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PERSUADING CLIENTS TO ENGAGE IN TREATMENT: THE EFFECT OF USING ONE-SIDED AND TWO-SIDED INFORMATION ON THE LIKELIHOOD OF TREATMENT ATTENDANCE

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As members of the Final Examination Committee, we certify that we have read the dissertation prepared by SUSAN ELIZABETH BECKER entitled PERSUADING CLIENTS TO ENGAGE IN TREATMENT: THE EFFECT OF USING ONE-SIDED AND TWO-SIDED INFORMATION ON THE LIKELIHOOD OF TREATMENT ATTENDANCE

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I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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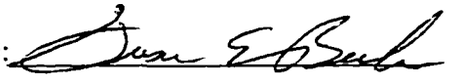
SIGNED: 

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ABSTRACT

Two studies were conducted to examine the role that information plays on persuading participants to engage in psychotherapy. Study 1 examined the effect of commitment to treatment on the seeking of information about the treatment by psychotherapy clients. This study demonstrated that participants have a preference for seeking positive information about treatment, particularly those who are postdecisional about change. Study 2 presented undergraduate participants with either positive information (one-sided) or combined positive and negative information (two-sided) about treatment. An interaction effect was found such that participants who were contemplating change were more likely to attend treatment after hearing two-sided information than one-sided. Participants who were ready to take action were more likely to attend when they heard one-sided information than when they heard two-sided information. These findings are discussed in terms of their implications for the presentation of information in psychotherapy informed consent procedures.

Persuading Clients To Engage in Treatment: The Effect of Using One- and Two-sided Information on the Likelihood of Treatment Attendance.

Introduction

These two studies were designed to systematically examine the role that information about treatment, as given during informed consent procedures, played in persuading potential clients to engage in treatment. Previous clinical literature seemed to show some benefits of presenting preparatory information, but it was not clear why it would be beneficial and for whom it would be most beneficial. Additionally the clinical literature had not explored the possible differential effects of presenting information about both risks and benefits of treatment, as recommended by the ethical principles regarding informed consent (APA, 1992. The key question was how the presentation of information would affect the decision of potential clients to attend subsequent treatment. and whether the relationship between the presentation of information and the decision was moderated by clients' stance toward change (pre-decisional or post decisional). Before that could be explored it was seen as necessary to address whether clients were biased toward either positive or negative information; did they want to increase their hopefulness and seek reassurance in only hearing about the benefits of treatment, or were they interested in weighing the risks and benefits of treatment in order to make a reasoned decision? Preferences in the type of information clients were seeking would then suggest possible effects of hearing information about risks and benefits on later attendance to

treatment.

Study 1 addresses the question of whether new psychotherapy clients are biased in their seeking of information about treatment, and under what conditions this bias may occur (bias defined as a preference for only supportive or non-supportive information). Decision making theory (c.f. Abelson & Levi, 1985) suggests that individuals will seek information relevant to making a decision in a relatively unbiased fashion, unless conditions occur which limit the capacity of the decision maker. Cognitive dissonance theory (c.f. Festinger, 1964) suggests that making a premature commitment to a decision alternative results in bias in the seeking of information, for example, clients would selectively seek information that supports their commitment to psychotherapy. Clients who are predecisional about change and treatment are expected to experience the most dissonance when they make a commitment to psychotherapy, so they would be the most biased in their seeking of positive information in order to reduce that dissonance.

Study 1 uses a two by two factorial design where expressed commitment to psychotherapy is manipulated (2 groups: commitment and no commitment) and the decisional status of the participant is the individual difference factor (predecisional or postdecisional). Participants are classified as either predecisional or post decisional regarding seeking psychotherapy for change. The effect of the two factors is measured by the relative preference of positive to negative information about psychotherapy sought by the participants.

The results showed that the postdecisional-no commitment group demonstrated the most bias for positive information and the predecisional commitment group showed the least bias for positive information. In addition all groups showed a positive difference score, suggesting at least a slight bias toward positive information about psychotherapy for participants in all experimental groups. These results do not appear to support the dissonance reduction hypothesis as tested by this study; however, the commitment manipulation may not have been convincing and there may have been problems with the questionnaire designed to test the effect of the commitment manipulation.

Study 2 was designed to address the question of whether information about psychotherapy, when presented as a persuasive one- or two-sided message, influences subsequent attendance. The persuasion literature suggests that individuals who are predecisional about some issue would be more persuaded by information presented as a two-sided message, presenting both the pros and cons of the issue. Stages of change research suggests that individuals in the contemplation stage of change (predecisional) would be most interested in gathering information about the pros and cons of change, so individuals in the contemplation stage were hypothesized to be most persuaded by a two-sided message containing an equal number of statements about the pros and cons of psychotherapy. The stages of change research also suggests that individuals in the action stage of change would not be actively interested in risk and benefit information relevant to change. However, the results from study 1 and the persuasion literature indicated that

individuals in the action stage of change (postdecisional) would be most persuaded by a one-sided positive message about psychotherapy, rather than a two-sided message.

This study used a two by three factorial design in which the type of persuasive message (one- or two-sided) was the manipulated factor and stage of change (precontemplation, contemplation or action) was the individual difference factor. The two-sided message contained equal amounts of positive and negative information about seeking stress management training. The one-sided message contained only positive information about the training. While persuasion was the stated goal of the message manipulation, the effect of the persuasive messages and stage of change was assessed by the participants' attendance to the training sessions.

Results of study two showed an interaction effect. Participants in the contemplation stage of change were more likely to attend training when they heard the two-sided message and less likely to attend when they heard the one-sided message. Participants in the action stage of change were more likely to attend training when they heard the one-sided message and less likely to attend when they heard the two-sided message. Participants in the precontemplation stage of change were least likely to attend the training overall, but their attendance was greater when they heard the two-sided message. Their attendance was not as high as the contemplation group, however.

These two studies were designed to examine the role that information about psychotherapy played in persuading potential clients to engage in treatment. The

presentation of information is required by APA's (1994) ethical principles, but how that information is conveyed varies widely (Handeslman, Kemper, Kesson-Craig, McLain & Johnsrud, 1986) with little thought given to the effect that it has or may have on the potential client. It is my premise that presenting information about risks and benefits can be done in a way that facilitates clients entering into treatment, and preserves their right to make informed decisions about that treatment.

Failure to engage in treatment is a significant problem observed by mental health practitioners. Research on premature termination from therapy suggests that many individuals seek psychotherapy but do not follow through with subsequent appointments. Baekland and Lundwall (1975) found that attrition ranged from 20% to 57% after the first visit to mental health clinics in their sample. Garfield (1980) reported that 41% of the clients referred to group therapy after an initial appointment never attended a subsequent session.

The decision to engage in psychotherapy is a stressful one for most people, arguably of high importance and high ambivalence (Meichenbaum and Turk, 1987, Janis and Mann, 1977). An initial appointment provides information which can increase or decrease the likelihood of a decision to engage in treatment. If so, it is important to systematically examine the ways in which individuals gather and use information to make decisions about psychotherapy. Several areas of psychology literature are reviewed for this purpose: 1)the role of information in decision making, 2) the stages of change and the

use of information, 3) persuasion and therapist influence and 4) client preparation and informed consent.

The role of information in decision making

The purpose of this section is twofold, to explore the consequences when a decision maker is provided with either balanced (equal discussion of risks and benefits) or biased information and to review studies that clarify under what conditions the seeking of information may be biased. The decision making literature that is most relevant here is a limited subset covering ill-defined decision situations, where outcome probabilities for the alternatives are unknown.

Janis and Mann's (1977) conflict model of ill-defined decision making suggests that for important decisions (with major consequences for the individual) decision makers should collect thorough and balanced information on all relevant alternatives. Failure to do so:

> ... constitutes a defect in the decision making process. The more defects, the more likely the decision maker will undergo unanticipated setbacks and experience postdecisional regret (p.11).

According to their model balanced information seeking about alternatives occurs when 1) there are consequences of not making a decision, 2) the most obvious alternative involves risk, 3) when it is perceived as possible to develop better alternatives, and 4) when there is sufficient time to search for, and deliberate about, the information pertaining to

possible alternatives. To the extent that potential psychotherapy clients are capable (intellectually and emotionally) of doing so, Janis and Mann (1977) suggest that they may be looking for information about risks and benefits in a balanced fashion.

Janis and Mann (1977) developed a decisional balance procedure to facilitate decision making. Decisional balance procedures were shown to be effective at reducing postdecisional distress, increasing participants' openness to new, potentially negative, information, and increasing adherence to clinic recommendations. Decisional balance procedures were also shown to act as an inoculation against postdecisional regret.

Decisional balance processes have also been shown to increase attendance to an exercise class (Hoyt & Janis, 1975). When women were asked to process the advantages and disadvantages of participating in an exercise class, their attendance was significantly greater than the women who had been asked to process information about a non-relevant situation. This study suggests that decisional balance processes (weighing risks and benefits) have a positive effect on postdecisional outcomes. Information about the psychotherapy/no psychotherapy alternatives may play a vital role, not only in assisting the potential client to make a decision, but also on later attitudes and behaviors.

Clients who attend a first appointment for psychotherapy may not receive or attend to information about treatment in a balanced fashion, however. More recent conflict models of decision making suggest possible biases or fallibilities in how the client may go about attending to, and weighing the information about treatment

alternatives. Once a client attends a first treatment appointment, the assumption is that she/he is (at least currently) not engaging in defensive avoidance (Hogarth, 1980; Janis & Mann, 1977), but potential clients may have other problems with seeking and weighing information that would lead to bias and fallible decision making.

The evaluation of alternatives is a key step in the decision making of the potential client. In the evaluation stage the decision maker 1) identifies and clarifies criteria for what is and is not important information, 2) identifies possible outcomes and 3) estimates the probability of various possible outcomes (Abelson & Levi, 1985). Decision makers are often unsure of their preferences and they tend to be inconsistent about what information is important to them (Dyckman, 1981). For example, a potential client with alcohol problems may value family relationships highly (suggesting the behavior should change) one day and then value his/her social relationships (don't change the behavior) more highly the next.

The goals of the potential client have an impact on which possible outcomes are relevant (Abelson & Levi, 1985). For example, the potential client may have a goal of preventing his/her spouse from leaving, and so would assess his/her alternatives based on the probability that they will lead to that desired outcome. Different alternatives may lend themselves to specific outcomes as well. Seeking treatment has the expected outcome of changing some problem behavior, but failure to change is also a possible outcome. Information about the likelihood of those two outcome probabilities would be

important to the potential client.

Estimating the probability of various possible outcomes by gaining specific information about their likelihood is a vital step for the potential client. In ill-defined decision situations this step is often reduced to a "best guess" probability made by the decision maker (Gettys, Kelly and Peterson, 1973). Seeking information both about personal values as well as evaluative information is an important process for the decision maker in order to increase confidence in their "best guess" about the preferred alternative. Gettys et. al found in their sample of business students that as information was gained, the "best guess" led to preferences among the alternatives.

Systematic bias enters the decision making process once there is a preference among alternatives. Decision makers acquire and process information in a confirmatory way in order to resolve any problems with the preferred alternative. For example, Englander & Tszyka (1980) found that decision makers sought out more information on their preferred alternative than on other alternatives they had generated. Kahnman and Tversky (1979) discuss a similar process where decision makers "edit" the information in order to simplify subsequent evaluation of the alternatives for making a choice. Thus there may be a tendency to seek confirmatory information by potential clients who attend an initial appointment if by their attendance they are indicating a preferred alternative.

Dissonance theory (Festinger, 1964) suggests an explanation for confirmatory biases when preferred alternatives emerge. According to Festinger an individual will be

motivated to reduce conflict about a chosen alternative by seeking out information to support that decision (Frey, 1986). In a psychotherapy setting, a potential client may feel conflict about the psychotherapy/no psychotherapy alternatives. If the potential client signs a treatment agreement before they are ready to make a commitment, the theory suggests that dissonance would result and the client would be expected to seek confirmatory information to support their premature commitment to engage in psychotherapy.

In general, Frey's (1986) research supports the hypothesis that under dissonance inducing conditions individuals will selectively seek out information that supports their chosen alternative. However there are situations where they will seek non supportive information: 1) when non-supportive information may be useful for future decisions,2) when revising the decision is possible, 3) when the supportive information is highly familiar, 4) when a norm for fairness exists thus making the need for balanced information important, and 5) when individuals are able to counter-argue dissonant information.

There are two conditions which increase dissonance after decision making, choice and commitment (Frey, 1986). When individuals who are ambivalent about the alternatives believe they are freely choosing an alternative and have made a public commitment to that alternative, seeking supportive information is much more likely to occur (Frey and Wicklund, 1978; Frey and Stahlberg, 1986). For example, if dissonance

were aroused by premature commitment to psychotherapy, the potential client would be expected to be more interested in how effective the treatment program is and how experienced or educated the therapist, and less interested in the risks or probability of failure.

Dissonance theory argues that biased information search occurs only after decisional commitment (Frey, 1986). Most experiments have been designed to capitalize on the strength of the decision, for example by creating a point of clear behavioral commitment. Frey has noted that the more easily reversible the decision appears to be the less likely participants are to selectively seek information supporting their decision. Making a public commitment to a choice makes the decision less reversible and the participant is more likely to seek information to support that choice. In a psychotherapy setting the potential client has made an apparent commitment by attending a session and thus may be motivated to attend only to information about the benefits of treatment. This does not suggest what the later effects on clients might be when they are confronted by possible risks or drawbacks to treatment.

The literature on ill-defined decision situations suggests that a balanced approach to seeking and weighing information may be the most effective approach for reducing postdecisional regret and to increase behaviors that are in line with the decision (e.g., attendance to exercise programs). However the literature reviewed also suggests that decision makers may not always do what is best for them, e.g., use a confirmatory

strategy to seek and consider information supporting their favored alternatives.

Stages of change and the use of information

Prochaska & DiClemente's (1992) readiness for change construct may clarify who would be more likely to use confirmatory or other faulty information seeking strategies. The stages (reviewed below) reflect aspects of an individual's problem relevant behavior, attitudes and intentions. In all of the stages a potential client may be weighing alternatives, but the contemplation stage is the one where weighing the "change" and "no change" alternatives take on the highest priority and where the potential client may appear to be the most ambivalent. This is also the stage where evaluative information plays the greatest role. Evidence for this will be presented after an overview of the stages of change construct.

The Stages of Change measure (McConnaughy, DiClemente, Prochaska & Velicer, 1989) consists of four subscales within which a client can be categorized at the beginning of therapy. In the first stage, precontemplation, individuals are unaware, unwilling or discouraged with respect to changing problem behavior. They have no intention of changing in the foreseeable future. Individuals in the second stage, contemplation, are actively considering prospects of change; they are weighing the pros and cons of change. They engage in information seeking behaviors, reevaluation of self, and consideration of options for change in specific situations, but have not yet made a commitment to action. The action stage involves overt modification of behavior.

Individuals in this stage are putting forth time and effort and report higher utilization of willpower, self-liberation and reliance on support from helping relationships. In the last stage, maintenance, individuals have already made changes in their problem behavior and may attempt treatment to consolidate former gains; however, backsliding may be the norm Prochaska & DiClemente, 1992).

It is not the case that all clients have decided to take action when they first approach treatment. and indeed may not have decided if professional treatment is the appropriate form of action for them to take. A potential client may be in any of the stages of change when they approach treatment as an option (DiClemente and Hughes, 1990; McConnaughy, DiClemente, Prochaska and Velicer, 1989). These studies report that at least roughly a third of the clients observed are in the precontemplation and contemplation stages where they have not yet decided to participate in therapy or to take action on their problem.

Of particular interest are the individuals in the contemplation stage who are doing the cognitive work that may lead to a decision to change. Prochaska and DiClemente (1992) suggest that a decisional balance process takes place where people who are contemplating change are considering the pros and cons of change in order to make a decision (from Janis and Mann, 1977). Their model proposes that when one perceives the pros of change to outweigh the cons of change then movement into the action stage takes place.

In a (non treatment) sample of smokers, recent quitters and long term quitters. Prochaska, Velicer, Guadagnoli, Rossi and DiClemente (1991) examined naturally occurring changes in the decisional balance variable over time. They found that the decisional balance measure changed significantly with movement from precontemplation to contemplation and from contemplation to action. In the shift from precontemplation to contemplation the pros of smoking became balanced by the cons of smoking. As the cons of smoking began to surpass the pros the individual moved from contemplation to action. The authors note that both the cons and the pros of smoking decreased in importance as the individual began taking action and continued to decrease in the maintenance stage of change. The authors conclude that the gathering and weighing of information in the contemplation stage is an important part of the cognitive work required for the individual to decide to take action. Similar results have been reported for weight loss decision making by O'Connell and Velicer (1988)and for participants in smoking cessation programs by Velicer, DiClemente, Prochaska, and Brandenburg (1985).

Prochaska (1994) reviews the studies examining the decisional balance processes for different health related behaviors and concludes that the transition from precontemplation to action includes an increase in the number of pros of changing the behavior that the individual is considering. This process of actively weighing pros and cons of changing occurs primarily in the contemplation stage of change and is marked by a dramatic increase in the number of pros of change the individual is willing to consider.

Prochaska (1994) concludes that consideration of the pros and cons for behavior change are crucial for progress to the action stage of change. Once the decision to take action occurs, consideration of the pros and cons of change gradually diminish in importance to the change processes. He also states that a message emphasizing only the pros of change would be persuasive since the individual already has access to the reasons not to change, however the literature on persuasive communication may suggest otherwise.

Persuasion and therapist influence.

Use of a persuasive message by a therapist may be one way to tip the balance for a potential client who is contemplating change. Information about the benefits of change may be sought and desirable as suggested by Prochaska and DiClemente's decisional balance data. The relevant question here is whether potential clients are going to be more influenced by a positive, pro-change message or by a message that discusses both the pros and the cons of change and treatment.

A classic study by Hoveland, Lumsdaine & Sheffield (1949) demonstrated that soldiers who were initially skeptical about a message indicating Japan's strength showed more agreement when exposed to a message that included both sides of the argument (a two-sided message). The skeptical soldiers were much less persuaded by a one-sided proattitudinal message. In contrast, soldiers who initially agreed with the message showed more even more agreement after hearing one-sided proattitudinal messages, and

less agreement after hearing the two-sided message.

Lumsdaine and Janis (1953) found that high school students were much more resistant to later opposing messages when they had originally heard a two-sided persuasive message. Students who had only heard a one-sided message that Russia would take years to develop the atomic bomb were later much more persuaded by a counter message arguing that Russia would soon develop the atomic bomb. This study shows that the two-sided message was more persuasive and that the subsequent attitude was then more resistant to counter-information.

More recently, Williams, Bourgeois and Croyle (1993) reported that jurors rated damaging evidence as less serious when the defense attorney presented the damaging evidence as a part of a two-sided message (damaging evidence plus explanation). If the jurors only heard the damaging evidence from the prosecution, they viewed it as much more serious and relevant to the case against the accused. The authors concluded that if jurors are going to be aware of damaging evidence, then the defense is better off presenting it in a balanced fashion, thus being more persuasive in their message of innocence. A second study in the article demonstrated that the persuasiveness in revealing damaging evidence lies in the increased credibility of the defense attorney.

To summarize, research on persuasion suggests that for those who are ambivalent, two-sided arguments (pros and cons) are most persuasive and one-sided arguments (pros only) are least persuasive for changing attitudes. In a psychotherapy

situation, potential clients who are contemplating change might be expected to respond better to a persuasive two-sided message that acknowledges their own concerns and doubts about engaging in treatment, perhaps because of the increased credibility of the communicator.

Client Preparation and Informed Consent

The purpose of this section is to review the psychotherapy literature on attempts to persuade/inform potential clients about psychotherapy in order to facilitate their decision making. Both areas of literature will be discussed in terms of the clients' weighing of alternatives and the effect of the information on later treatment attendance. The goal of client preparation is to aid them in carrying out their role in the treatment plan. The goal of informed consent procedures is to provide information to clients that they can use to make a decision about treatment. In both cases information is presented that could facilitate client decision making.

Client preparation encompasses two main goals. First, information is provided to create positive expectancies about treatment. Second, role induction procedures provide models of appropriate client behaviors. The client preparation literature suggests that providing this type of information about psychotherapy to clients improves therapy retention rates. Heitler, in his 1976 review of the client preparation literature, found that mutuality of client-therapist role expectations did increase clients' treatment attendance. The studies reviewed up to that point give no indication as to how role induction

procedures achieved their effectiveness or what direct effects on client thinking and decision making may have occurred.

More recently, Wilson (1985) found that having clients view a video which included both role modeling and information about psychotherapy (e.g. duration, benefits and risks, etc.) increased the likelihood that clients would attend at least one session after intake. He reports that the group assigned to experience preparation had a 12% dropout rate, compared to the unprepared group with a 33% dropout rate. A limitation of this research was that no information was collected from the treatment dropouts. It would have been interesting to know if the preparation information assisted in a decision to not return for some potential clients, or if there was some other barrier to attendance.

Similar studies suggested that preparation materials increased the likelihood of clients remaining in treatment and enhanced the clients' ability to achieve a successful outcome (Bonner & Everett, 1986; Corrazzini & Heppner, 1982; France & Dugo, 1985; Garrison, 1978). What is not clear is how clients were using this information. Were they attending to the information they wanted to hear, to bolster their decision about getting treatment, or did the preparation act as a persuasive message about treatment? These studies also do not suggest for whom the preparation information may have been most persuasive.

The purpose of the informed consent doctrine which is ethically mandated (APA, 1992) is to provide clients with information about psychotherapy in order to facilitate

autonomous decisions about engaging in the treatment (see also Egan, 1994). This assumes that the client has not made a commitment to psychotherapy before the information is provided. According to experts on ethical practice, clients must receive a complete description of the treatment including any possible risks and benefits, and alternatives to the planned treatment (Bray, Shepard and Hays, 1985).

There is some evidence to suggest that informed consent procedures may also have a beneficial impact on client expectations and retention in treatment. Goodyear, Colman and Brunson(1986, cited in Talbert & Pipes, 1988) found that clients felt more relaxed and had more positive expectations about treatment when they discussed the consent form with their therapist. It is not clear if the clients benefited from making an informed decision about psychotherapy or if the benefit was due to the persuasive nature of the informed consent procedure.

Research on providing medical patients with information about the risks and benefits of upcoming noxious procedures showed positive effects on patient postoperative comfort, medication use and other outcome measures (reviewed by Taylor & Clark, 1986). The information was provided after the decision for the procedure was made, so the information probably played a preparatory rather then persuasive role. Taylor & Clark concluded that future research should identify why information had a beneficial effect and for whom it was most helpful.

Sullivan, Martin and Handelsman (1993) found that research participants rated a

psychotherapist as more expert and trustworthy when they read a transcript that included informed consent procedures. The participants also reported more willingness to recommend to others the therapist who used informed consent compared to the same therapist transcript without informed consent procedures. Walter and Handelsman (1993) reported similar results; that increased specificity of information presented elevated participants' ratings of expertness and trustworthiness of the psychotherapist. These studies showed that the presence of information on risks and benefits had a positive effect on consumer perceptions. These studies did not address differential effects for different types of information. Was it the discussion of risks that increased the therapist's credibility, or the persuasiveness of a two-sided discussion of risks and benefits?

Research on informed consent procedures has not examined whether clients are biased in their attention to the information presented, which may be a necessary first step, before assessing how the presence of information affects attendance and motivation for treatment. It is not uncommon for clinicians to require their clients to commit to a certain number of therapy sessions, which could result in dissonance in ambivalent clients. Clients in this situation may be more likely to attend to the positive information about therapy presented to them, than to information which does not support their agreement, as discussed earlier (Frey, 1986).

An example from Simmons, Klein and Thornton (1973) may help clarify this point. They collected interview data from 80 persons who had agreed to donate a kidney

to a relative. They found that 68% of the donors made an immediate commitment to donate and subsequently paid very little attention to the risks and drawbacks to donation outlined in the informed consent procedures. One donor, even though he had been fully informed of the risks, asserted that the staff of the hospital had told him there were no risks involved, which is what he believed. A behavioral commitment to some important choice about which the client may be ambivalent can bias the information to which the client attends, presumably to reduce the ambivalence.

Only one study (Pryor & Mengel, 1987) has systematically examined the effects of commitment and informed consent on client decision making. Potential clients were randomly assigned to group discussions about either risks and benefits or just benefits of a diabetic treatment program, either before or after their commitment to the treatment program. Pryor and Mengel (1987) found that the group discussions of risks and benefits significantly increased the clients' ability to adhere to the treatment program. They did not find any effects for varied levels of commitment to treatment. The commitment manipulation is in doubt since the authors used the presence of video cameras to manipulate the level of commitment experienced by the clients. The mechanism by which this would occur is unclear and they do not provide information to check the success of their manipulation. This study does support the hypothesis that discussion of risks and benefits of treatment increases client attendance and motivation for treatment, but does not address the question of bias in information seeking produced by

commitment. Nor is it clear for whom discussion of risks and benefits is most helpful.

Rationale for studies

The literature reviewed here has led to two main points; that potential clients may be biased in attending to and seeking out positive information (benefits) about psychotherapy, and that receiving biased information may have adverse consequences for subsequent treatment attendance and motivation. The decision making literature clearly suggests that a balanced approach to weighing the alternatives is more effective, but bias can enter into the information gathering process when there is pressure to engage in treatment prematurely. Study 1 examines whether selective information seeking is a problem for potential clients.

If information seeking is selectve, then potential clients may only be considering the benefits of psychotherapy in their decision. According to the persuasion literature, this bias could influence subsequent attendance to treatment. A problem for treatment providers is knowing which clients are still attempting to make a decision about engaging in treatment and which have decided and are ready to take action. The persuasion literature suggests that presenting a balanced two-sided message may not be persuasive for all clients, but only for those who are ambivalent.

One controversy in the psychotherapy literature on informed consent is whether it is helpful to tell clients "bad" things about therapy (e.g., it's hard work, it doesn't work for everyone). Many argue that full informed consent procedures similar to what is required

in medicine (Handelsman, 1990; Hare-Mustin, Maracek, Kaplan & Liss-Levinson, 1979) will enhance the treatment relationship, while others suggest that psychotherapy clients do not process information in an objective way and hearing negative information can harm the therapy relationship and discourage the client (Handelsman, Kemper, Kesson-Craig, McLain & Johnsrud, 1986; Muehleman, Pickens & Robinson, 1985). Disregarding ethical concerns for the moment, the basic controversy is whether it is harmful to client motivation to hear about the risks and limitations of psychotherapy. This is an empirical question which will be addressed by Study 2.

Study 1.

The goal of study 1 was to test whether psychotherapy participants would selectively seek positive information about treatment under conditions of required commitment to treatment. It was hypothesized that Stage of Change would moderate this effect such that participants who were asked to make a commitment wouldl seek positive information only when they were not yet ready to take action about their problem, e.g., the precontemplation and contemplation stages of change. Study 1 was designed as a conceptual replication of Frey's work on the selective seeking of information after commitment to a choice (Frey 1984, 1986).

Participants who were not asked to make a commitment to treatment were expected to seek less positive information than the commitment clients, regardless of their level of ambivalence. According to the decisional balance model, participants who were not yet decided about treatment (precontemplation and contemplation stages of change) would continue to seek information in order to weigh the alternatives. Participants who had not been asked to make a commitment should have sought positive and negative information equally, regardless of their decision status. The stages of change literature suggests that participants in the action and maintenance stages of change would also seek balanced information, but they may be less interested in information in general.

Method

Participants

Forty-four voluntary adult outpatients at a rural mental health center agreed to participate in this study. Clients were ruled ineligible for the study if they were court ordered to treatment, if they were unable to read at a high school level, or if they gave indications of suicide risk. Three participants were ruled out as having a suicide risk, leaving 41 participants who completed the entire study. Participants were informed of the tasks required for the study and that they were free to decline at any time; however, they were not informed of the full purpose of the study or the variables of interest. There were 36 female and 5 male participants whose ages ranged from 20 to 69 years of age. The identified problems for the participants were associated with diagnoses of depression (N = 16), anxiety (N = 11) or family stressors (N = 14).

Design

Study one uses a two by two factorial design where expressed commitment to treatment is manipulated (2 groups: commitment and no commitment) and the decisional status of the participant is the individual difference factor (predecisional or postdecisional). Participants are classified as either predecisional or postdecisional regarding seeking treatment for change. The effect of the two factors is measured by the

relative preference for positive over negative information about treatment sought by the participants.

Measures and Materials

Stages of change scale (SOC). The SOC is a 32 item scale consisting of four subscales; precontemplation, contemplation, action, and maintenance (McConnaughy, DiClemente, Prochaska, and Velicer, 1989). Each subscale contains eight items which are rated on a five point Likert scale from one (indicating strong disagreement) to five (indicating strong agreement). Cronbach alpha reliability was reported for the four subscales: precontemplation, .88; contemplation, .88; action, .89; and maintenance, .88, which indicates acceptable reliability for research purposes (Nunnaly, 1978). The instructions and some of the word choices on items were altered slightly to a more basic reading level (see appendix A).

Information choice form. The information choice form is the dependent measure of information selection bias(see appendix A). The form consists of 16 categories of information; eight describing positive aspects of therapy ("the possible benefits of getting therapy") and eight describing negative aspects of therapy ("the possible risks of getting therapy"). The form instructs participants to select five categories they would like to know most about and rank order them according to which they would like to hear about

first. The content of the items is based on an information form presented by Handelsman and Galvin (1988) which encompasses the necessary issues for informed consent. The information categories were reworded from the Handelsman and Galvin form in order to more clearly specify either pros or cons of treatment. A pilot test of this form was given to 82 undergraduate students for them to rate whether each category was a pro or a con about therapy at that health center. The student ratings produced 95% agreement as to which categories were pros and which were cons.

Commitment form. Once participants made their choice to commit to at least three sessions of treatment they filled out the commitment form and signed their name. The form also contains a space for the witness to sign, thus making the commitment to treatment more formal and public and making the commitment appear less changeable (see appendix A).

Manipulation check. In order to assess the effectiveness of the commitment manipulation, participants were given a questionnaire to fill out anonymously about their intention and commitment to attending treatment (see appendix A). The form consisted of four questions about their commitment to treatment, rated on a Likert scale from 1 (agree) to 5 (disagree). An example of a manipulation check question was; "I am committed to giving therapy a try." Three other questions on the manipulation check were designed to mask the purpose of the questionnaire.

Procedure

During the intake interview, it was first ascertained that clients were voluntarily requesting therapy. They were then asked if they would be willing to participate in a study to find out what people who come in for counseling think about psychotherapy, in order to better meet their needs. They were then informed what the requirements and tasks of the study would be; including tape recording the intake session, filling out some questionnaires, and allowing some information from their file to be used. They were informed that their questionnaires and information would only be identified with a code number and that the tapes would be erased once data was collected, so there would be no way to identify which information was theirs. They were also notified that the study did not extend past that first session and that participation in no way affected their access to therapy (see appendix A for research protocol). If they agreed to participate and signed the consent form the intake interview proceeded with the Stages of Change Questionnaire. Clients who declined to participate (N = 4) were given a standard intake interview.

Participants identified the specific problem for which they were attending treatment and filled out the Stages of Change Questionnaire based on their specific problem. The Stages of Change Questionnaire was scored by a research assistant who then randomly assigned the participant to either the commitment or no commitment conditions. blocking for stage of change. Blocking by stage of change was accomplished

by calculating a z-score for each subscale on the measure and then comparing the participant's score on each scale. Using z-scores to compare participants to norms for the subscales was suggested by McConnaughy et al. (1989) and confirmed by J. Prochaska (1993, personal communication). If a participant scored highest on the precontemplation or contemplation subscales they were judged to be predecisional. If a participant scored highest on the action or maintenance subscales they were judged to be post decisional. Blocking for stage of change was thus based on whether the participant was judged to be predecisional or postdecisional regarding making changes. Random assignment for the commitment variable took place within the predecisional and post decisional blocks. The experimenter was blind to the participants' stage of change and was notified by telephone during the intake appointment as to the experimental assignment of the participant.

After the Stages of Change questionnaire, the participant was given the standard intake interview, including questions about the presenting problem and psychosocial functioning in general. If suicidal potential was judged to be a risk during this interview, the participant was eliminated from the study ($\underline{N} = 3$) and the experimenter completed a standard suicide assessment and informed consent procedures instead. Participants who were judged to be a suicide risk were debriefed about the study and were informed that they were no longer participating due to the clinical concerns. Suicide risk participants were also referred to a therapist on a high priority basis.

Upon completion of the standard interview the commitment manipulation was

presented to participants. Participants assigned to the no commitment condition were merely told that we hoped they would decide to come in for counseling sessions and that they would give it a fair try. Participants in the commitment condition were given a forced choice situation (Frey & Stahlberg, 1986) and were told that:

> as a part of coming to counseling we like to ask clients to commit to coming in for at least three counseling sessions, in order to get to know your therapist and to give counseling a fair try. It is up to you to make this choice, but it can be helpful to make this commitment, both to you and to the therapist. If you choose to make this commitment please sign this agreement form so your therapist will know that you have decided to try at least three sessions.

The no-commitment group were not exposed to the agreement form.

After the commitment manipulation was presented, participants were asked to look over the information choice form and select five areas of information they would like to hear about at that time. They were told that since time was short it would help if they rank ordered their selection so the most important ones would be discussed first. After making their selections they were asked to fill out the Manipulation Check questionnaire which was presented as a "Feelings about Therapy Questionnaire" for the research project. They were given privacy to fill out the questionnaire and an envelop to seal it in to assure them of the confidentiality of their responses.

After filling out the manipulation check questionnaire, all participants were

debriefed about their participation in the study, including all variables of interest. They were then given the information about therapy which they had requested, as well as any other areas they wished to ask about.

Results

Manipulation Check

The Therapy Impressions Form which measured participants self-report of their commitment to "give therapy a try" demonstrated no significant effect for the commitment manipulation. The mean for the commitment group was 10.00(SD = 2.31), the mean for the no commitment group was 9.88 (SD = 2.32); $F(1,39) = .01$, ns.

Test of Hypotheses

Total scores for positive information and negative information were computed by weighting the items according to their rank order. A score for each item was derived by reversing the rank order so the participant's #1 choice received a score of 5, for example. All nonselected topics for each participant received a score of zero. A difference score was computed by subtracting the score for negative information from the score for positive information, quantifying the relative importance of positive information over negative information. The hypothesis suggested that this difference score would be greater for participants who were predecisional and received the commitment manipulation.

The difference scores for all groups were positive, showing a preference for

positive information about change over negative information, but there was a significant interaction effect between commitment status and decision status; F (1,39) = 7.58, $p<.05$. Post hoc analysis shows that the postdecisional, no-commitment group had a larger difference score (e.g. greater preference for positive information) than all other groups (see table 1.).

The analysis does not support the dissonance hypothesis and is of questionable value, given the lack of difference between the commitment groups found with the manipulation check. Participants may not have perceived the commitment manipulation as a real, binding commitment, or their stage of change may have ruled out any efforts to manipulate commitment. Problems may also have occurred with the manipulation check questionnaire; participants might have responded to demand characteristics of the situation by reporting an intention to attend treatment to please the experimenter. This idea is supported by the low average scores on the manipulation check reported earlier, indicating a high intention to attend treatment. The manipulation check measure also showed no significant differences for decision status. The predecisional group mean was 5.89 (SD = 2.34) and the mean for the post decisional group was 6.67 (SD =1.96); $F(1,37) = 2.12$, ns.

Secondary Analysis

A secondary analysis examined the relationship of commitment and stage of change to the number of actual appointments attended by the experimental participants.

Table 1. Means (Standard Deviations) of the Relative Preference for Positive Information by Experimental Group.

Stages of Change	Commitment	No Commitment
Predecisional	6.43 (7.18) (N = 7)	4.45 (5.80) (N = 11)
Postdecisional	2.71 (4.49) (N = 14)	10.5 (4.50)* (N = 8)

Note: Positive score indicates a relative preference for positive over negative information about therapy. Predecisional = the precontemplation and contemplation stages of change. Postdecisional = the action and maintenance stages of change.

* Post hoc analysis Tukey HSD $p < 0.05$

The average number of appointments attended for all participants was 5.19. There were no significant differences between the experimental groups on number of appointments attended, F (1,30) = .425, ns. It was also interesting to examine what topics of information the participants were most interested in receiving. Table 2 lists the most highly ranked topics of information requested by the participants.

Discussion

Study 1 indicates that participants have a preference for positive information about therapy. This study did not replicate the findings of Frey (1986) in that the commitment manipulation apparently did not have the predicted effect. This may have been due to a lack of control in the experimental setting, weakness of the commitment manipulation, or that the participants' need for positive information about therapy was too strong to allow the effects of the manipulation to be apparent as discussed by Frey (1986). The pattern of obtained results do indicate, however, that under the no commitment conditions, the post decisional participants had greater preference for positive over negative information than predecisional clients.

The commitment manipulation may not have had the desired effect for several reasons; it may not have been presented in a believable way, participants may not have accepted it as a firm commitment, or the manipulation may have been weak since participants' level of commitment was already set by their behavior (in attending the intake appointment) and in their stage of change (e.g., people in precontemplation are not

Table 2. What do New Psychotherapy Clients Want to Know?

Item	Mean Score (SD)
How the therapists here will help you with your problem.	2.68 (2.2)
The possible benefits of getting therapy.	1.78 (2.0)
Success we've had with problems like yours in therapy.	1.63 (1.8)
What the counselor can do for you if you need help between sessions.	1.61 (1.5)
Steps to take if therapy isn't working.	1.37 (1.7)

Note: Average score for each item across all experimental groups, $\underline{N} = 41$

going to be very committed to change). The failure of the commitment manipulation check to demonstrate any effects across the experimental groups suggests either a failure of the manipulation itself, or failure of the questionnaire to assess levels of commitment to treatment.

Study 2.

Study 2 was designed to address the question of whether or not information about treatment, when presented as a persuasive one- or two-sided message, influences subsequent attendance to treatment. The persuasion literature suggests that individuals who are predecisional about some issue would be more persuaded by information presented as a two-sided message, presenting both the pros and cons of the issue. Stages of change research suggests that individuals in the contemplation stage of change would be most interested in gathering information about the pros and cons of change, so individuals in the contemplation stage were hypothesized to be most persuaded by a two-sided message containing an equal number of statements about the pros and cons of treatment. The stages of change research also suggests that individuals in the action stage of change would not be actively interested in information relevant to change (c.f. Prochaska, 1994), however the results from Study 1 and the persuasion literature indicated that individuals in the action stage of change (postdecisional) would be most persuaded by a one-sided positive message about treatment, rather than a two-sided message.

Method

Participants

Sixty undergraduate students volunteered to participate in this study; forty were

female and twenty were male. The potential participants were selected based on their reported level of stress on the Stress Adjective Checklist which was filled out during a mass screening in the Introductory Psychology classes. Participants were selected if they had above average stress scores and if they expressed a willingness to attend a stress management training session. The average age of the participants was 19.7 with a range from 18 to 32.

Design

This study used a two by three factorial design where the type of persuasive message (one- or two-sided) was the manipulated factor and stage of change (precontemplation, contemplation or action) was the individual difference factor. Specific stages of change were used, rather than decisional status as levels of the variable, since specific hypotheses about the stages could be expressed. The maintenance stage of change is not part of the design, since no participants were in that stage, and it is not crucial to the hypotheses being tested. The two-sided message contained equal amounts of positive and negative information about seeking stress management training. The one-sided message contained only positive information about the training. While persuasion was the stated goal of the message manipulation, the effect of the persuasive messages and stage of change was assessed by the participants' attendance to the training sessions.

Measures and Materials

Stress Adjective Checklist (SAC). The Stress Adjective Checklist (Fisher & Donatelli, 1987) is a twenty item checklist which asked participants to rate each adjective according to how they felt in the last week on a four point Likert scale (appendix B). A number of studies have found this measure to be reliable and valid, with a two factor structure, stress and arousal (Fisher & Donatelli, 1987; Fisher, Hansen and Zemore, 1988: Mackay, Cox, Burrows and Lazzerini, 1978). Norms used for the selection criteria in this study were based on responses from the pool of 500 possible participants. The mean stress score for the population was 45 with a standard deviation of 6.71. A score of 52 (one standard deviation above the mean) was used as a cutoff such that participants were eligible for the study if they scored 52 or higher.

Stages of change scale (SOC). The SOC is a 32 item scale consisting of four subscales; precontemplation, contemplation, action, and maintenance (McConnaughy, DiClemente, Prochaska, and Velicer, 1989). Each subscale contains eight items which are rated on a five point Likert scale from one (indicating strong disagreement) to five (indicating strong agreement). The psychometric properties of this scale were discussed in Study 1. The wording of the items was altered slightly so the participants would respond in terms of managing stress. (see Appendix B).

Attendance Record Form. An attendance record form was used to track the appointment dates and outcome for each participant. Information recorded includes

whether the participant attended, canceled or "no-showed" the appointment. In addition this form was used to record all relevant information about the participant necessary for the study, including their name and ID number which identified all their data. At the conclusion of the study, the participant's name was removed from the Attendance Record form (see Appendix B).

Working Alliance Inventory. The Working Alliance Inventory (WAI) is a self-report questionnaire used to measure the quality of relationship between the client and the treatment provider (Horvath and Greenberg, 1989). The instrument is highly correlated with a number of counselor and client outcome measures including termination from treatment (Shick-Tryon and Kane, 1993). The instrument has two forms, one for the counselor and one for the client. In this study only items pertaining to initial, or one session contact were used resulting in two, fifteen item inventories for both the stress management trainer and the participant (see Appendix B). While this reduces the reliability and validity of the measure, this shortened measure best represented the questions of interest for this study.

Homework Form. As a secondary measure of participant motivation, a homework assignment was devised, requiring the participants to assess their level of stress and their method used to cope with it every waking hour for two days. Participants were clearly instructed to fill out the form as they went through their day, and not to go back and fill in any that they missed. They were also instructed to hand in whatever they had completed

by the date due, three or four days after their stress management training (Appendix B).

Stress Management Training Materials. The Stress Management Training Materials consist of information about stress and its effects (from Meyers, 1990) and then coping suggestions from three different perspectives: 1) Physiological, a discussion of exercise and nutrition, 2) Cognitive, where the activating event, beliefs and consequences of the event are examined, and 3) Behavioral, where relaxation techniques are discussed (Ewing, 1994). The training materials were presented as a handout that participants could take with them (Appendix B).

Procedure

This experiment was carried out in three contacts with the participant; the assessment session, the stress management training session, and a debriefing contact. Potential participants were identified by the mass screening which took place in their introductory psychology class. Students filled out the SAC and indicated that they would be interested in being contacted about stress management training. Potential participants who scored one standard deviation above the average (score of 52 or higher) were then contacted by phone to set up an assessment session. They were informed at that time that they would receive experimental course credit for the assessment session, but that they would not receive credit for training session. Only those who indicated they would still be interested in stress management training were invited to participate in the study. A total of four potential participants declined to participate at this point.

During the assessment session, the participants were fully informed about the tasks of the project, including the use of tape recording, but there was no discussion of the true purpose of the experiment or experimental variables. Two potential participants refused at this point, both declaring they would not attend the stress management session: they were given experimental credit, debriefed and excluded from the study. Participants then filled out the SAC for a second time, to assess if they still qualified for the study with a score of 52 or greater. This cutoff was selected to assure that participants were homogenous in the extent to which stress management might be helpful to them. Six participants were ruled out of the study at this point, for failing to meet the cutoff score. They were debriefed and given experimental credit.

The remaining participants were then informed that they qualified for stress management training and that they would be given a training session which would fit into their schedule. Participants then filled out the Stages of Change measure, regarding their feelings about changing their experience of stress. The Stages of Change measure was scored by a research assistant who then randomly assigned the participant to either the one-sided (positive) information group or the two-sided (positive and negative) information group, blocking for stage of change. Blocking by stage of change was accomplished by calculating a z-score for each subscale on the measure and then comparing the participant's score on each scale. If a participant scored highest on the precontemplation or contemplation subscales they were judged to be predecisional. If a

participant scored highest on the action or maintenance subscales they were judged to be postdecisional. Blocking for stage of change was thus based on whether the participant was judged to be predecisional or postdecisional regarding making changes in their experience of stress. The assistant carried out the random assignment procedure, and notified the experimenter, keeping the experimenter blind to the stage of change of the participant.

The participant was next given a single session stress management training appointment that best fit his/her schedule. The training appointment was always within one week of the assessment session. There were three graduate student stress management trainers who each provided 2-3 training sessions per week. The trainers (one female, two male) attended 5 hours of training in the stress management techniques and one hour of supervision per week. The stress management training sessions were tape recorded for supervision purposes only, and the tapes were erased within one week of the session. The trainers were blind to the purposes of the study and to the experimental groups.

The experimenter next presented the information about stress management training to the participants from a specific script (see Appendix B for research protocol). The one-sided group heard six items of information about how helpful stress management can be, while the two-sided group heard three items of positive information and three items of negative information, for example "sometimes changing behavior can be hard

work". For the two-sided group negative items were alternated with positive items, and there were two separate two-sided scripts used; each script had the same three negative items. Two-sided Script I contained three of the positive items from the one-sided script and Two-sided Script II contained the other three positive items from the one-sided script. Participants in the two sided group heard either Two-sided I or Two-sided II which were alternated (See research protocol in Appendix B for exact wording).

Participants were given an appointment slip to help them remember the training appointment and thanked for their participation. At this time an identification number was also assigned and the participant informed that all questionnaires relating to the study would only have the ID number on them, to assure the participant of confidentiality.

The primary dependent measure is whether or not the participant attended the stress management training appointment. The one-hour stress management training session proceeded through the materials described above, focusing on examples from the participant's experience. After the stress management training, the participant was given the homework assignment with an explanation of the instructions and the WAI to fill out privately and seal in an envelope. The trainer then left the room in order to fill out the therapist portion of the WAI. The trainer then showed the participant the drop box for the questionnaires and for the homework assignment.

Approximately three weeks after the stress management training appointment, the participants were sent a debriefing letter (Appendix B) and subsequently a follow-up

phone call to see if they had any questions or concerns.

Results

Test of Hypotheses

A measure of attendance/compliance was calculated by giving a score of one for a participant who is a no-show, a score of two for a participant who called to cancel their appointment and a score of three for those participants who attended their training appointment. For the analysis, participants were assigned to a Stages of Change experimental group based on their z-scores for the subscales. There were 25 participants in the precontemplation stage, 21 participants in the contemplation stage, and 14 participants in the action stage of change. There were no participants in the maintenance stage of change. Specific stage of change was used for the analyses in this study, since the hypotheses were based on specific stages, rather than decisional status.

Figure 1 indicates an interaction between the type of message presented and the stage of change, such that participants in the contemplation stage were more compliant when they heard the two-sided message and less compliant when they heard the one-sided message. For participants in the action stage this pattern was reversed (see Table 3). However, the statistical analysis of this interaction yeilded an F ratio that was at the $p = .066$ level, [$F(2,59) = 2.85$].

A power analysis for the interaction effect was .536 for the .05 significance level, which is lower than the recommended level of .80 (Cohen, 1988). This suggests that the

sample size may have been too small to detect significant differences in outcome, particularly for the experimental groups in the action stage of change. Very few potential participants for this study were in the action stage of change relative to the predecisional stages, so the probability of recruitment was low.

Taking the dependent measure down to its most basic, the number of no-shows was calculated for each group. Figure 2 again shows an interaction effect, in which the participants in the contemplation stage were more likely to no-show when they heard the one-sided message. There were zero no-shows when they heard the two-sided message. The action group shows the reverse pattern. A Chi-Square test of frequency of no-shows was significant; $\underline{X^2} = 6.06$, $\underline{p} < .05$ (See Table 4).

Secondary Measures

The measures of participant motivation (homework) and therapeutic alliance (WAI) were only available for those participants who attended their training session ($\underline{N}$ = 40), so the number of participants in each experimental group is low. See Table 5 for means and standard deviations for the secondary measures. There were no statistically significant differences between experimental groups on the WAI-participant version; $\underline{F}(2,39) = 1.13$, or on the homework measure; $\underline{F}\ (2,39) = .52$. There were also no differences between experimental groups on the WAI trainer measure; $\underline{F}\ (2,39) = .43$.

Figure 1. Interaction of message type with stage of change on measure of attendance/compliance.

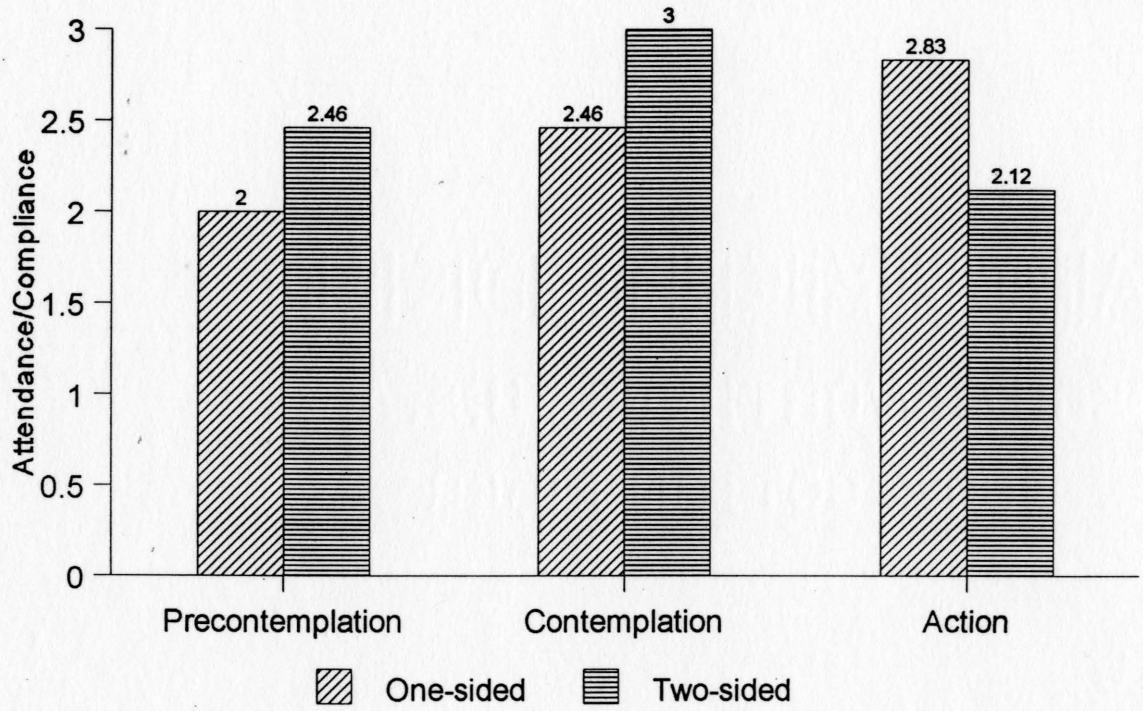

Table 3. Mean (standard deviation) measure of attendance/ compliance by message type and stage of change.

	Message Type	
Stage of Change	One-sided	Two-sided
Precontemplation	2.00(.95) (N=12)	2.46(.87) (N=13)
Contemplation	2.46(.87) (N=13)	3.00(.00) (N=8)
Action	2.83(.40) (N=6)	2.12(.85) (N=8)

Note: Participants score: 1 = no-show, 2 = called to cancel, 3 = attended training.

Figure 2. Interaction of stages of change and type of message on number of no-shows.

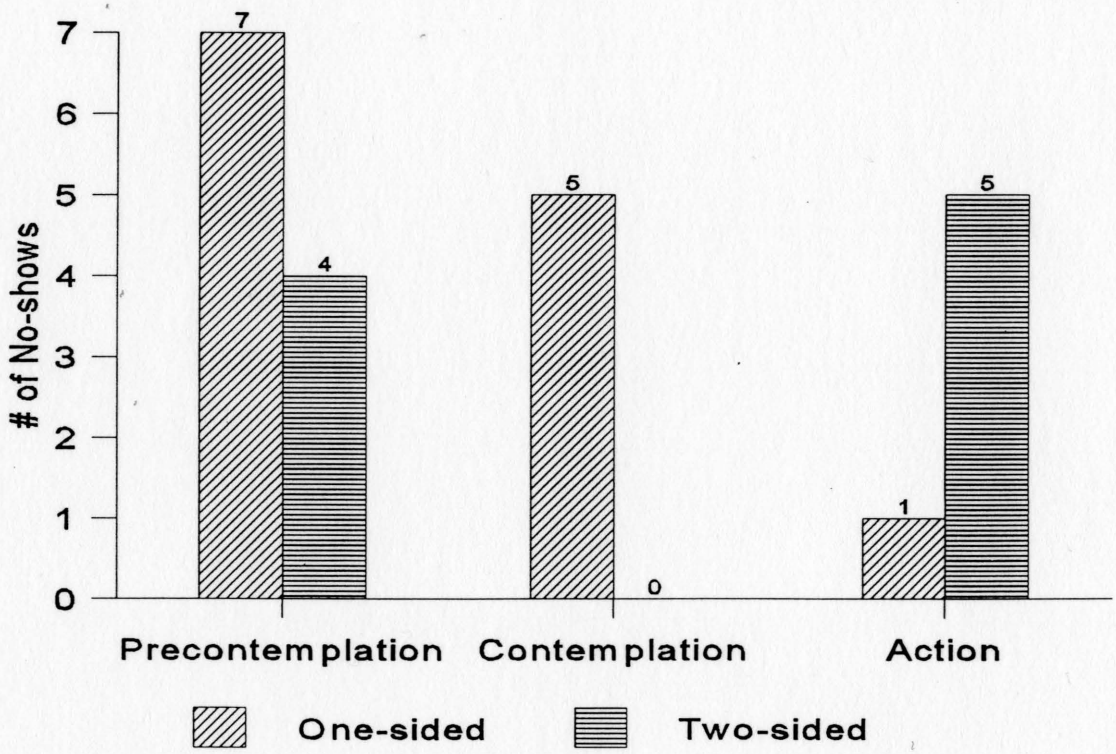

Table 4. Number of No Shows (Number of Participants) by Experimental Group

	Message Type	
	One-sided	Two-sided
Precontemplation	7 (12)	4 (13)
Contemplation	5 (13)	0 (8)*
Action	1 (6)	5 (8)

Note: Number in parentheses is the total number of participants in each group.

* $\underline{X^2}$ analysis, $\underline{p} < .05$.

Table 5. Means (standard deviations) for secondary measures by experimental group.

	Secondary Measures		
	WAI-C	WAI-T	Homewk
Experimental Group			
One-sided			
Precontemplation	84.2(14.5) (N = 5)	61.8(6.4) (N = 5)	4.0(3.8) (N = 5)
Contemplation	91.5(13.6) (N = 8)	75.7(15.6) (N = 9)	5.1(4.6) (N = 9)
Action	75.2(10.3) (N = 5)	53.8(14.9) (N = 5)	4.6(4.5) (N = 5)
Two-sided			
Precontemplation	76.3(18.2) (N = 8)	67.8(13.7) (N = 9)	4.6(4.3) (N = 9)
Contemplation	80.4(14.6) (N = 8)	67.7(12.5) (N = 8)	2.6(3.8) (N = 8)
Action	82.5(17.5) (N = 4)	75.5(7.7) (N = 4)	4.5(5.2) (N = 4)

Note: WAI-C = Working Alliance Inventory - Client version; WAI-T = Working Alliance Inventory - Therapist version; Homework = number of days the homework assignment was late in being returned, 9 = not returned.

Discussion

Results of study 2 showed an interaction effect such that participants in the contemplation stage of change were more likely to attend training when they heard the two-sided message and less likely to attend when they heard the one-sided message. Participants in the action stage of change were more likely to attend training when they heard the one-sided message and less likely to attend when they heard the two-sided message. Participants in the precontemplation stage of change were least likely to attend the training overall, but their attendance was greater when they heard the two-sided message, but not as high as the contemplation group.

General Discussion

Study 1 showed that people who are seeking psychotherapy treatment have a preference for positive information about treatment over negative information. This preference was greatest in participants who were in the action stage of change and who had not received the commitment manipulation. While it does not support the dissonance hypothesis as tested here, this finding may be partially explainable by the decision making literature, in that people who have made a decision and have started to take action (attending psychotherapy to change a problem) are most likely to engage in post decisional bolstering (see Abelson & Levi, 1985, for a review). If attending even one treatment session is considered to be a behavioral commitment, then bolstering of that commitment could be expected.

The preference for positive information was least in the no-commitment participants who were in the contemplation stage of change. These participants took the most balanced approach to seeking information, perhaps using a vigilant mode of decision processing as suggested by Janis and Mann (1977), and by Prochaska (1994) and others (c.f. Prochaska, Velicer, Rossi, Goldstein, Marcus, Rakowski, Fiore, et al., 1994). This may have interesting implications for the way informed consent procedures are carried out. For example, if clinicians use Handelsman and Galvin's (1988) approach, where clients select the information they wish to discuss, there is a risk some clients would neglect information about potential risks and drawbacks.

Study 2 shows that people who were contemplating change were more likely to attend treatment if they were given a two-sided message about the pros and cons of treatment than if they were only given a one-sided message, which supported the hypothesis. This is congruent with the findings of Hoyt and Janis (1975) who found that decision makers would be positively affected by a decisional balance process where pros and cons of a treatment were weighed; this applies, however, only to participants in the precontemplation and contemplation stages of change. The findings in Study 2 are also supported by Prochaska (1994) who concluded that people in the contemplation stage were more interested in weighing pros and cons of change than individuals in other stages of change.

People who were ready to take action were more likely to attend the training when

they heard the positive one-sided message and less likely to attend when they heard the two-sided message, also as hypothesized. Unlike participants in the precontemplation and contemplation stages of change, participants in the action stage benefited from hearing a message containing only positive aspects of receiving treatment. Participants in the action stage of change who heard the two-sided message may have been influenced to recontemplate change, thus being less prepared to take action by attending the stress management training.

The two studies utilized participants from two distinct populations. Study 1 was conducted with psycyotherapy clients seeking help at a mental health center. Their participation was valuable in showing that psychotherapy clients do seem to use biased processes in seeking information about treatment. Since study 2 hypothesized that different information may effect attendance to treatment, it was decided that undergraduate college students for whom the treatment was not as important would be more appropriate participants. This seemed the most ethical approach to take, although it limits the applicability of study 2.

There are a number of problems with drawing firm conclusions from study 2. The small sample size for participants in the action stage of change is problematic, as indicated by the power analysis. The paradigm and sample used (stress and stress management training for freshman college students) did not yield many individuals in the action stage (approximately 1 in 15 potential participants). The findings for participants

in the action stage could place psychotherapists in a bind, where giving full informed consent (risks and benefits) is ethically required, but may reduce the likelihood of the client attending subsequent treatment. For these reasons, replication is necessary with a paradigm that yields more participants in the action stage of change.

Another limitation is the lack of information about participants who did not attend the training. This resulted in a small sample size for the secondary measures and more importantly a lack of information about how the one- and two-sided messages affected the participants who did not attend. It would be interesting in future studies to assess changes in stage of change, to see if the two-sided message facilitated movement from contemplation to action as suggested by Prochaska and DiClemente (1992). Perhaps even more interesting might be the effect of the two-sided message on participants in the action stage of change. A possible hypothesis is that two-sided messages trigger further contemplation in participants who had previously decided to change.

There are measurement problems that need to be cleared up as well. In particular, the Stages of Change measure includes questions about changing a problem behavior and questions about seeking treatment. These are separate problems in a decision making process, each with possible alternatives and outcomes. Both are interesting questions for potential psychotherapy clients, but future research may benefit from separating the two issues. In addition, there is some controversy whether the Stages of Change measure indicates a state or a less changeable trait. Study 2 suggests that an one's stage of change

may be changeable, influenced by information made available to the person. Prochaska & DiClemente (1992) have observed that people move from one stage to the next as their change behaviors shift. In addition they suggest that people can waver from one stage to the next and that there may be interim "stages" to describe the wavering process (for example, they have suggested a preparation stage between contemplation and action).

Overall these two studies call into question psychotherapists' use of standard informed consent procedures. Adequate coverage of both risks and benefits of treatment may be very beneficial to clients contemplating change, but may have adverse consequences for clients ready to take action. This may place therapists in an ethical bind; in order to give full informed consent, both the risks and benefits of treatment need to be discussed. However, therapists also have an obligation to help clients change, but study 2 suggests that clients who are ready to take action may decline treatment if they hear about the risks and drawbacks, perhaps reducing the liklihood that they will be able to change. The application of these results is speculative, however and should wait until replication with a clinical sample is conducted.

Appendix A: Study 1. Measures and Materials

Date_____

Change Questionnaire

Instructions: The purpose of these questions is to find out how you feel about the problem(s) you have been having. First give the reason and then tell us if you agree or disagree with each of the following statements as they apply to you on the scale 1 -strongly disagree and 5 - strongly agree.
Reason for seeking therapy:

_____

		Strongly Disagree				Strongly Agree
1.	As far as I see it, I don't have any problems that need changing.	1	2	3	4	5
2.	I think I might be ready for some self-improvement.	1	2	3	4	5
3.	I am doing something about the problems that have been bothering me.	1	2	3	4	5
4.	It might be worthwhile to work on my problem(s).	1	2	3	4	5
5.	I'm not the problem one. It doesn't make sense for me to be here.	1	2	3	4	5
6.	It worries me that I might slip back on a problem I have already changed, so I am here to seek help.	1	2	3	4	5
7.	I am finally doing some work on my problem(s).	1	2	3	4	5
8.	I've been thinking that I might want to change something about myself.	1	2	3	4	5
9.	I have been successful in working on my problem(s) but I'm not sure I can keep up this work on my own.	1	2	3	4	5
10.	At times my problem is difficult, but I'm working on it.	1	2	3	4	5

		Strongly Disagree				Strongly Agree
11.	Being here is pretty much of a waste of time for me because the problem doesn't have to do with me.	1	2	3	4	5
12.	I'm hoping this place will help me to better understand myself.	1	2	3	4	5
13.	I guess I have faults, but there's nothing that I really need to change.	1	2	3	4	5
14.	I am really working hard to change.	1	2	3	4	5
15.	I have a problem and I really think I should work on it.	1	2	3	4	5
16.	I'm not keeping up with what I have already changed as well as I wanted to, and I'm here to prevent the problem from happening again.	1	2	3	4	5
17.	Even though I'm not always successful in changing, I am at least working on my problem.	1	2	3	4	5
18.	I thought once I had fixed the problem I would be free of it, but sometimes I still find myself struggling with it.	1	2	3	4	5
19.	I wish I had more ideas on how to get rid of my problem.	1	2	3	4	5
20.	I have started working on my problem but I would like help.	1	2	3	4	5
21.	Maybe this place will be able to help me.	1	2	3	4	5
22.	I may need a boost right now to help me keep the changes I've already made.	1	2	3	4	5
23.	I may be part of the problem, but I don't really think I am.	1	2	3	4	5

		Strongly Disagree				Strongly Agree
24.	I hope that someone here will have some good advice for me.	1	2	3	4	5
25.	Anyone can talk about changing; I'm actually doing something about it.	1	2	3	4	5
26.	All this talk about psychology is boring. Why can't people just forget about their problems?	1	2	3	4	5
27.	I'm here to stop myself from having the same problem again.	1	2	3	4	5
28.	I'm worried because I think a problem I thought I had fixed may be coming back.	1	2	3	4	5
29.	I have worries but so does the next person. Why spend time thinking about them?	1	2	3	4	5
30.	I am actively working on my problem(s).	1	2	3	4	5
31.	I would rather cope with my faults than try to change them.	1	2	3	4	5
32.	After all I had done to change my problem, every now and again it comes back to haunt me.	1	2	3	4	5

Information About Therapy at Marana Health Center

When you come in for therapy, you need to have information to help you understand how it all works. The following is a list of things you might want to know about. Please choose five for us to talk about today. You will have the opportunity to discuss the others with your therapist later.

_____ How the therapists here will help you with your problem.

_____ The possible risks of getting therapy.

_____ The possible benefits of getting therapy.

_____ Counseling and therapy services that are not available here.

_____ Success we've had with problems like yours in therapy.

_____ Ways the problem might improve without therapy.

_____ The choices of counselor and types of therapy available here.

_____ Steps to take if therapy isn't working.

_____ What the counselor can do for you if you need help between sessions.

_____ The hard work that is necessary for therapy.

_____ Protecting your records and your right to privacy.

_____ Sometimes we are not able to protect your right to privacy.

_____ The extensive education and training of our therapists.

_____ What if you're not able to work with your therapist.

MARANA HEALTH CENTER AGREEMENT FORM

I, _____, agree to commit to at least **three** sessions of therapy in order to give therapy a change and to get to know my counselor

Name _____

Date _____

Witness _____

Date _____

Therapy Impressions Form - I

Date_____
ID#_____

I appreciate you taking the time to answer these questions. Please remember that your answers are annonymous and no one who works at this clinic will see them. Please answer each of them quickly and then put this sheet into the envelope provided. The intake worker will show you where to place the envelope. Thank you very much.

Please rate how much you agree or disagree with each statement:

1.I'm committed to giving therapy a try.

1	2	3	4	5
Agree				Disagree

2.I'm determined to get as much as I can

1	2	3	4	5
Agree				Disagree

3.It is going to be difficult for me to come to therapy sessions.

1	2	3	4	5
Agree				Disagree

4. I may miss some of my therapy appointments.

1	2	3	4	5
Agree				Disagree

5. How much do you think you will be able to control or change the problems that brought you to this clinic?

1	2	3	4	5
no control				A great deal of control

6. Please list some of the ways you think you will bennefit from therapy:

_____
_____
_____

7. Please list some of the things you think will be hard about therapy:

_____
_____
_____

Research Protocol - Study One

I. Identifying potential subjects and informed consent procedures

A. Identifying potential subjects

Clients attending their intake appointment will first be asked who referred them to counseling, in order to clarify if the client is court referred and thus not eligible for participation. If the client is an adult and voluntarily seeking out counseling the intake worker will proceed with consent to participate procedures.

B. Informed consent procedure

Before we begin I would like to ask you if you would be willing to participate in a project that is being done here at the health center. We are interested in what people who come for counseling think about therapy and their therapist. It is important for us to know how good a job we are doing. All that is involved is filling out a couple of questionnaires and giving permission for us to tape record this first session and use information from the questionnaires and from your file for the project. It will not take any extra time beyond this intake session.

Choosing to participate in this project or not will have no effect on your access to therapy or how you will be treated here. You are free to stop participating in this project, now or at any later time. However, we would really appreciate your help on this project. Do you have any questions about any of this so far?

I'm sure you are concerned about protecting your privacy and I want you to know that we am also very concerned about this. All of the information that we collect will have a code number for you that you will select. When we look at the information we collect there will be no way to know which is yours. The data from this project will be presented in both written and oral formats, but there will be no identification or discussion of individuals.

Are you willing to participate?

Show client consent form, go over all the issues with them, gain
signature if consent is given and have client write down four numbers for their ID #.

II. Intake - information collection

The intake worker will first give the subject an outline of how the intake will proceed.

Intakes normally proceed in this fashion. First we will talk about why you have decided to seek our services. This includes filling out a questionnaire and going over the questions on this intake form. Then I will give you some information about therapy and the psychological service here.

A. Stages of Change Questionnaire
Discuss first part of psychosocial history regarding the current concerns and why the client decided to

come to the psychology service.

> **In order to fill this out you need to try to describe why you have come here or what you think the main problem is in one sentence or less. Sometimes this is easy to do and sometimes it is difficult. If you have any difficulty or questions I would be happy to help out. Please go ahead and rate the statements on this form as they relate to the problem you have identified here at the top. Any questions? For example...**

After the client fills out the stages of change questionnaire the intake worker will leave the room for a minute to get some paperwork and will bring the stages of change form to an assistant for scoring.

The assistant will randomly assign the subject to either the commitment or the no commitment group blocking for the stages of change score, either pre-decisional or post-decisional. The assistant will call the intake worker by phone to give the experimental assignment.

B. Standard intake form
The intake worker proceeds with the standard intake form, asking the client for information in the following categories:

1. What are your current concerns? When did this become a problem? How often is it a problem? What other things were going on when the problem(s) began?
2. Have there been problems in this area before?
3. What has been tried to address the problem in the past?
4. Have you had any previous counseling or therapy? What was the outcome?
5. What do you expect from therapy? What would you like to accomplish?
6. Review of current systems:
   - -Work functioning
   - -Academic Functioning
   - -Peer/Social Supports
   - -Substance Abuse
   - - Antisocial Behavior/Legal Problems
   - -Family Relationships
   - -Emotional Functioning (current symptoms)
   - -Current Significant Medical Problems/ Current Medications
7. Have you ever thought about hurting yourself? Suicide? (currently and past attempts)
8. Have there been others in your family with difficulties like yours? Is there anyone in your family who have had trouble with drugs or alcohol? Suicide attempts? (Include family of origin and current family.)
9. Mental Status - (orientation, Memory, Concentration)

III. Commitment manipulation

After the intake worker collects the psychosocial history information from the partipant the commitment manipulation will be given.

A. "High commitment"

> **As part of coming to counseling we like to ask clients to commit to coming in for at least three counseling sessions, in order to get to know your therapist and to give counseling a fair**

tryout. It is up to you to make this choice, but it can be very helpful to make this committment. The therapists like to know that you have chosen to make this agreement, that you really want to come in and give counseling a try. If you want to, please read and sign this agreement form, so your therapist will know you have agreed to try at least three sessions.

B. "no commitment"

We hope that you will decide to come in for counseling sessions, in order to get to know your therapist and to give counseling a fair try.

IV. Dependent Measures

A. Information Choice Form

Please look this over and select five of the areas you would like to talk about with me today. Since we're running short of time could you rank order them, one being the most important and five being the least important, that way we'll talk about the information that is most important to you first.

V. Manipulation Check

This survey is for the research we discussed earlier. I will give you some time alone to fill it out and you can seal it back in the envelope, no one here at the clinic will see your answers to this.

The intake worker will then discuss the requested information with the participant.

VI. Debriefing

After completing the manipulation check subjects will be debriefed by the intake worker. The subjects will be fully informed of the purpose of the study and why it was important to manipulate commitment to treatment. The intake worker will take all of the research related forms from the folder and show that they are identified only with the ID number. Goals for debriefing subjects include:

-understanding that they are not required to attend three sessions but that they should feel free to keep that commitment if they wish.
-understanding why the manipulation was necessary
-giving them the opportunity to ask about any of the information on the information choice form.
-clarifying that none of the consumer reactions are real.
-understanding that the study is over and no other information will be needed.
-restoration of trust in therapy and therapists.

These goals will be accomplished using and interactive discussion with the participant.

Appendix B: Study 2. Measures and Materials

Date_____

Change Questionnaire

Instructions: The purpose of these questions is to find out how you feel about the stress you have been having. Indicate if you agree or disagree with each of the following statements as they apply to you and your experience of stress on the scale from 1 - strongly disagree to 5 - strongly agree.
Reason for seeking training: **too much stress**

		Strongly Disagree				Strongly Agree
1.	As far as I see it, I don't have any problems that need changing.	1	2	3	4	5
2.	I think I might be ready for some self-improvement.	1	2	3	4	5
3.	I am doing something about the problems that have been bothering me.	1	2	3	4	5
4.	It might be worthwhile to work on my problem(s).	1	2	3	4	5
5.	I'm not the problem one. It doesn't make sense for me to be here.	1	2	3	4	5
6.	It worries me that I might slip back on a problem I have already changed, so I am here to seek help.	1	2	3	4	5
7.	I am finally doing some work on my problem(s).	1	2	3	4	5
8.	I've been thinking that I might want to change something about myself.	1	2	3	4	5
9.	I have been successful in working on my problem(s) but I'm not sure I can keep up this work on my own.	1	2	3	4	5
10.	At times my problem is difficult, but I'm working on it.	1	2	3	4	5

		Strongly Disagree				Strongly Agree
11.	Being here is pretty much of a waste of time for me because the problem doesn't have to do with me.	1	2	3	4	5
12.	I'm hoping this place will help me to better understand myself.	1	2	3	4	5
13.	I guess I have faults, but there's nothing that I really need to change.	1	2	3	4	5
14.	I am really working hard to change.	1	2	3	4	5
15.	I have a problem and I really think I should work on it.	1	2	3	4	5
16.	I'm not keeping up with what I have already changed as well as I wanted to, and I'm here to prevent the problem from happening again.	1	2	3	4	5
17.	Even though I'm not always successful in changing, I am at least working on my problem.	1	2	3	4	5
18.	I thought once I had fixed the problem I would be free of it, but sometimes I still find myself struggling with it.	1	2	3	4	5
19.	I wish I had more ideas on how to get rid of my problem.	1	2	3	4	5
20.	I have started working on my problem but I would like help.	1	2	3	4	5
21.	Maybe this place will be able to help me.	1	2	3	4	5
22.	I may need a boost right now to help me keep the changes I've already made.	1	2	3	4	5
23.	I may be part of the problem, but I don't really think I am.	1	2	3	4	5

		Strongly Disagree				Strongly Agree
24.	I hope that someone here will have some good advice for me.	1	2	3	4	5
25.	Anyone can talk about changing; I'm actually doing something about it.	1	2	3	4	5
26.	All this talk about psychology is boring. Why can't people just forget about their problems?	1	2	3	4	5
27.	I'm here to stop myself from having the same problem again.	1	2	3	4	5
28.	I'm worried because I think a problem I thought I had fixed may be coming back.	1	2	3	4	5
29.	I have worries but so does the next person. Why spend time thinking about them?	1	2	3	4	5
30.	I am actively working on my problem(s).	1	2	3	4	5
31.	I would rather cope with my faults than try to change them.	1	2	3	4	5
32.	After all I had done to change my problem, every now and again it comes back to haunt me.	1	2	3	4	5

BASIC DATA SHEET ID#:

Name:

Phone #

Address:

DOB:_____ ID#:

Sex:

Stress Management Appointment:

Trainer:

Group:

Appointment & Data Record:

Appointment	show	CA	NS			
Homework	Due	In	#done	# cope		
SAC-mass test						
SAC-assessment						

Please Return By:_____
ID Number:_____

Stress Management Homework

We want you to check your stress level every hour for two days and record your method(s) for coping from the four mentioned above: exercise, good nutrition, combating unreasonable beliefs, and/ or relaxation techniques.

REMEMBER - FILL THIS OUT AS YOU GO THROUGH YOUR DAY
DO NOT FILL IT IN LATER
PLEASE HAND IN WHATEVER YOU HAVE COMPLETED BY THE DATE NOTED

DAY ONE

8:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

9:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

10:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

11:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

1:00 pm Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

2:00 pm Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

3:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

4:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

5:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

6:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

7:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

8:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

9:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

10:00 pm Amount of stress:
1_____2_____3_____4_____5_____6_____7_____8_____9
Least stress Most stress
Method of coping:
1)
2)

11:00 pm Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

DAY TWO

8:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

9:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

10:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

11:00 am Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

12:00 Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

1:00 pm Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:
1)
2)

2:00 pm Amount of stress:
1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress
Method of coping:

3:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

4:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

5:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

6:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

7:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

8:00 pm Amount of stress:

1_____2_____3_____4_____5_____6_____7_____8_____9

Least stress Most stress

Method of coping:

1)

2)

REMEMBER - FILL THIS OUT AS YOU GO THROUGH YOUR DAY
DO NOT FILL IT IN LATER
PLEASE HAND IN WHATEVER YOU HAVE COMPLETED BY THE DATE NOTED

STRESS MANAGEMENT TRAINING MANUAL

This first section is intended to be didactic. An oportunity for the trainee to learn more about the effects of stress and distress. You will want to go over the information and then discuss with the trainee how these areas apply to them. It may help to self-disclose a physical symptom you often experience in order to help the client feel more comfortable about discussing their own experiences.

WHAT IS STRESS?

Stress is the arousal of the mind and body in response to demands made upon them.

DISTRESS is too much or too little arousal resulting in harm to the body or the mind. (examples)

PHYSICAL SYMPTOMS OF DISTRESS

trembling hands	depression
stomach churning	poor concentration
tight shoulders	fuzzy thinking
sore lower back	accelerated speech
edginess	irritability
anxiety	short-temper

Do you recognize any of these symptoms in yourself at times?

STRESS CONTRIBUTES TO ILLNESS IN THREE WAYS:

1) long term wear and tear on the body and decreased resistance to disease
2) directly precipitating an illness, e.g., heart attack
3) by aggravating an existing illness.

STRESS-RELATED ILLNESSES:

migraine headaches	dizzy spells
tension headaches	high blood pressure
psoriasis	obesity
ulcers	asthma attacks
colitis (irritable bowel)	chronic lower-back pain
cancer	heart attack

Do you experience any of these, or have others in your family with any of these problems?

PSYCHOLOGICAL DISTRESS MAY INCLUDE:

feelings of depression /moodiness	anxiety
lack of motivation	disoriented thinking

Summarize: Stress to the point of distress can effect us in a number of negative ways, both in terms of our health and our ability to get things accomplished. Does this happen to you? Let's now go on to ways of combating excessive stress.

WAYS TO COMBAT STRESS

1. Recognizing when stress occurs

Discuss the importance of being able to recognize when the effects of stress are occurring. The only way to combat stress is to recognize what the effects are. Introduce the concept of a SUDs (Subjective Units of Distress) Scale.

(a)Body check periodically throughout the day:

Amount of stress:

1_____2____3____4_____5_____6____7_____8____9
Least stress Most stress

If SUDS rating is above 4 ask yourself the following questions:
Where do I feel tense?

What happened recently that felt stressful (distressing)?

2. Exercise

Discuss the information with the client and ask them to generate some personal preferences for exercise that fit in with their daily activities.

(a) 3-4 times per week for at least 20 continuous minutes at a moderate pace.

(b)Exercise provides mental benefit, physical benefit, and produces endorphins which help us feel good.

brisk walking
aerobics
swimming
Personal Preferences:

jogging
bike riding
stair climbing

3. Nutrition Three meals per day.

Discuss this information and give them nutrition handout.

YOU WILL FEEL BETTER AND BE IN BETTER HEALTH IF YOU EAT THREE MEALS A DAY!!!!!

*Breakfast is particularly important at combating fatigue
*Lunch helps get you through the afternoon
*A light supper can help you get through an evening of studying

4. Recognizing and combating unreasonable beliefs

A is any event that occurs out in the world, material or interpersonal; B is what we tell ourselves or believe about what the event means; C is the consequences of our beliefs interacting with the actual event, this is the level of stress or distress experienced by the individual. Use an example: -two victims of an earthquake who experience equivalent losses (both loose their homes) and yet have very different reactions: one will mourn and focus on the tremendous loss of property, while the other will be focusing on the fact that no one was hurt and they can always rebuild.

ABC'S OF STRESS AND DISTRESS

A	B	C
activating event- what happened	beliefs- what you say/think about it.	consequences what you do & feel about it.

Discuss the following points in light of your previous example or an example they can generate from their own experience

---

* Life events are stressful when they are seen as threatening.

* Sometimes it is rational and realistic to view life events as threatening and therefore to be temporarily distressed (e.g. fire in your home, death of a loved one).

* Unnecessarily interpreting a life event as threatening results from unreasonable

Examples of beliefs:

If I don't succeed in college it is a catastrophe; if I say no, people will dislike me; if I don't get an A I'm a failure).

The following example shows the result of beliefs that are unhealthy and unreasonable and may lead to feelings of anger, sadness and hopelessness and could lead the person to feel depressed.

Situation	What you think/believe about the situation.	What you feel about the situation.
Fail a class	"I'm ruined, I'll have to drop outof college. I can never recover from this failure."	depressed, hopeless

---

You can change the way you feel about a situation by changing your thoughts or beliefs about that situation. By adding a step where we dispute our automatic beliefs we can view the situation another way:

A	B	C
You fail a class	"It is terrible that this happened but it's not the only class I have. At least I can succeed in these other areas. Mabe I didn't try hard enough."	Sad, Angry at self. Glad to have other interests. Works harder in other classes

---

Work through the following exercise with the trainee, focusing on awareness of automatic beliefs and the process of disputing the beliefs with more rational interpretations of events.

EXERCISE

Think about a recent situation in which you felt very upset and/or in which you responded in an unhealthy manner. Fill in 1) what the situation was and 2) how you felt/how you behaved. Then focus on 3) what thoughts were you having? were these rational and reasonable? If not, how could you change these thoughts to be more reasonable?

Situation How you felt/acted Thoughts/Beliefs

Dispute Beliefs:

5. Relaxation Techniques

First introduce abdominal breathing - we know that it produces immediate parasympathetic (relaxation) effects and can be a very effective brief tool.

A. Deep Breathing

-Breath in deeply, note that your abdomen rises, not your chest
-Hold the breath for a couple seconds
-As you let the breath slowly out, silently say, "relax and let go"
-Repeat this sequence at least three times

B. Imagery Techniques

This relaxation tool is useful for managing the cognitive (thinking) components of stress. It takes more

time, but can very effectively give the body and the mind a break from stress and distress. First mention the examples, or they can come up with an imagery place that has felt safe and relaxing to them.

Suggested images:

1. Tropical island with warm sunny beach
2. Enveloped by a white cloud
3. In a pleasant green valley by a lake
4. In a cool green forest resting against a tree

Give the following instructions to the trainee - give them plenty of time for each step

---

-with your eyes closed and sitting in a comfortable position
-form a clear image of a pleasant scene.
-try to include images from other senses such as

1. Smell "smell the scent of flowers"
2. Touch "feel the gentle breeze on your skin"
3. Sound "hear the birds singing in the trees"
4. Taste "taste the salt air on your lips"

-Return to activity by counting forward from one to three.

Research Protocol - Study Two

I. Outline of basic procedure
Participants will be asked to attend two sessions.

1) Session I
The first session(assessment) will consist of the informed consent procedure, a measure of stress reaction. the Stages of Change measure, the Information Manipulation (randomly assigned), and asking for a commitment to return for the training session. The participants will be assigned to a trainer (three) who are blind to what information the participant received. Introductory
Psychology students will receive credit for this session only.

2) Stress Management Training Session
Data will be collected on the participants attendance or non attendance of their training session. Training will be conducted in individual sessions, consisting of didactic and practice components. Participants will be asked to fill out the WAI at the end of the session and will be asked to do a homework assignment to return three days later. The trainer will also fill out the WAI at the end of the session.

3) Debriefing
Participants will be invited to a debriefing 2-3 weeks after their participation in the study. At this time any participants requesting further treatment can be referred.

Research Protocol

II. Identifying potential subjects and informed consent procedures

A. Identifying potential subjects

Undergraduate students in the introductory psychology class will be invited to participate for experimental credit. They will receive credit for only the assessment session (I), and they will be informed that they are receiving training for free. Other undergraduate participants may be recruited as well, based on their interest in receiving stress management training. They will be asked to participate in a study of the effectiveness of stress management training. The selection criteria for participation is a score of 52 or above on the stress reaction scale.

B. Informed Consent

As you know this research has to do with the effectiveness of a stress management training. In this assessment session I have a couple questionnaires for you to fill out and then I will give you more information about the training if you qualify for training based on your level of stress. You will receive your experimental credit at the end of this session and if you qualify you will receive free training. If you qualify I will give you a therapy appointment time to come in and receive the stress management training. The training is composed of information and discussion about stress and there will be a questionnaire at the end of that session. Each session will be tape recorded but we will protect your privacy by using an identification number for all of the information you give us. Any discussion or reporting of the results of this study will not include identification or discussion of individuals. Do you have any questions?

Show participant consent form and gain signature if consent is given and assign ID number

III. Assessment session

A. Stress Adjective Checklist

This form will be scored while the participant fills out the next questionnaire. They will be informed if they still qualify (by scoring 52 or higher) for training or not before the rest of the assessment session is carried out.

B. Stages of Change Questionnaire

Please go ahead and rate the statements on this form as they relate to problems with stress identified here at the top. Any questions? For example...

At completion of this form it will be brought to an assistant who will randomly assign the subject to either the positive information group or the balanced information group, blocking for stages of change score, either pre-decisional or post-decisional. The assistant will then notify the experimenter of the experimental assignment.

C. Information Manipulation

Participants will be randomly assigned to receive either positive information about the stress management training or balanced (positive and negative) information about the training. Participants will be handed a sheet giving them information about the training and the experimenter will present the information orally.

a. Positive Information (six categories)

-How stress management training can help you improve your behavior

-Stress management training has been shown to be very effective

-The trainers have been trained in stress management and are very good at it

-We've been very effective helping other people change their behavior, most people get some benefit

-The trainers are easy to work with

-Change is often easier than we usually think it will be

b. Balanced Information (see appendix B)

The balanced information given to the subjects will include three negative categories which follow. The positive categories used above will be counterbalanced, three on each form of the balanced information.

-Sometimes changing behavior can be hard work

-The trainers are good but some are better with some people and some are better with others; we won't know how good a match for you this training will be until we try it. (it may not work for you?)

-Behavior change is unpredictable, it's hard to tell when people are ready to try new things. You may not know if you're able to do something new until you try it out.

C. Training session sign up

Sign the participant up for a training session that fits in their schedule and is one week or less from the assessment session

It's important to us that you come to the training. If you need to reschedule please call this number and we will work with you.

IV. Stress management Training (attached)

A. Didactic component

B. Practice component

C. Instructions for Homework:

(Given by trainer)

Now that our training session is completed I would like to show you this homework assignment that will help you practice applying what we have discussed. We would like you to do as much of this homework as possible and hand in whatever you have completed by the date shown. Please fill it in during the hour indicated, if you miss one that's fine, just skip it and do it the next hour. Please do not fill this in at the end of the day, it's important that you do the homework during the hours indicated.

Instructions for WAI - participant version:

Please take a few moments alone to fill out this questionnaire about the training and put it back in the envelope. Your answers are completely confidential - I do not get to see them.

Trainers show the participant the data box in the clinic where they can put their questionnaire and their homework

V. Debriefing Session

Participants will be contacted by letter (see attached) and then by telephone, approximately two to three weeks after their scheduled stress managment training appointment. Any further difficulties with stress will be referred to the student counseling center.

Participants who did not qualify for stress management training were debriefed at the end of the assessment session.

Dear

Thank you so much for your participation in the Stress Management Training Study. I wanted to let you know that I appreciate your participation. If you have any questions or concerns about the study please feel free to get in touch with me (Susan Becker) at my office (xxxxxxx) any time this semester.

I also wanted to let you know more about what the study is looking at. What we're really interested in is the reactions people have to information about the training sessions. We aren't really concerned with the effectiveness of stress management training per se, rather we are interested in what people want to know about treatment when they are thinking about changing things about themselves.

We know that people think about change in several different stages. I might start out just contemplating what change might involve, what the pros and cons of change might be. When I get enough information I may decide to change things and be ready for action, ready to seek out new ways to act or manage my life. After I've changed some things I
might be more concerned about how to maintain these changes. These stages of change have been researched by Prochaska, DiClemente and others.

The study you participated in is concerned with how your stage of change can interact with the types of information you received about the training. Some participants received only positive information about the training, while others were given a more balanced view (both the pros and the cons). It's my theory that people who are still
contemplating change are going to be more motivated if they get balanced information about the training and be a lot less motivated if they just hear the positive information. I also think that participants who are ready for change are going to be more motivated than those who are still contemplating change. We measured motivation in several ways: 1)attendance of the training session, 2)completion of the homework and 3)how you felt about the trainer. So you can see that your participation was important to me, even if you decided not to follow up on the stress training.

I really do appreciate your participation. If you have any other concerns or questions or if you are still concerned about your levels of stress, please feel free to get in touch
with me. Thanks again,

Susan Becker

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