please try to make these
sketches as naturally and spontaneously as you can. Do you have any questions?
My first three questions are about the point in time immediately before you told me
your handle out loud. Remember that at that point you had already contacted your felt sense,
had found and resonated the handle silently to yourself a few times,

and were just about to tell it to me.

Question 1.) At that point, on a scale from 1-5, how distinctly and tangibly could you feel your felt sense as sensation within your body. Was it:

1 Very distinct...2 Quite distinct...3 Somewhat distinct...4 Not very distinct...or 5 Not at all distinct Question 2.) At this same point, how well did the handle match your felt sense? 1 Completely...2 Almost completely...3 Somewhat completely ...4 Not very completely ...or 5 Not at all Ouestion 3.) Now please add a few lines or simple shapes to represent your felt sense on your body diagram. Please place your felt sense on the diagram wherever you sensed it in your body at that point in time. Also, please use whatever shapes or colors you feel will help to express the quality of your felt sense as you experienced it on a bodily or sensation level. For example, if at that moment your felt sense had a light quality you would choose whatever colour best represented lightness to you. (Wait for the participant to draw their felt sense and then use open ended follow up questions in order to learn how the felt sense was experienced on both a sensation and a meaning level). Question 4.) You responded "Yes" to the handle(s) X number of times. In the same way that you just did with the original felt sense, please add a few lines

of times. In the same way that you just did with the original felt sense, please add a few lines or shapes to show how the felt sense responded immediately after rearing the words that you saif "Yes" to. (Ask follow-up questions to understand how this reaction was experienced both at the level of sensation and at a narrative or meaning making level).

Question 5.) You responded, "Close" to the handle(s) \_\_\_\_\_\_ X
number of times. In the same way that you just did with the original felt sense, please add a

few lines or shapes to show how the felt sense responded immediately after rearing the words that you saif "Yes" to. (Ask follow-up questions to understand how this reaction was experienced both at the level of sensation and at a narrative or meaning making level).

Question 6.) You responded "Far" to the handle(s) \_\_\_\_\_\_\_ X number of times. In the same way that you just did with the original felt sense, please add a few lines or shapes to show how the felt sense responded immediately after rearing the words that you said "Yes" to. (Ask follow-up questions to understand how this reaction was experienced both at the level of sensation and at a narrative or meaning making level).

Question 7.) There were obviously real differences between what you did in the focusing task today and what people usually do when they focus. However, please consider the different ways that you have just explained in which the felt sense responded today to let you know if my words were right, almost right, or far from right. Please compare this felt sense behaviour to what the felt sense usually does to signal to you how well something fits either when you are focusing or when you are consulting your felt sense during daily life. On a scale of 1 to 5, would you say the way your felt sense communicated its judgments today was:

1 The same as how it usually does...2 Close to how it usually does...3 Somewhat close to how it usually does ...4 Quite different to how it usually does...or 5 Very different from how it usually does

(Use open ended questions to follow up on any differences)

8.) Was what happened in your body during the word task similar or different to what happened in your body during the focusing task? Please explain the basic differences.

9.) Is there anything else about your experience today that you want to share or that you think is important for me to understand?

Thank you, please take a short break before I explain the final task for today, a rating task. (Wait 2 minutes).

Ok, I will now explain the rating task. We are interested in understanding your emotional reactions to each of the words or phrases that you heard during the earlier word and focusing tasks. Therefore, I will now read each of the words or phrases that you heard during the tasks back to you one more time. Only this time when you hear a word or phrase I would like you to rate your reaction to it on these two different scales. (*Hand out SAM*). "... You will notice that this measure has a figure on it. This figure is named SAM. SAM shows two different kinds of feelings: Happy vs. Unhappy (point left) and Excited vs. Calm (point right). I will read back the list of words or phrases that you heard during the earlier two tasks and I will ask you to make both kinds of rating for each word or phrase. When rating just try to listen to the word or phrase and rate how you feel immediately after hearing it, don't make any effort to recall how you felt while hearing the word or phrase during the earlier tasks.

"Please notice that each of the two feelings are arrayed along a different scale The left panel shows the happy-unhappy scale, which ranges from a smile to a frown. At one extreme of this scale, you are completely happy, pleased, satisfied, contented, hopeful. When you feel completely happy after hearing a particular word or phrase you should indicate this by marking an X on the figure at the left. The other end of the scale is when you feel completely unhappy, annoyed, unsatisfied, melancholic, despaired, or bored in response to hearing a particular word or phrase. When you feel completely unhappy after hearing a particular word or phrase you should indicate this by marking an X on the figure at the right. The figures also

allow you to describe intermediate feelings of pleasure, by marking an X on any of the other figures. If you feel completely neutral, neither happy nor sad, mark an X on the figure in the middle. If your feeling of pleasure or displeasure falls between two of the figures, then mark an X on the space between the figures. This permits you to make more finely graded ratings of how you feel in reaction to hearing each word or phrase. There are a total of 9 possible points along each rating scale that you can mark to indicate the extent to which you feel happy or unhappy after hearing each word or phrase. Any questions so far?

The excited or calm scale is the second type of feeling displayed here... At one extreme of this scale you are stimulated, excited, frenzied, jittery, wide awake or aroused. When you feel completely aroused mark in the figure at the left of the row. Now look at the other end of the excited-calm scale, which is the completely opposite feeling. Here you would feel completely relaxed, calm, sluggish, dull, sleepy, or unaroused. Indicate feeling calm by marking the figure at the right of the row. As with the happy-unhappy scale, you can represent intermediate levels of excitedness or calmness by marking on any of the other figures. If you are not excited, nor at all calm, mark in the figure in the middle of the row. Again, if you wish to make a more finely tuned rating of how excited or calm you feel, bubble in the space between the pictures... Please work at a rapid pace and don't spend too much time thinking about each word. Rather, make your markings based on your first and immediate reaction as you..." hear "... each word..." (Bradley & Lang, 1999, p.1). Do you have any questions or are you ready to start?

(Go through rating procedure, check if there are any last questions, thank participant, and say

good-bye).

Appendix 2: Experiential Task Items

Participant	"Right" Words	"Close" Words	"Far" Words
Linda	Dark and cold (3)	Dark and freezing (2)	Grey and frozen (3)  Dark and freezing (1)
Anne	Anxious waiting (2)	Nervous waiting (3)	Social aloneness (3)
Jill	It's a hard ball (1)	It's a tight knot (1)	It's a throbbing idea (2) It's a tight knot (1)
Beth	Hollow ache (1)	Empty pain (1)	Throbbing terror (2) Empty pain (1)
Joan*	It's like backing away	(1)	It's like running away (1) It's a hot throbbing (3)
William	Tethered (3)	Tied down (3)	Shooting pain (3)
Yvette Denise	Scared small (1) Muffled dusty (9)	Frightened tiny (1)  Muted gritty (8)  Murky dirty (1)	Buzzing ache (1) Murky dirty (7)

Notes: The numbers in brackets indicate the number of times that each item was responded to within each category. \* Joan's physiological results were omitted

# Appendix 3: Experiential Task Item Presentation Order

Order One:				
1.) Original	2.) Close	3.) Far		
4.) Far	5.) Close	6.) Original		
7.) Far	8.) Original	9.) Close		
10.) Original	11.) Close	13.) Far		
	cle repeats with return to #			
Order Two:				
Order Two:  1.) Close	2.) Original	3.) Far		
	2.) Original 5.) Close	3.) Far 6.) Far		
1.) Close		,		
1.) Close 4.) Original	5.) Close	6.) Far		

# Appendix 4:

# Control Task Items

Level	Description	Words Sets (anchor-close-far)
1	High arousal-negative valence 2 of 3 sets selected	cancer-leukemia-bomb hate-hatred-bankrupt assault-attack-disloyal
2	Medium arousal- medium negative valence 2 of 3 sets selected	crime-criminal-broken confused-mixed up-damage embarrassed-ashamed-flood
3	Medium arousal-neutral valence 2 of 3 sets selected	curtains-drapes-dark fall-stumble-cellar alley-lane-contents
4	Low arousal-positive valence 1 of 2 sets selected	colour-hue-circus dawn-daybreak-cuisine

Appendix 5:

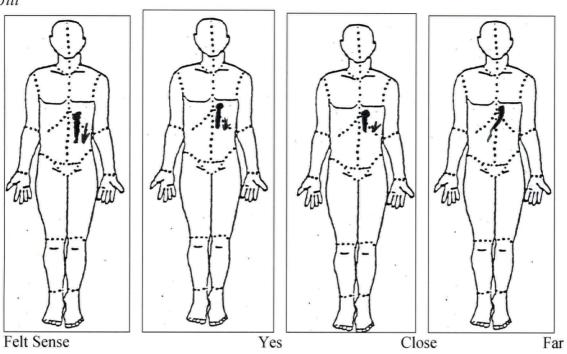
## Control Task Item Presentation Order

Level 2	Close Word (C)-Anchor Word (A)-Far Word (F) / A-C-F
Level 3	F-A-C/ F-A-C
Level 1	A-F-C/ F-C-A
Level 3	C-A-F/ A-C-F
Level 2	A-F-C/F-C-A
Level 1	F-A-C/F-A-C
Level 4	A-C-F/ F-A-C

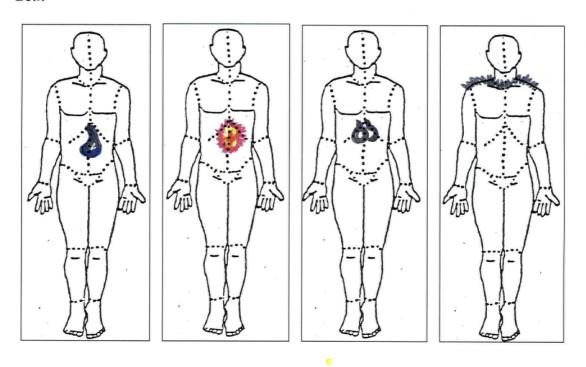
# Appendix 6:

# Client Drawings

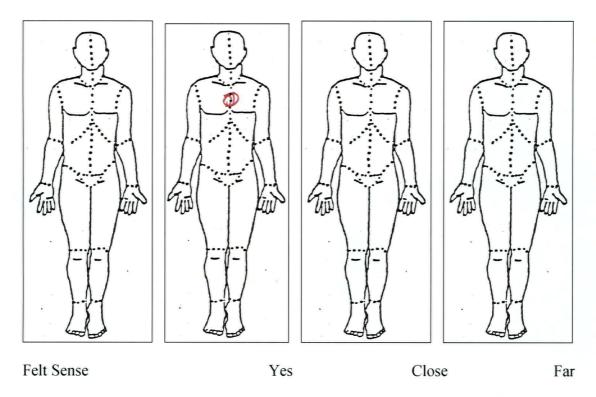
Jill



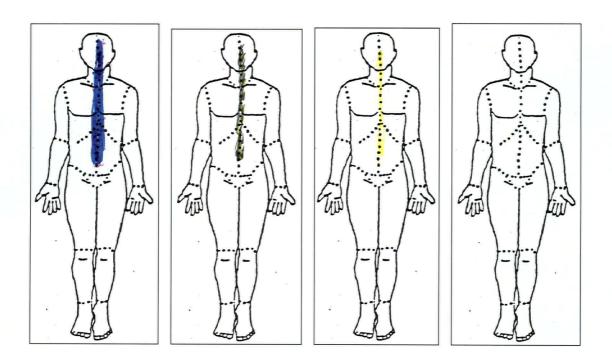
Beth



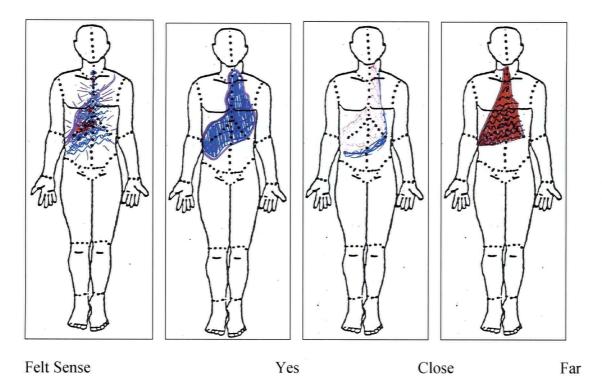
## Joan



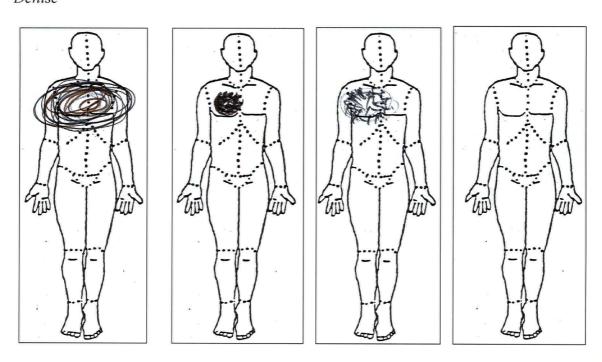
William



## Yvette



## Denise



## Appendix 7:

## Item Matching Procedure

- Step 1.) A mean SAM valence and arousal rating was calculated for each response category and rounded to the nearest whole number
- Step 2.) Any control task item(s) with matching ratings in the corresponding response category was identified (e.g. if the rounded mean experiential arousal rating was 7 for the "yes" response category then control items were searched for in the "yes" category that had arousal ratings of 7)
- Step 3.) If there were the same number of control task items that had the matching rating these were the control items used in analysis
- Step 4.) If there were a higher number of completely matched control items than experiential items then only the appropriate number were chosen for analysis based on chronological order of presentation (e.g. the first three of four to be presented were included)
- Step 5.) If there were fewer completely matched control items than experiential task items then only these items were used and an unequal number of items between tasks were compared
- Step 6.) If there were no completely matched control items then the appropriate response category was searched to identify the control items with the closest ratings and a matching number of these items control items were included based on the chronological order of presentation (e.g. if the rounded mean valence rating for an experiential "yes" item was 3 and there were four "yes" responses, then three control task items rated as 2 and one control task item rated as 4 might be included as based on chronological order)

## Appendix 8:

## Participant Solicitation Letter

Dear Focuser,

My name is Douglas Ozier. I am a Masters student in Counselling Psychology at UBC under the supervision of Dr. Susan James. Dr. James is the principal investigator and I am a co-investigator on a research project that we are currently conducting that is studying the focusing process. I hope that you will consider participating.

The title of the project is "Micro-steps of Change: A Test of Gendlin's Carrying Forward Construct" and it is for my Master's thesis. The purpose of the study is to learn what happens to experienced focusers (both on a subtle physical level and on a level of conscious experience) as they practice focusing, so that these actual experiences can be compared to what would be predicted by the theories of Eugene Gendlin. Knowledge gained through this experiment could help us to better understand how focusing works on a mind-body level. Ultimately this line of research could help to improve the practices of focusing and psychotherapy, and to educate a greater number of psychologists and other helpers about focusing.

You have been asked to participate in this study because you are an experienced focuser. Participation would involve coming to the UBC Counselling Psychology offices at a time of your convenience in order to participate in an experiment that will take no more than an hour and a half. During the experiment you would be asked to go through the first four stages of focusing several times while being physiologically monitored for electrical muscle activity and autonomic nervous reactions. The machine used to measure these physical responses (EMG and GSR) has been shown to be a safe and non-invasive. This machine runs on simple AA batteries, has been approved by the FDA and Health Canada, and has been used safely in a experiments at a large number of universities around the world, including at UBC. You would not be asked to reveal the contents of your private thoughts or feelings during the rounds of focusing, just to discuss the process itself.

In addition to doing the actual focusing you would also be asked to complete a simple cognitive task, make some simple paper and pencil ratings, and also briefly describe the experience of focusing in your own words. Six-eight weeks after you came to UBC we would call you and ask you to spend no more than 30 minutes discussing our initial results and having you give your opinion of them. You would be offered an honorarium of 10 dollars for your participation, and we would compensate you up to five dollars for travel expenses.

before we ask you to use them. At the end of your session today you will be asked if the process has brought up any emotional issues that you feel you need support with. If your answer to this question is "yes", and if you would like us to, at that time we will refer you to an appropriate community service at which you can receive this kind of support.

After we have attached the sensors and adjusted them to your comfort, we will ask you to sit silently for several moments. We will then ask you to silently make a mental list of several problems that you are facing in your life at present. We will then use standardized instructions to lead you through "clearing a space". At this point we will ask you to choose one of the problems that you have identified in order to focus with it. We will then use standardized focusing instructions to lead you through to the resonating stage of focusing (stage four) while working with the problem that you have chosen. Next, we will ask you to say out loud the handle that you have found for your felt sense. We will then say a number of handles back to you and ask you to verbally rate how well each of these handles fits your felt sense. After this, we will lead you back through "clearing a space" and will ask you to repeat this entire process with another life problem that you select. We will ask you to repeat this whole cycle with four separate life problems. Other then saying the handles that you come up with for your felt senses we will not ask you to tell us what the problems that you are focusing on are, or anything about them. This focusing process should take about twenty minutes.

We will then play back the handles that you just heard on the videotape and ask you to rate them again, but this time with a simple paper and pencil rating scale. This part of the experiment should take no more than ten minutes. We will then help you to take off the sensors.

We will then ask you a few short, open ended questions designed to allow you to describe your experience of participating in the experiment in your own words.

Once the data has been initially analyzed we will contact you again. This should be 6-8 weeks after the experiment day. If you are willing to participate in this follow up procedure, we will give you a synopsis of the interview that we conducted with you and give you a chance to say whether it accurately reflects what you wanted to express during the interview, and then to make changes to the synopsis if you see a need.

In total, the experiment today should take no more than one and a half hours and the follow up call to discuss your interview synopsis should take no more than half an hour.

If at any stage you during the experiment you wish to withdraw from the study please inform the interviewer and your request will be fully honored. Withdrawal will result in having no reprisals of any kind directed toward you by the investigators.

## Confidentiality:

Your identity will be kept strictly confidential. Only the research assistant who is in your presence today, Dr. Susan James and Mr. Ozier will have access to your name. The rest of the team members will only have access to your participant number and will have no way of matching this number to you identity. The following steps will also be undertaken to ensure that your confidentiality will be maintained.

1. Mr. Ozier, Dr. James and all research assistants will sign a written oath agreeing to maintain strict confidentiality.