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Increasing Readiness to Change Anger: A Motivational Group Intervention

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INCREASING READINESS TO CHANGE ANGER:

A MOTIVATIONAL GROUP INTERVENTION

by

Gregory Lee Futral

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

ABSTRACT

INCREASING READINESS TO CHANGE ANGER:

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The conceptualization and treatment of problematic anger has received increased attention in the literature in recent years. Among the challenges in working with persons experiencing anger-related difficulties, barriers in forming the therapeutic alliance (Tafrate & Kassinove, 2003), resistance behaviors (DiGiuseppe, 1995), and/or low motivation to change (DiGiuseppe & Tafrate, 2007) have been commonly identified as having the potential to derail the treatment process. Strategies developed to increase treatment motivation and readiness to change, such as those found in the literature on the transtheoretical model (TTM; Prochaska & DiClemente, 1982) and motivational interviewing (MI; Miller & Rollnick, 2002), have been proposed as potentially important areas of research inquiry and therapeutic application in the treatment of problem anger. The present study involved the development and evaluation of a motivational group intervention (integrating TTM-, MI-, and anger-related constructs and principles) designed to increase readiness to change in individuals who reported elevated trait anger and/or a tendency to express their anger aggressively and who obtained low scores on a measure of anger readiness to change. The study was divided into three phases. Phase I included 608 college students screened for potential inclusion in the study, with 69 participants completing Phase II (i.e., group intervention and control conditions) and 53

participants completing Phase III (i.e., 1-month follow-up). Results included an increase in readiness to change in the second phase of the study immediately following the group intervention for participants receiving the motivational intervention versus those in a no-treatment control group. These differences were not evident by one month post-treatment.

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A Dissertation
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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Anger is a common, frequently occurring, and universal human emotion and experience (Averill, 1982; DiGiuseppe & Tafrate, 2007; Scherer & Wallbott, 1994) that has received increased recognition as a subject of clinical and empirical interest in recent years (DiGiuseppe, 1999). Anger may be positive/adaptive or negative/maladaptive with corresponding positive or negative consequences, depending partly on its frequency, intensity, duration, and the manner in which it is expressed (Dahlen & Deffenbacher, 2001; Deffenbacher, 2006; DiGiuseppe, 1999; DiGiuseppe & Tafrate, 2007; Kassinove & Sukhodolsky, 1995; Tafrate, Kassinove, & Dundin, 2002). DiGiuseppe and Tafrate (2001) noted that anger is a significant problem facing individuals and society today, and Norcross and Kobayashi (1999) described the emotion of anger as one of the most challenging issues that clinicians face in treatment.

Deffenbacher (2006) observed that "dysfunctional anger is an issue frequently addressed in therapy, and recommendations or referrals for anger management are increasingly popular" (p. 43). In a study of community adults and college students, Averill (1982) found that anger is experienced often, with the most frequently reported time frame as one to two incidents per week. Additionally, the reports of regular anger experiences were generally rated as fairly intense by participants in the study. Scherer and Wallbott (1994) conducted a cross cultural study (37 different countries spanning 5 continents) of university students that studied the universality of seven emotions (joy, anger, fear, sadness, disgust, shame, and guilt), finding that anger and joy are experienced more often than sadness or fear. In a more recent investigation involving samples of

college students and anger management participants, Lench (2004) reported rates of 25.4% and 30.8%, respectively, of individuals meeting criteria for high anger as determined by a set cutoff score on a well-established anger measure, the trait anger subscale of the State-Trait Anger Expression Inventory (Speilberger, 1988).

Kassinove and Sukhodolsky (1995) described a number of potential negative consequences suggested in the research literature on anger, including interpersonal (e.g., conflict with family members), intrapersonal (e.g., poor self-concept), and medical (e.g., relationship between anger and coronary artery disease) factors. DiGiuseppe and Tafrate (2007) discussed various research findings also suggesting that anger may affect individuals' judgment abilities, involvement in the justice system, abilities to appropriately care for others, failure to comply with medication treatment, sexual activity, risky driving, and occupational performance. There are important distinctions to be made between anger and other commonly associated concepts such as aggression (e.g., Kassinove & Tafrate, 2002; Spielberger, 1999; Spielberger, Reheiser, & Sydeman, 1995). Kassinove and Sukhodolsky (1995) noted that "although there is an obvious and important relationship between anger and aggression, anger is an independent (or at least semi-independent)" (p. 7) phenomenon that is worth consideration in its own right.

Given the apparent significance of anger as a clinical and social issue, its recent increased attention appears warranted. As the focus on this subject has grown, so has the availability of a variety of differing theories, conceptualizations, and treatment strategies for dealing with anger. Within this literature, various challenges in the treatment of anger have been noted, with one of the most common involving low motivation or readiness to change problematic anger (e.g., DiGiuseppe & Tafrate, 2007). Among the strategies for

managing such challenges, the use of motivational interventions has often been

recommended (e.g., Tafrate & Kassinove, 2003). The following paragraphs provide a

review of relevant literature involving aspects significant to the study and treatment of

anger, concluding with an in-depth discussion of the challenges that have been associated

with the empirical investigation and treatment of anger. A review of relevant

motivational intervention and change literature is then provided, followed by a discussion

of the status of theoretical and empirical literature applying such principles to anger.

<p style="text-align:center">Anger: Conceptualization, Empirical, and Treatment Issues</p>

This section defines the concept of anger, describing its nature, characteristics,

significance, and treatment. After briefly considering historical perspectives, anger will

be defined as related to but distinct from hostility and aggression. Next, the identification

of problematic anger will be discussed, followed by a review of selected approaches for

the conceptualization and treatment of dysfunctional anger.

Historical and Contemporary Views of Anger

Many contemporary authors have noted the significance of early work by ancient

writers and philosophers such as Plato, Aristotle, Seneca, Plutarch Galen, Lactantius,

Aquinas, Bacon, and Descartes (e.g., Averill, 1982; DiGiuseppe & Tafrate, 2007; Kemp

& Strongman, 1995; Tavris, 1989). One of the emergent themes from classic works

involves the view of anger as inherently positive or negative. For example, Kemp and

Strongman (1995) noted that "although ancient philosophers seem generally to have

shown hostility to anger, there was some disagreement as to the value of the emotion" (p.

398). Generally speaking, many early writers (e.g., Aristotle) found that there was some

benefit to anger, such as in retribution to or prevention of instances of injustice. However,

some (primarily Seneca and Plutarch) believed that there could be absolutely no value in or positive aspects of the experience of anger or rage, even in sanctioned conflict such as wars (Averill, 1982; DiGiuseppe & Tafrate, 2007; Kemp & Strongman, 1995). DiGiueseppe and Tafrate (2007) noted that while Seneca was likely the first to label anger as a problem, the roots of anger management concepts originated in Aristotle's ideas on the possible benefits of appropriately controlled anger.

Another theme described in early writings is the nature of anger as a strictly human emotion and experience (Averill, 1982; Kemp & Strongman, 1995; Tavris, 1989). In his review, Averill (1982) described a distinction often made between the aggressive responses that both animals and human infants may exhibit and anger, which involves cognition as well as basic emotion. Kemp and Strongman (1995) described the positions of Aristotle and Seneca that "anger is predicated on complex thought processes" (p. 400). This also involves the idea that an appraisal of some moral infraction occurs in the case of anger and that the resulting experience is typically retaliatory in nature (Averill, 1982). Additionally, anger was described by most early writers as distinct from other human emotions, such as sadness (Kemp & Strongman, 1995). In relation to common theories of the times, anger was also seen as having specific physiological associations, such as heated blood or excessive bile.

A third theme emphasizes the social context in which anger was thought to occur (Averill, 1982). As described above, if anger involves complex thought processes and moral judgments, then the perception of injustice involves others and is typically interpersonal in that it is primarily directed at some other person or persons. Based on his review of early writings, Averill described the nature of anger as conflictive in that

societal standards are often inconsistent or contradictory. At its basic level, this refers to the conflict between times when it is deemed socially appropriate, or even expected, that an individual experience anger (and possibly associated acts of aggression) in reaction to some type of injustice and societal norms that discourage or condemn the experience of anger and/or aggression as leading to undesirable consequences. In relation to common Western values, this conflict involves two types of norms, in which "one set condemns deliberate acts of violence as inhumane, while the other set calls for the forceful retribution of injustice" (p. 100).

A final major theme from early philosophical writings involves the interpretation of the experience of anger as a *passion*, or "something that a person suffers" (Averill, 1982, p. 13), rather than an action or behavior. This connotation denotes a passive view of anger as something that happens to a person, rather than something a person initiates. One of the difficulties these early teachers faced in dealing with anger was its relation to reason. Although most viewed anger as irrational, the nature of its relationship with reason differed among teachings. Drawing from a number of early writings, Averill concluded that a combination of biological imperatives, sociocultural imperatives, and systemic (both intersystemic and intrasystemic) conflicts converge with the oft-perceived irrational nature of anger to explain it as a *passion*, rather than as an *action*. This conclusion was also considered in relation to the implications of viewing anger as a passion, including questions regarding personal responsibility and control over anger. Kemp and Strongman (1995) described agreement between Seneca's and Aristotle's views of anger in terms of negativity toward a lack of anger control along with value in the ability to control one's anger. Additionally, the above depiction of anger as a human

emotion involving complex cognitive processes suggests that anger can be controlled, which is noted as consistent with the ideas of later Christian writers. However, the concept that anger may override reason at times and thereby affect a person's responsibility was generally maintained.

DiGiueseppe and Tafrate (2007) described concepts of anger from the sixteenth to nineteenth centuries as dominated by medical and psychiatric ideas such as those from Sigmund Freud and evolutionary ideas based on the writings of Charles Darwin. From these perspectives, anger typically emerged as a secondary or subsidiary emotion to others, such as depression, and was generally linked to the concept of aggression (see also Tavris, 1989). Ideas from behaviorism in the twentieth century served to further reinforce the lack of differentiation between anger and aggression (DiGiuseppe & Tafrate, 2007). The authors noted that "behaviorists failed to distinguish between anger and aggression and considered the former a covert, diminished response of the latter" (pp. 8-9). Kassinove and Sukhodolsky (1995) described more recent debate (though likely revisiting the above mentioned early writing on the relationship between thought and anger) over the role of cognition in relation to anger and other emotions, including the idea "that appraisals, memories, perceptions, and interpretations of events (i.e., cognitive processes) affect people's level of anger" (p. 16). Among the points of controversy in this area is whether anger or other emotions may occur without cognition.

Though the selected early teachings and more recent writings reviewed by the above authors often differed from one another, several of the core themes throughout continue to be relevant. For instance, the interaction of biological, psychological, and social aspects of anger; the distinction between anger as an emotion and the behaviors

that may be related to or result from the experience of anger; and ideas related to personal responsibility and control over anger all remain important concepts in contemporary views of anger. Ongoing debate as to the nature of anger remains, such as in the area of anger as a distinctly human emotion in relation to its cognitive and social correlates. These types of considerations may also contribute to issues in the description and definition of anger discussed below.

Definitions of Anger and Related Concepts

Part of the difficulty in addressing the issue of anger is the lack of a common language to describe this elusive phenomenon. Norcross and Kobayashi (1999) pointed out that anger is often defined differentially across both individuals and settings. Whether professional or nonprofessional, the ways in which various persons and groups describe anger are often significantly different from one another. A challenge in this area appears to be developing an agreed on understanding and definition of anger (DiGiuseppe, Eckhardt, Tafrate, & Robin, 1994; DiGiuseppe & Tafrate, 2007; Eckhardt & Deffenbacher, 1995; Kassinove & Tafrate, 2006), and a sampling of proposed definitions is provided to highlight this difficulty. Some early definitions of anger were criticized either for being overly narrow (e.g., describing anger in purely physiological terms) or for failing to distinguish between anger and related constructs (DiGiuseppe & Tafrate, 2007).

As Novaco (1975) stated, "most simply, anger can be viewed as a strong emotional response to provocation" (p. 3) involving various physiological and cognitive causal factors. Averill (1982) defined anger as follows:

Anger may be defined as a *conflictive emotion* that, on the biological level, *is related to aggressive systems and, even more important, to the capacities for*

cooperative social living, symbolization, and reflective self-awareness; that on the

psychological level, *is aimed at the correction of some appraised wrong*; and that,

on the sociocultural level, *functions to uphold accepted standards of conduct*. (p.

317)

This definition captured the view of anger as a complex, multifaceted, and

multidimensional phenomenon, characteristics considered essential by virtually all

subsequent definitions.

Tavris (1989) emphasized the social and interactional nature of anger, noting that

"with the possible exception of anger caused by organic abnormalities, most angry

episodes are social events" (p. 19). She also emphasized the integral role of individual

beliefs and interpretations in the experience and comprehension of anger. Kassinove &

Sukhodolsky (1995) sought to provide a particularly comprehensive definition:

We define *anger* as a *negative, phenomenological (or internal) feeling state*

associated with specific cognitive and perceptual distortions and deficiencies

(e.g., misappraisals, errors, and attributions of blame, injustice, preventability,

and/or intentionality), subjective labeling, physiological changes, and action

tendencies to engage in socially constructed and reinforced organized behavioral

scripts. (p. 7)

Spielberger (1999) emphasized the continuum over which the experience of anger ranges:

The concept of anger usually refers to a psychobiological emotional state or

condition that consists of feelings that vary in intensity from mild irritation or

annoyance to intense fury and rage, accompanied by activation of neuroendocrine

processes and arousal of the autonomic nervous system. (p. 19)

A number of authors have argued that it is critical to differentiate anger from the closely related but distinct constructs of hostility and aggression (Kassinove & Tafrate, 2002; Spielberger, 1999; Spielberger et al., 1995). Kassinove and Tafrate (2002) defined anger as "a person's (mostly learned) internal experiences such as thoughts, fantasies, and images, verbal behaviors, and bodily responses to the aversive behavior of others; these vary in intensity, frequency, and duration" (p. 24). They argued that this is different from hostility, which they defined as "enduring negative attitudes or thoughts that predispose people to anger" (p. 34). Finally, they construed aggression as involving "motor behavior intended to cause harm" (p. 34). Spielberger (1999) agreed, noting that "whereas anger refers to feelings, the concepts of hostility and aggression are generally used to describe negative attitudes and destructive and punitive behavior" (p. 19).

DiGiuseppe and Tafrate (2007) recently attempted to provide a comprehensive definition of anger that addressed various criticisms and/or limitations of prior definitions (e.g., failing to adequately differentiate anger and aggression), including those involving the authors themselves. According to the authors, most previous definitions of anger are not sufficiently specific, instead referring to a variety of emotions. In addition, they criticized some prior definitions as overly narrow (e.g., defining anger in primarily physiological terms), relying heavily on similar terminology to explain anger (e.g., rage), or defining anger in terms of resulting motivation. They proposed that:

Anger is a subjectively experienced emotional state with high sympathetic autonomic arousal. It is initially elicited by a perception of a threat (to one's physical well-being, property, present or future resources, self-image, social status or projected image to one's group, maintenance of social rules that regulate daily

life, or comfort), although it may persist even after the threat has passed. Anger is associated with attributional, informational, and evaluative cognitions that emphasize the misdeeds of others and motivate a response of antagonism to thwart, drive off, retaliate against, or attack the source of the perceived threat. Anger is communicated through facial or postural gestures or vocal inflections, aversive verbalizations, and aggressive behavior. One's choice of strategies to communicate anger varies with social roles, learning history, and environmental contingencies. (p. 21)

A final important consideration in relation to anger definitions involves a differentiation between types of anger experiences. DiGiuseppe and Tafrate (2007) observed that most anger definitions refer to the emotional state of anger, as opposed to the differential concept of anger as a trait described in Spielberger's state-trait anger theory (Spielberger, 1999; Spielberger et al., 1995). In consideration of the empirical support that the state-trait theory has received specifically in the area of anger (Deffenbacher et al., 1996) and in relation to their own proposed definition, DiGiuseppe and Tafrate (2007) stated that "we would therefore define trait anger as the propensity to experience intense states of anger . . . frequently" (pp. 21-22).

Although the previously noted difficulties in defining the construct of anger are evident from the above discussion, a selected combination of definitional considerations can serve as a useful foundation for the present study. Given the attempts at comprehensiveness and addressing of prior criticisms, DiGiuseppe and Tafrate's (2007) definition of anger, in conjunction with distinctions made between the concepts of anger, hostility, and aggression (Kassinove & Tafrate, 2002; Spielberger, 1999), was utilized for

the purposes of this study. Additionally, the focus of the present study was individuals who experience significant trait anger as defined above, versus those experiencing acute state anger.

Clinical and Empirical Recognition of Problematic Anger

Numerous authors have described the relative lack of attention across settings (e.g., clinical, research, education) given to anger in comparison with other emotion-related disturbances and have noted this occurrence as one of the major issues facing researchers and clinicians working with clients who have primarily anger-related problems (DiGiuseppe, 1999; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate; 2007; DiGiuseppe, Tafrate, & Eckhardt, 1994; Eckhardt & Deffenbacher, 1995; Edmondson & Conger, 1996; Kassinove & Tafrate, 2006; Kassinove & Sukhodolsky, 1995; Lachmund, DiGiuseppe, & Fuller, 2005; Lench, 2004; Norcross & Kobayashi, 1999). DiGiuseppe and Tafrate (2007) stated that "as a strictly clinical concept, anger appears to have been excluded in psychiatry and abnormal and clinical psychology in the twentieth century" (p. 8) and described anger as "the forgotten emotion" (p. 3). For example, Kassinove and Sukhodolsky (1995) searched a major electronic psychology database for negative feeling words and found that anger was cited thousands of times less than the emotions of depression and anxiety. DiGiuseppe and Tafrate (2007), using more narrowly defined search criteria that included keywords of *diagnosis* plus *depression*, *anxiety*, or *anger* in journal articles, identified 1267 depression-related, 410 anxiety-related, and 7 anger-related articles meeting this criteria. Deffenbacher and Deffenbacher (2003) examined both introductory and abnormal psychology textbooks for discussions of anger in comparison to other topics and found a paucity of references to

anger in comparison to depression, anxiety, and aggression (from six to 25 times more often, depending on the type of text and comparison topic, with a substantial amount making no mention of anger).

A variety of potential reasons for the neglect of anger in the literature have been suggested. The view of anger in terms only of its linkage to or as an aspect of the behavior of aggression (DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007), the prevailing acceptance of anger as secondary to other emotions, (DiGiuseppe & Tafrate, 2007), and problems in accurately and comprehensively defining anger and distinguishing it from related concepts (DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007) have likely inhibited the recognition of anger as a distinct issue worthy of classification and research. Kassinove and Tafrate (2006) also cited inherent difficulties in working with many angry individuals (e.g., argumentativeness, volatile behavior) as potential reasons for ignoring anger as a topic of inquiry. The lack of attention to and research on the assessment of anger has been described as a significant issue as well (DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; Spielberger et al., 1995), including citation of significantly fewer articles on anger assessment than anxiety or depression and the relatively few instruments for measuring anger available (see also Eckhardt, Norlander, & Deffenbacher, 2004, for an in-depth evaluation of assessment issues with regard to anger). Perhaps most often cited as reflective of and perpetuating the neglect of anger in the literature is the lack of diagnostic categories for anger-related problems (e.g., DiGiuseppe & Tafrate, 2007; Eckhardt & Deffenbacher, 1995; Edmondson & Conger, 1996; Kassinove & Tafrate, 2006; Lench, 2004; Norcross & Kobayashi, 1999; Novaco, 1985).

Assessment and Diagnosis of Anger-Related Problems

Given the widespread use of the *Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision* (*DSM-IV-TR*; American Psychiatric Association, 2000) in diagnosing problems, treatment planning, and reimbursement in the clinical community, the absence of diagnoses in which dysfunctional anger is the central feature is noticeably conspicuous (Norcross & Kobayashi, 1999). Problematic anger is often listed among the diagnostic criteria for other disorders (Deffenbacher, 2003; Lench, 2004); however, *DSM-IV-TR* includes no diagnostic categories for which maladaptive anger is necessary.

Various authors have suggested the formation of diagnostic categories for anger-related problems and have provided compelling arguments for the inclusion of such categories in the diagnostic system. For example, Eckhardt and Deffenbacher (1995) noted that the high homicide rate in the United States, the occurrence of violence toward women by men, and the relationship of anger to coronary heart disease are significant reasons to clarify specific anger problems. Based on the results of an empirical study involving both college students and court-ordered anger management clients, Lench (2004) proposed the need for a diagnostic category for anger based on both the rates of high anger found in both samples and the often associated presence of relationship problems. Lachmund et al. (2005) found that in a study of psychologists and psychiatrists utilizing case examples of anxiety and anger, clinicians rated the anger case as less complete, were less confident in diagnosing the anger case, frequently diagnosed the anger case as Intermittent Explosive Disorder (IED), and were more likely to assign personality disorder diagnoses to the anger case. Participants also reported seeing a similar amount of both anxiety and anger cases in practice. The authors concluded from

these findings that the lack of a diagnostic category specific to anger provides a significant barrier to the evaluation of dysfunctional anger.

Several authors have proposed strategies for developing clinical diagnostic categories for anger-related problems (Deffenbacher, 2003; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; Eckhardt & Deffenbacher, 1995; Hecker & Lunde, 1985). DiGiuseppe, Eckhardt et al. (1994) suggested diagnostic criteria for classifying anger and hostility problems labeled General Anger/Hostility Disorder. The proposed criteria included the presence of "excessive and intense feelings of anger for a period of 6 months or longer, during which the person experiences angry episodes more days than not in response to" (p. 245) a variety of threats or stressors (real or interpreted as such). Additional criteria included the reaction as disproportionate to the occurrence(s), exclusion of other possible causes (e.g., organic disorder, psychosis, substance-induced), the presence of impaired functioning related to anger, and the presence of a minimum of two types of anger-related symptoms (i.e., physiological signs such as nausea, cognitions such as blaming, and/or behaviors such as aversive verbalizations). The authors also noted that in the absence of anger-related behaviors, an individual would be classified as Anger Disorder without Aggression.

Based on combinations of both physiological (e.g., muscle tension, skin reddening) and cognitive (e.g., blaming, difficulty concentrating) symptoms, Eckhardt and Deffenbacher (1995) described three separate anger disorders, two of which have two subtypes each. Adjustment Disorder with Angry Mood, which would be subsumed under the *DSM-IV-TR* Adjustment Disorder category, involves a primary anger reaction to an identified stressor. A diagnosis of Situational Anger Disorder would be classified as

either Situational Anger Disorder with Aggression, which was proposed to include "both elevated anger and aggressive behavior in response to specific situations" (p. 43), or Situational Anger Disorder without Aggression that does not require the presence of aggressive behaviors. General Anger Disorder without Aggression or General Anger Disorder with Aggression refer to chronic (i.e., minimum of one year present) anger problems that do not generally include aggressive behaviors or those in which aggressive behaviors are typically present, respectively, and are similar to the General Anger/Hostility Disorder category described above (DiGiuseppe, Eckhardt et al., 1994). Deffenbacher (2003) described further revisions and expansions to the above categorical suggestions, including the inclusion of an Adjustment Disorder with Anger and Aggression, as well as two new classifications of Anger Attacks with Aggression and Anger Attacks without Aggression. Deffenbacher noted that these latter categories refer to individuals having recurrent, brief episodes of intense anger without readily identifiable causes that are accompanied by relief afterward.

Most recently, DiGiuseppe and Tafrate (2007) suggested that a disorder labeled Anger Regulation-Expression Disorder could replace Intermittent Explosive Disorder. Criteria would include either "significant **angry affect** as indicated by frequent, intense, or enduring anger episodes that have persisted for at least six-months" (p. 271) and involve a minimum of two anger experience symptoms (e.g., physiological arousal, cognitive rumination) or "a marked pattern of **aggressive/expressive behaviors** associated with anger episodes" (p. 271) that are both disproportionate to the situation and include at least one type of direct (e.g., assault) or indirect (e.g., sabotage) aggressive/expressive behavior. Proposed subtypes include Anger Disorder,

Predominately Subjective Type, Anger Disorder, Primarily Expressive Type, and Anger

Disorder, Combined Type. The authors also further divided these subtypes into an

additional 13 clusters based on statistical analysis of an anger assessment instrument.

The above discussion highlights the ongoing problematic nature of assessing and

diagnosing anger-related problems, including in the lack of agreement or consistency

regarding possible diagnostic categories. Eckhardt and Deffenbacher (1995) stated that

their suggestions were offered for the purpose of assisting in the increased recognition

and understanding of anger-related problems. However, the authors also acknowledged

possible problems with and dissenting views of the current diagnostic system and

suggested consideration of alternative diagnostic conceptualizations in the future.

DiGiuseppe and Tafrate (2007) addressed a number of potential criticisms that have been

made regarding the development of anger diagnostic classifications, including most

prominently views that anger is purely a secondary emotion (i.e. to depression), concerns

about the potential removal of responsibility for actions of angry individuals, views of

anger as a normal part of aggressive drive, and views of anger problems as subsumed

under personality disorder characteristics. Ultimately, the authors concluded that the

merits for most of these arguments have not been substantially supported by research

(e.g., anger considered one of primary core emotions; substantial numbers of angry

individuals not meeting criteria for personality disorders) and they purport that these

arguments do not adequately account for problems related to anger.

Clinical Conceptualization of Anger

Perspectives on problematic anger have been offered from a number of theoretical

approaches, including cognitive-behavioral (Deffenbacher, 1999; Rathus, 2006; Tafrate

& Kassinove, 2006), family systems (Karam & Lebow, 2006; Robins & Novaco, 1999), experiential/emotion-focused (Jarry & Paivio, 2006; Paivio, 1999), Buddhist approaches (Bankart, 2006; Leifer, 1999), and psychodynamic (Eckstein, Milliren, Rasmussen, & Willhite, 2006; Gold, 2006; Knafo & Moscovitz, 2006; Ornstein, 1999; Patrick & Rich, 2004). Given that the overwhelming majority of empirical research on anger involves cognitive-behavioral theory (Deffenbacher, 2006; DiGiuseppe & Tafrate, 2001, 2007; Mayne & Ambrose, 1999), a brief exposition of a cognitive-behavioral conceptualization of anger is provided.

Deffenbacher (1999) elaborated on a cognitive-behavioral view of anger centralized around the core concepts of eliciting events, pre-anger states, and appraisal processes. Eliciting events refer to three separate, though often interconnected, anger-triggering stimuli including external events, memories with associated angry feelings, and cognitions or other emotions. An individual's pre-anger state involves three aspects as well, including the immediate state of the person when the eliciting event occurs, "enduring cognitive characteristics" (p. 296) or schemas, and cultural valuations and views about anger internalized by individuals. The third core component involves appraisal processes beginning with primary appraisals, or initial evaluations of events, that may involve the perception of some type of violation or insult. Secondary appraisals primarily involve views of one's coping abilities, as well as other anger-engendering beliefs (e.g., externalization of anger or positive views of aggression). Deffenbacher summarized this view of anger as an internal experience in which interacting thoughts, feelings, and physiological responses occur simultaneously, reinforce one another, and affect how anger is expressed behaviorally. Treatment for anger in this model may

involve a combination of cognitive-behavioral strategies, such as relaxation, cognitive therapy, silly humor, and skills training.

Empirical Findings Related to the Treatment of Anger

To date, six meta-analytic studies of the anger management treatment literature have been published (i.e., Beck & Fernandez, 1998; Del Vecchio & O'Leary, 2004; DiGiuseppe & Tafrate, 2003; Edmondson & Conger, 1996; Sukhodolsky, Kassinove, & Gorman, 2004; Tafrate, 1995). The overwhelming majority of the treatment studies included in the analyses of these articles involve cognitive-behavioral interventions. According to Beck and Fernandez (1998), analyses from children, adolescents, and adults which involved "1,640 subjects revealed a weighted mean effect size of .70, suggestive of moderate treatment gains" (p. 70) for cognitive-behavioral treatment. Similarly, Sukhodolsky et al. (2004) reported a moderate mean effect size (.67) of studies in which cognitive-behavioral treatments for children and adolescents were investigated. The studies of Beck and Fernandez (1998) and Sukhodolsky et al. (2004) are not further reviewed here due to their inclusion of child and adolescent samples.

Tafrate (1995) conducted the first published meta-analysis of anger treatment, which included 17 published studies that focused on anger treatment for adults, evaluated a treatment against a control group, and included a minimum of two intervention sessions. Dividing the results into categories of treatments included, Tafrate found mean effect sizes of .93 for cognitive therapies, 1.16 for relaxation-based therapies, .82 for skills training therapies, 1.00 for multicomponent treatments, and a high .99 overall across all approaches.

Noting Tafrate's (1995) primary reliance on outcome measures involving anger frequency and intensity, Edmondson and Conger (1996) sought to expand the base of studies analyzed by evaluating additional outcome measures (e.g., anger experiences, observer ratings of anger). They included 18 studies, 14 of which were in common with Tafrate's (1995) analysis, involving adults receiving anger treatment. They found mean effect sizes ranging from .64 to .82 across treatments, with cognitive therapy at the low end and relaxation treatment at the high end. Effect sizes on the anger experience outcome measures ranged from .90 (social skills therapy) to 1.19 (relaxation treatment), while effect sizes for self-reported anger behaviors were .29 (cognitive therapy) and in the range .72 (social skills therapy) to .79 (relaxation treatment) for others. For observer rated anger behaviors, only social skills therapy (1.13) and cognitive therapy (.34) could be evaluated, though the authors noted that this effect size calculation for cognitive therapy involved only one study. Finally, they noted relatively smaller mean effect sizes (.49 for anger experience and 0.57 for self-reported anger behavior) in one comprehensive multicomponent treatment and a negative effect in another, though with a notable limitation in that study related to the absence of pretest data.

The meta-analysis conducted by DiGiuseppe and Tafrate (2003) was intended to further expand and build on prior analyses by expanding the scope to include additional published studies, unpublished dissertations, and studies with "uncontrolled pre- to posttest investigations" (p. 71). This brought them up to 50 studies that included a between-group design and 7 studies with a within-group only design. They obtained a mean overall effect size of .71 across studies, while also observing significant variability in effect sizes across differing outcome variables and noting that "anger treatments

produced moderate to large improvements on anger self-reports, measures of aggressive behaviors, measures of positive nonangry behaviors, attitudes and cognitions, type A behaviors, and physiological measures" (p. 79). While the improvement on aggression was the highest, the authors reported small effects in the area of relationship outcome. Additionally, they found no differences on dependent measures based on type of treatment (though high variance within treatments was noted), little support for the matching specific symptoms to particular treatments, and higher effect sizes related to use of manuals and integrity checks (though not widely used). Finally, individual treatment was related to larger effects on positive behaviors than the group treatment, and findings from studies that included follow-up assessment suggest that the treatment effects of anger interventions are lasting.

Del Vecchio and O'Leary (2004) sought to improve the methodological sophistication of previous meta-analyses by making sure that only studies using demonstrably high anger participants were included. They also limited their sample to studies computing effects only for anger-specific measures, incorporated studies of angry drivers, and permitted differential analysis by moderator and/or type of treatment or anger issue. Their analysis involved 23 published and unpublished studies (15 not previously analyzed) of outpatient adults, and they obtained overall effect sizes ranging from .61 to .90 across types of treatment. Differential effects were noted, suggesting that a category of diverse therapies (e.g., social skill treatment, process groups) and cognitive behavioral therapies, respectively, were more effective with anger control problems, cognitive therapy appeared more effective for suppression of anger, relaxation treatment

was best for state anger, and all four categories of treatment were effective with trait anger.

In reviewing a number of the meta-analyses of anger studies described above, DiGiuseppe and Tafrate (2001, 2007) drew a number of conclusions related to the status of research on the treatment of anger. First, studies have demonstrated that there are effective anger treatments across age ranges (e.g., adults and children), populations (e.g., outpatients, college students), and sex. Additionally, the studied treatments appeared equally useful across these variables. Second, treatment for anger produces moderate to large effect sizes on change measures, though with a tendency to be lower than those for other emotional issues, including anxiety and depression. Third, the literature generally supported the lasting effectiveness of anger treatments. Fourth, anger treatment effectiveness was demonstrated on a variety of outcome measures in addition to self-report (e.g., observations by others, physiological assessment). Fifth, there was little support for matching types of treatments with symptom presentation (e.g., using relaxation training to specifically target physiological arousal). Sixth, the bulk of the outcome studies to date delivered treatments in groups (80%), although larger effect sizes were generally reported in studies using individual treatment. The seventh finding reflected the larger effects produced by studies that involved the use of relatively stringent manualized treatments and evaluation of treatment integrity versus those not using such procedures, though this was found only on aggression outcome measures. A final observation concerned the previously mentioned finding that most empirical studies have utilized behavioral, cognitive, or cognitive-behavioral therapies.

Deffenbacher's (2006) review of the anger management literature noted a number of issues and suggestions related to past research on anger interventions. The first three related to the author's observation that "the ecological validity of outcome research is somewhat compromised" (p. 44) due to the following: the use of manuals/protocols (e.g., less flexible),the brevity of the interventions, and the lack of post-therapy attempts to address potential relapse concerns. While stating that these issues may limit these studies as accurate reflections of actual clinical environments, he also noted that there is reason to be hopeful based on research findings thus far. A fourth concern involved the nature of the majority of outcome measures (i.e., self-report), which was noted as often appropriate but also likely in need of additional incorporation of information (e.g., past records). Fifth, Deffenbacher discussed the primary focus on pre-post intervention change, which does not allow for evaluation of the change process throughout therapy. Finally, he observed that the majority of studies included voluntary versus coerced or court-ordered populations, which may involve differences in areas such as motivation, problem attribution, and defensiveness, as well as limit the ability for generalization. Ultimately, Deffenbacher concluded that cognitive-behavioral interventions are able to reduce anger, that there is no compelling evidence that any particular intervention is more effective than others, and that there is room for improvement in the treatment research. He also concluded that group interventions for anger should continue to be considered given that "although there is little research addressing the relative effectiveness of individual versus group therapy, what is clear is that most outcome research has been conducted in a group format and indicates treatment effectiveness" (p. 63).

Challenges in the Treatment of Anger

A number of authors have addressed specific challenges practitioners face in working with angry individuals. For example, Norcross and Kobayashi (1999) reported that encountering hostile and/or aggressive attitudes and behaviors in treatment was rated by clinicians as most stressful after suicidal remarks. Unfortunately, the treatment research with angry clients has not adequately addressed the alliance problems specific to this population, despite evidence of the importance of the therapeutic alliance (DiGiuseppe & Tafrate, 2007). Given that difficulties in establishing the therapeutic alliance are common when working with angry clients (DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Tafrate & Kassinove, 2003), a variety of relevant factors suggested by the literature are reviewed. These factors include agreement between the therapist and client on the goals and focus of treatment, client beliefs related to anger, availability of alternative anger responses, resistant behaviors, and low motivation or readiness for change.

Treatment goals and focus. In the theoretical literature, perhaps the most commonly cited and clinically occurring issue pertaining to the therapeutic alliance with angry clients is the lack of agreement between the therapist and the client on changing anger as the goal or focus of treatment (Deffenbacher, 1995, 1999; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2001, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Tafrate & Kassinove, 2003). Clinician and client agreement on therapeutic goals and interventions has long been proposed as critical in the therapeutic working alliance (Bordin, 1983), thus highlighting the potentially detrimental effects of these commonly encountered discrepancies when working with

clients with problematic anger. As a primary example, many clients enter anger treatment as a result of mandated and/or coercive efforts on the part of others (e.g., justice system, significant others) (Deffenbacher, 2006; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Tafrate & Kassinove, 2003). The nature of the referral has been proposed as contributing to the observation that angry clients often desire help in changing others, likely those with whom they are angry, rather than changing their own anger (DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2001; DiGiuseppe, Tafrate et al., 1994; Tafrate & Kassinove, 2003). DiGiuseppe, Tafrate et al. (1994) noted, based on supervisory experiences, that they "often found therapists working hard to change their clients' anger, while at the same time, their clients are working just as eagerly to change" the target of the clients' anger (p. 116).

Anger-related cognitions and beliefs. Another significant factor potentially affecting the therapeutic alliance involves particular beliefs or cognitions held by clients. Commonly identified examples include failure to accept emotional responsibility, thoughts that condemn others, self-righteous ideas, positive views of cathartic anger expression, short-term reinforcing effects of anger expression related to controlling others (DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al.,1994; Howells & Day, 2003), the belief that intense or strong anger is a justifiable and/or expected response (e.g., in context of cultural norms; DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2007; Howells & Day, 2003), misinterpretations of events (e.g., as threatening), rigid and assumptive demands (DiGiuseppe & Tafrate, 2007; Tafrate & Kassinove, 2003), perceptions of lack of

empathy or understanding on the part of others/clinicians (DiGiuseppe, 1995;

DiGiuseppe & Tafrate, 2007), and exaggeration of problems/situations (Tafrate &

Kassinove, 2003). The significance of the clients' perceived lack of empathy on the part

of the clinician was emphasized by a number of authors, including in terms of the client

feeling invalidated in their feelings of having been transgressed by others (Deffenbacher,

2006; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate,

2007; DiGiuseppe, Tafrate et al., 1994; Tafrate & Kassinove, 2003) and/or viewing the

therapist as siding with the other person (Tafrate & Kassinove, 2003).

Alternative anger responses. Clients' lack of specific alternative emotional

responses or reactions, or *scripts* (Abelson, 1981), has also been identified as a significant

challenge in anger treatment (Deffenbacher, 1999; DiGiuseppe, 1995; DiGiuseppe,

Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994).

"Script theories suggest that cultural groups share common expectations for set patterns

of behavior in which given emotions are anticipated reactions to a sequence of events"

(DiGiuseppe, Tafrate et al., 1994, p. 119). Coupled with the assertion that angry clients

are often unaware of or unable to distinguish differences between functional and

dysfunctional anger, this suggests that clients with problematic anger may often have

inadequate access to scripts for adaptive anger. An additional related issue is the

importance of considering (including the potential effects on treatment and alliance) a

clients' accepted cultural and familial scripts for experiencing the emotion of anger, as

well as the ability within one's own language (including noted limitations in the English

language) for accurate differentiation among words to describe various anger-related

feelings (e.g., rage, annoyance) (DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994).

Resistance. Another factor in establishing the therapeutic alliance involves resistance in working with angry clients, which DiGiuseppe (1995) described as a common complaint of clinicians working with this population. Howells and Day (2003) noted that in comparison to interventions with other emotions such as sadness, "the attempt to clinically modify anger is likely to elicit more ambivalent reactions in the client and greater treatment resistance" (p. 325). In his review on the effectiveness of anger treatment, Deffenbacher (2006) described resistance as a major issue that may need to be taken into account in the treatment of anger, despite the neglect of this factor in the literature. As an example, he noted potential problems that may occur when clients become defensive and react with anger at the clinician (e.g., intimidation on the part of the professional) that "if not handled well, such processes may lead to clients' resisting therapy and change, to therapeutic impasses, and in some cases, to premature termination" (p. 266). Ultimately, however, Howells and Day (2003) observed that

> The notion of the 'resistant' client is a shorthand (and ultimately unhelpful) way
> of describing the combined effects of…impediments to treatment readiness. The
> term is unhelpful in the sense that it locates causality entirely within a negative,
> dispositional, and voluntaristic quality of the client. (p. 327)

Additional considerations related to potential resistance with anger clients, specifically with regard to motivational issues, are described next.

Motivation/readiness for change. Finally, a recurring theme in the anger literature related to issues in the therapeutic alliance and clients' resistant behaviors involves the

client's view of or attitude regarding the need for change (Deffenbacher, 1995, 1999, 2006; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2001, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Kassinove & Tafrate, 2002; Tafrate & Kassinove, 2003). Primarily utilizing ideas from the stages of change model (Prochaska & DiClemente, 1982), each of these authors highlighted the common idea that clients presenting for anger treatment may often either be unaware of, or not acknowledging, difficulties with anger or believe they have a need for assistance, thereby classifying them in an early stage of change (e.g., *precontemplative* in which change is not being considered) or as low in readiness to change from this perspective. A more detailed discussion and elaboration of the stages of change model is provided in a later section.

Several writers have also argued that differences exist between traditional psychotherapy clients (e.g., with depression) and clients with anger problems in that the majority of other consumers of therapy are considered more motivated and ready for change than angry clients (DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003). Howells and Day (2003) suggested a number of potential contributing factors to this phenomena, including case complexity with anger issues, co-morbid mental and/or personality disorders, common treatment settings (e.g., prison), beliefs about anger, nature of referral, insufficient attention to personal goals in relation to anger, and diversity issues (e.g., culture, gender). DiGiuseppe and Tafrate (2007) elaborated on previously identified concerns regarding the nature of empirical anger studies to date (i.e., use of voluntary participants, primarily cognitive-behavioral orientations), stating that

Most angry clients arrive for therapy in the precontemplative or contemplative stages of change, and because the effectively proven therapies all tested action-stage interventions with volunteer participants, there is a strong possibility that there are therapies that are more effective in the real world. (p. 321)

Low motivation or desire for change on the part of angry individuals has been described as the most significant challenge facing clinicians working with this population (DiGiuseppe & Tafrate, 2001). The anger management literature is filled with calls for more attention to enhancing motivation with this population and brief tips for doing so (Deffenbacher, 1995, 1999, 2006; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2001, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Kassinove & Tafrate, 2002; Tafrate & Kassinove, 2003), however, practitioners lack a comprehensive model for motivational enhancement with angry clients. Fortunately, a vast literature on motivational enhancement exists which might serve as a model for developing strategies to overcome resistance and foster change in anger management. It is this body of literature which will be addressed next.

Theories of Motivation and Change

The concept of change is central to the processes of counseling and therapy. Wampold (2001) provided the following definition of psychotherapy:

Psychotherapy is a primarily interpersonal treatment that is based on psychological principles and involves a trained therapist and a client who has a mental disorder, problem, or complaint; it is intended by the therapist to be remedial for the client's disorder, problem, or complaint; and it is adapted or

individualized for the particular client and his or her disorder, problem, or

complaint. (p. 3)

Inherent in this definition is the idea of remediation of difficulties or complaints,

suggesting movement in a different direction (i.e., change). Also notable in this definition

is the attribution of intentionality of the remediation to the therapist. This raises the

possibility that therapist and client, for a variety of potential reasons, may have

incongruent ideas about the process of therapy or the idea of change itself. Various

factors related to change, such as why people do change (Miller & Rollnick, 2002) or do

not change (Engle & Arkowitz, 2006), the fundamental cause or causes of change (Gelso,

2005), and the course and processes of change (Prochaska & Norcross, 2002) have been

the source of debate in research and clinical settings for many years. A particular area of

interest receiving much attention involves the concept of resistance or impasses in

therapeutic relationships.

Impediments to Change: Resistance

Concepts related to resistance are proposed consistently across most theories of

psychotherapy (Beutler, Moleiro, & Talebi, 2002). Brehm and Brehm (1981) noted "that

clients can oppose the efforts of their therapists is a therapeutic truism as old as the

concept of systematic psychological intervention itself" (p. 300). Despite this

commonality, a consistent definition of resistance, clarification of the nature of

resistance, and agreement on ways to address resistance in therapy have been elusive

(Engle & Arkowitz, 2006).

The origins of resistance and related concepts may be traced to psychoanalytic

ideas, with resistance being viewed as critical in understanding the process of therapy

(Wachtel, 1982). From this standpoint, resistance is seen as reflective of "unconscious material that the patient is struggling to avoid uncovering" (Beutler et al., 2002, p. 208), with the goal of therapy to increase awareness of this material through interpretation by the analyst. Within this approach, resistance is viewed as a characteristic of the individual seeking counseling. From a behavioral perspective, resistance is viewed as lack of compliance on the part of the client within the therapeutic relationship, typically originating in prior reinforcement experiences (Beutler et al., 2002). In these cases, resistance is often proposed as occurring due to therapist actions (e.g., inadequate identification of a client's reinforcement contingencies) or situational demands. Addressing resistance could involve identifying and changing stimuli and reinforcers related to resistance behaviors. Cognitive theorists emphasize the role of "faulty beliefs, assumptions, and schemas" (Engle & Arkowitz, 2006, p. 24) in behavioral noncompliance and label behaviors reflecting resistance as "technical problems, countertherapeutic beliefs, avoidance behaviors, and passivity" (Beutler et al., 2002, p. 208). Therapeutic interventions aimed at correction of these thoughts/beliefs and modification of schemas are primary ways of addressing resistance from this perspective (Engle & Arkowitz, 2006).

In reviewing various theories and conceptualizations of resistance or noncompliance, Freeman and McCloskey (2003) identified 41 factors, subsumed under four major categories, related to what the authors refer to as "impediments to therapy" (p. 26). These categories included client factors (e.g., negative cognitions about effects of changing behaviors on others, secondary gain, lacking motivation for change, ineffective self- or other-monitoring), practitioner or therapist factors (e.g., skill or experience

deficits, poor working alliance, poor intervention timing, unrealistic or incongruent goals, lack of flexibility), environmental factors (e.g., attempts to undermine therapy by significant others, cultural considerations in seeking help, limited social support), and pathology factors (e.g., rigidity, difficulty trusting, negative self-view, impulsiveness, multiplicity of symptoms, medical problems). An additional important consideration varying across theories of psychotherapy and change involves the view of client resistance as a state or trait variable. While psychoanalytic perspectives suggest resistance as a trait characteristic of the client (i.e., unconscious avoidance), a behavioral perspective may contain both trait (e.g., historical reinforcement) and state (e.g., therapist behaviors) concepts (Beutler et al., 2002).

Hanna (2002) proposed an alternative conceptualization of resistant or *difficult* clients, noting that "for a model of change to be worth its therapeutic salt, it should illuminate how to work with clients who are considered to be difficult" (p. 19). Within Hanna's model, resistance stems primarily from clients' beliefs, and client-related variables are those with the most relevance to both resistance and change. The author identified seven *precursors*, which are described as "a set of functions and conditions that a client might engage or hold that are specifically conducive to therapeutic change" (p. 31). The first precursor involves the client's perception of an urgent need for change, while the second refers to the client's "willingness or readiness to experience anxiety or difficulty" (p. 32). Third, the client's knowledge or self-awareness of both the existence and nature of a problem is considered necessary, and the fourth precursor involves direct confrontation of the problem by a client. The fifth condition is action-oriented in that the client makes actual steps or efforts to change. Hanna described the sixth precursor as

some degree of hope on the part of the client that change is possible, and the final precursor is described as the client's use of support from interpersonal relationships that encourage growth or change. Ultimately, Hanna noted his intent that these conditions be viewed as a model of therapy that cuts across various theoretical orientations and treatment approaches.

Engle and Arkowitz (2006) attempted to synthesize ideas on resistance, as well as theoretical and empirical information on social-cognitive and self-schema perspectives, into an integrated theory with *ambivalence* as the central concept. While acknowledging additional possible contributions to resistance (e.g., no desire to change, lack of knowledge regarding how to change), they describe "*resistant ambivalence* as a subset of resistance in which there are movements toward change as well as movements away from change" (p. 3). The authors' model is based on a number of assumptions, some of which include a view of much of resistant behavior as reflecting ambivalence, the importance of understanding resistant ambivalence from the viewpoint of the client, the idea that resistant ambivalence is both intrapersonal and interpersonal in nature, that lack of awareness of reasons for ambivalence on the part of the client may exist, that resistant ambivalence is seen as a state versus trait characteristic, and that less directive strategies (e.g., provision of empathy) and/or paradoxical interventions may be more effective in the change process when resistant ambivalence is present.

Resistance is an important and commonly-occurring phenomenon that is viewed differently across theories, especially regarding the causes of and/or methods of addressing resistance in psychotherapeutic relationships. Beutler et al. (2002) noted that the greatest areas of agreement were the recognition, meaning, and therapeutic

consequences of resistance. Two major theories that have direct relevance and application to ideas related to change, resistance, and ambivalence in therapy are described next.

The Transtheoretical Model of Change

The transtheoretical model (TTM) was originally developed, at least partially, out of dissatisfaction with the myriad of differing systems of psychotherapy and a predominant lack of empirical research supporting the effectiveness of any one system over others for most problems (Prochaska & DiClemente, 1982). Rather than selecting a particular theory or system that accurately and comprehensively explains how individuals change, Prochaska (1984) comparatively reviewed 18 major theories of psychotherapy (e.g., psychoanalysis, gestalt, client-centered) with the goal of developing a more eclectic, integrated model of the change process. Additionally, Prochaska and DiClemente (1982) studied individuals who successfully changed themselves and those who participated in treatment programs within the area of smoking cessation. Out of these procedures emerged the TTM and two of its primary components, the stages of change and the processes of change.

Stages of change. As originally conceptualized (Prochaska & DiClemente, 1982), the TTM included four distinct stages through which individuals attempting to change progress: contemplation, decision-making or determination, action, and maintenance. The researchers also identified two additional stages, precontemplation and termination, that occur before and after the change process, respectively. Prochaska (1984) noted that further research demonstrated support for four distinct stages, including precontemplation, contemplation, action, and maintenance. Although it was proposed that only these four stages were supported by early research (Prochaska, 1984), DiClemente et

al. (1991) found evidence to support reinsertion of a preparation stage, previously termed determination or decision-making, prior to the contemplation stage. Although it has been acknowledged that there are individuals who progress from maintenance into full remittance of the problem (Prochaska, 1984), termination has often not included as a distinctive stage of change in the literature and was described as speculative by Prochaska and DiClemente (1992). Prochaska (2000) described individuals in the termination stage as having "zero temptation and 100% self-efficacy" (p. 112) and noted that lifetime maintenance may be a more likely result for many.

Within the precontemplation stage, individuals do not intend to change behaviors, often in relation to being "unaware or underaware of their problems" (Prochaska, DiClemente, & Norcross, 1992, p. 1103). Since others around them are often aware of the presence of problems, these individuals may present to therapy in response to social, familial, or other forms of pressure. Alternatively, precontemplative persons may feel hopeless regarding their abilities to change due to failed prior attempts (Prochaska, 2000). Regardless of the cause, individuals in this stage tend to avoid issues related to the problematic behavior and in many theories of psychotherapy would be characterized as lacking motivation or resistant. Interestingly, measuring this stage of change involves consideration of a person's intent, rather than simply desire, to change a problematic behavior.

The contemplation stage involves both awareness of a problem's existence and serious consideration of the need to make changes in the problem area (Prochaska, DiClemente et al., 1992). However, at this stage the individual is not yet committed to taking steps to resolve the problem. Ambivalent feelings are often prevalent, with persons

becoming more cognizant of not only the benefits of changing but also the potential negative effects as well (Prochaska, 2000). Individuals may remain in the contemplation stage for significant periods of time (e.g., two years or more) without movement toward action (Prochaska, DiClemente et al., 1992).

People in the preparation stage of change are making plans for action in the near future, which is often classified as within one month (Prochaska, 2000). An additional criterion for inclusion in this group is typically the presence of some unsuccessful action or attempt to change within the previous year (Prochaska, DiClemente et al., 1992). While some positive change may have resulted from prior attempt(s), full reduction or elimination of problematic behavior (e.g., abstinence from smoking behaviors) has not occurred.

Action, the fourth stage of change, is signified by taking overt measures to alter one's lifestyle, behaviors, or environment in order to try to solve a problem (Prochaska, DiClemente et al., 1992). At this stage, a commitment to change has been made, and the person must expend both time and energy in order to effect this change. A distinction is made between action and actual change, with an emphasis on continuation through to the maintenance stage in order for change to have occurred. Also, the criteria for what qualifies as action-oriented behavior change may differ depending on the nature of the problem and standards agreed upon by various professionals (Prochaska, 2000). The time frame used to determine this stage is often set at six months (Prochaska, 2000), although the length of time for successful change in behavior may range from one day up to six months (Prochaska, DiClemente et al., 1992).

Maintenance involves continued attempts at relapse prevention and strengthening of progress already made in overcoming a problem (Prochaska, DiClemente et al., 1992). A key concept in this stage is that change is ongoing, not completed, and may proceed from six months up to a lifetime. Prochaska (2000) described individuals in this stage as being less tempted toward relapse and having increased confidence in their abilities, and their use of the processes of change would be expected as less than in the action stage.

The stages of change do not necessarily represent an ideal linear model of progression of change behaviors toward the resolution of a problem. Prochaska and DiClemente (1982) described movement through the stages in terms of a dynamic, cyclical progression involving entrances, exits, and re-entrance throughout the stages of change. Prochaska (2000) described the common occurrence of relapse and regression to previous stages in a spiral progression of change, and he noted that "most people taking action to modify chronic conditions like addictions do not successfully maintain their gains on their first attempt" (p. 111).

Processes of change. In addition to outlining stages of change in the TTM, ten change processes (i.e., consciousness-raising, self-reevaluation, dramatic relief, environmental reevaluation, social liberation, self-liberation, counterconditioning, stimulus control, reinforcement management, and helping relationships) were identified that converged across both major psychological theories of change and studies of self-changers (Prochaska, 1984). Consciousness-raising, which Prochaska, Norcross, and DiClemente (1994) described as "the most widely used change process" (p. 27), refers to activities or interventions designed to increase knowledge or awareness of one's self and the problem (Prochaska, DiClemente et al., 1992). Examples are wide-ranging and might

include interpretations by a counselor or self-initiated bibliotherapy (Prochaska,

DiClemente et al., 1992). The second change process, self-reevaluation, involves

assessment of emotions and cognitions related to a problem, as well as how individuals

may picture themselves after overcoming the problem (Prochaska, Norcross et al., 1994).

Possible types of self-reevaluation include clarification of values and imagery techniques,

among others (Prochaska, DiClemente et al., 1992).

The third process, dramatic relief, refers to cathartic emotional release

(Prochaska, Norcross et al., 1994), which could be facilitated by techniques such as role-

playing or psychodrama when appropriate (Prochaska, DiClemente et al., 1992).

Environmental reevaluation involves assessment of the interaction of one's problem with

the physical environment (Prochaska, DiClemente et al., 1992). Training on empathic

techniques and viewing educational films or documentaries are possible examples. Social

liberation is the fifth change process and involves advocacy for personal rights and

engaging in behaviors that increase personal empowerment (Prochaska, Norcross, et al.,

1994). Participation in the formation of non-smoking areas or in organizations such as

women's rights groups are possible examples of activities within this change process.

Self-liberation, sometimes called commitment, refers to making the choice to

change, taking personal responsibility for changing, and committing to taking steps

toward changing (Prochaska, Norcross et al., 1994). Self-initiated New Year's resolutions

and engaging in therapy focused on the decision-making process are examples. The

seventh process of counterconditioning involves the substitution of healthy behaviors for

unhealthy behaviors. Specific behavioral techniques, such as relaxation and assertiveness

training, are representative of possible interventions in this area (Prochaska, DiClemente

et al., 1992). Stimulus control, or environmental control, involves avoidance or countering of problematic situations and may include actions such as environmental restructuring or avoiding problem behavior-triggering cues. Contingency management typically involves a focus on rewards, rather than punishment, as part of the overall change process (Prochaska, 2000), and may involve techniques such as contingency contracts (Prochaska, DiClemente et al., 1992). The final process, helping relationships, is described as the most used change process for individuals in psychotherapy (Prochaska, Norcross et al., 1994).

Integration of stages and processes. One of the fundamental assertions and presuppositions of the TTM is that people at differing stages of change will differ in their emphasis on and engagement in the various processes of change (Prochaska, 1984). Additionally, professionals may benefit from employing the specific processes of change associated with each stage of change and/or the transitions from one stage to another. Prochaska's (2000) model is used to describe the proposed interactions between nine of the processes of change and five stages of change. Observations suggest that individuals in the precontemplation stage use the majority of the change processes the least (Prochaska, 1984). However, in attempting to move from precontemplation into contemplation, consciousness-raising, dramatic relief, and environmental reevaluation are identified as the most useful change processes. Self-reevaluation is suggested as the process most used in transitioning from contemplation to preparation, while movement from preparation to action may involve greater use of self-liberating change processes. In the action stage and transitions from the action stage to the maintenance stage, the

processes of contingency management, helping relationships, counterconditioning, and stimulus control are the most utilized.

Resistance and the TTM. From its original conception, the TTM was proposed as having relevance to problems in the change process (Prochaska & DiClemente, 1982). The authors asserted that "one of the more common sources of resistance might well be when clients and therapists are working at two different stages of change" (p. 287). Resistance may be seen as occurring either in situations where the therapist is working at a more advanced stage of change or when the client is at a more progressive stage of change than the therapist (Prochaska & Norcross, 2002). McConnaughy, Prochaska, and Velicer (1983) noted that stage of change issues may be related to premature termination. As described in previous sections, TTM theory suggests the need for assessing an individuals' current stage of change and tailoring of techniques (e.g., processes of change corresponding to that stage) in order to increase the effectiveness of therapy and decrease impediments to therapy, such as resistance.

Issues in the theory, research, and application of the TTM. While the initial research on the TTM focused on the problem of smoking cessation, many subsequent studies focused on applying the TTM to other problem areas. For example, Prochaska, Velicer, et al. (1994) evaluated components of the TTM, including the stages of change, across a variety of problem behaviors, such as quitting cocaine, delinquent behavior in adolescence, safe sex, screening for mammograms, and sunscreen use, and found support for relations between the stages of change and decisional balance measures across these behaviors. DiClemente, Schlundt, and Gemmell (2004) discussed applications and related studies applying the TTM to alcohol abuse and dependence, as well as drug abuse and

dependence, with other authors (Migneault, Adams, & Read, 2005) reviewing the literature in the area of substance abuse and concluding that evidence has been mixed. Beitman et al. (1994) found that pretreatment readiness to change was significantly related to treatment outcome in panic-disordered individuals. In a study of patients with generalized anxiety disorder, Wilson, Bell-Dolan, and Beitman (1997) found mixed support for a relationship between stages of change and outcome (e.g., decrease in anxiety in high versus low precontemplators, but not in severity of problem). Spencer, Adams, Malone, Roy, and Yost (2006) reviewed the literature on applications of the TTM to exercise and concluded that the evidence for matching particular interventions to stages of change received some support. Prochaska, Norcross, Fowler, Follick, and Abrams (1992) found evidence for applying both stage and process of change constructs toward problems of obesity in the workplace. Among numerous other applications, the TTM and/or its various components have been applied to therapeutic issues or concerns including bulimia nervosa (Franko, 1997; Levy, 1997; Wolk & Devlin, 2001), adult survivors of childhood sexual abuse (Koraleski & Larson, 1997), client expectations about counseling (Satterfield, Buelow, Lyddon, & Johnson, 1995), and premature termination of therapy (Smith, Subich, & Kalodner, 1995).

Some findings raise doubt regarding some predictions of the TTM (e.g., Farkas et al., 1996; Herzog, Abrams, Emmons, Linnan, & Shadel, 1999; Rosen, 2000), and the model has been criticized by a number of authors (e.g., Bulley, Donaghy, Payne, & Mutrie, 2007; Davidson, 1992, 1998; Littell & Girvin, 2002; Sutton, 2000a, 2000b, 2001). Some criticism has focused on the degree to which the stages of change model predicts clients' progression through treatment (Farkas et al., 1996; Herzog et al., 1999).

For example, Rosen's (2000) meta-analytic review of 47 TTM-related studies (all cross-sectional) found that the sequence of change processes used at various stages of change may not be consistent across various health problems, though there was support provided for differential use of change processes in differing stages.

Davidson (1992) observed that the TTM may be "too comprehensive" (p. 821) and described it as more "atheoretical" (p. 822) than transtheoretical. Littell and Girvin (2002) reviewed 87 empirical articles related to the stages of change model and concluded that little evidence supported consistent distinct stages of change across problems and populations, a lack of support for problem-specific (e.g., substance-related issues) discrete stages, and no demonstration of progress through all stages described (see also Davidson, 1998). Sutton (2000a, 2001) reviewed TTM literature related to smoking cessation and substance use, respectively, finding various concerns, such as with measurement, lack of specification of constructs, and empirical design (e.g., most studies employing cross-sectional designs; see also Davidson, 1998; Sutton, 2000b). Regarding measurement challenges, Sutton (2001) and Davidson (1998) described problems with commonly employed staging algorithms (e.g., arbitrary time delineations) and dimensional measures that allocate individuals to particular stages based on answers to questions (e.g., problems in high correlations of adjacent scales suggesting lack of unique measurement). A number of writers also noted the findings and/or suggestion that rather than discrete stages, a continuum model (and continuous measurement) may be a more appropriate conceptualization (Davidson, 1998; Littell & Girvin, 2002; Sutton, 2001).

Finally, the most well-known and utilized application of the TTM, the stages of change (Davidson, 1998), may be seen as subject to the general criticisms of stage

models within psychology, including descriptions of the demise of such ideas in more recent times (Bandura, 1998). Despite its criticisms, the TTM has become one of the most influential and widely researched models of behavior change, with Weinstein, Rothman, and Sutton (1998) noting that it is "currently the most widely used stage model in health psychology" (p. 293).

Motivational Interviewing

Motivational interviewing (MI) began as an intuitive strategy developed by William R. Miller in his working with clients with problematic drinking and was outlined in a foundational article, "Motivational Interviewing with Problem Drinkers" (Miller, 1983). Partially out of dissatisfaction with traditional treatment strategies and philosophies for working with clients with alcohol problems (e.g., confrontational behaviors, attribution of treatment failure to the client, denial of problems as a negative personality trait) and a lack of research to support these ideas, Miller proposed a differing view of treatment and specifically the concept of denial, "asserting that *denial is not inherent in the alcoholic individual, but rather is the product of the way in which counselors have chosen to interact with problem drinkers*" (p. 150). From his viewpoint, the balance of clients' views on drinking (e.g., positive and negative aspects) is critical, and he outlined four major therapeutic principles, including discouragement of "labeling" problems, emphasizing clients' personal choice and responsibility, accentuating internal attributions of change, and increasing clients' cognitive dissonance.

In elaborating on the development and evolution of MI over the years, Moyers (2004) noted that person or client-centered therapy was most significant among the various historical influences on the development of MI. Fundamental elements of MI

reflect this influence, including its view of the client and the client's abilities (e.g., to determine optimal solution for one's own problem), a major emphasis on therapist reflections during session as a key strategy, and the import of research of methods employed in the therapeutic relationship. Moyers also described significant social psychology contributions such as Bem's (1972) theory of self-perception, which influenced MI concepts regarding the effects of language arising from interpersonal interactions on clients' self-perceptions. Moyers (2004) illuminated the impact of Miller's collaboration with Stephen Rollnick, beginning in 1989, including as reflected in the emphasis in MI on client's ambivalence about change, as well as the import in MI of eliciting a client's own statements regarding commitment to change. An additional body of literature noted as having an impact on the development of MI, including references in early writings (Miller, 1983), involves the TTM/stages of change (DiClemente & Velasquez, 2002; Moyers, 2004).

Definition of MI. Since Miller's (1983) original starting point, MI has been expounded on in terms of specification of philosophy, strategies, and implementation. Though initially lacking a specified, clear definition (Rollnick & Miller, 1995), Miller and Rollnick (2002) defined MI in its current incarnation as "a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (p. 25). In addition to the importance of MI as a client-centered approach, MI is considered a directive intervention in that a significant aspect of the therapist's role involves assisting the client in making progress toward a healthy change or goal (Isenhart, 2005). Ambivalence, from an MI standpoint, is viewed as normal rather than pathological, with the idea that most people have mixed feelings, consciously or

unconsciously, about change. Exploration of ambivalence may be critical in intervening along the process of change (Miller & Rollnick, 2002) and in understanding client resistance (Isenhart, 2005).

The spirit of MI. Although MI is viewed as having techniques that can be taught (Britt, Blampied, & Hudson, 2003; Rollnick & Miller, 1995), the emphasis has shifted from a focus on techniques to one on the "spirit of motivational interviewing" (Miller & Rollnick, 2002; Rollnick & Miller, 1995). Moyers (2004) noted that MI is more about a view of relationships rather than a collection of techniques, which was also suggested as consistent with Rogers' (1980) concepts in his text, *A Way of Being*. Rogers (1980) described his standpoint as reflecting "a point of view, a philosophy, an approach to life, *a way of being* [italics added], which fits any situation in which *growth*—of a person, a group, or a community—is part of the goal," (p. ix) as opposed to a theory of therapy only. Ultimately, Miller and Rollnick (2002) describe MI as "not something that one does *to* people; rather, it is fundamentally a way of being with and for people—a facilitative approach to communication that evokes natural change" (p. 25).

Rollnick and Miller (1995) described a primary reason for this shift in MI emphasis as related to concerns over the dilution of the essence of MI through some clinicians and researchers focusing more on the techniques recommended and/or interventions identified as related to MI but bearing little relation to the primary conceptual foundations. Miller and Rollnick (2002) expounded upon the spirit of MI in terms of three aspects of the therapeutic relationships. These include a collaborative style (versus a confronting style) in the relationship between the therapist and client, an emphasis on an evocative standpoint from therapist to client (versus a traditionally

educative position), and an inherent regard for clients' individual choices and autonomous functioning (p. 34). The controversy over differences between the spirit of MI as a clinical method (Miller & Rollnick, 2002) versus various MI-related interventions (e.g., the Drinker's Check-up; Miller, Sovereign, & Krege, 1988) led to the suggestion that the term "motivational interviewing" be used only in reference to the pure and intended style or method of MI in order to distinguish MI from any number of intervention strategies developed from (or in some cases, in contradiction with) MI principles (Miller & Rollnick, 2002; Rollnick & Miller, 1995; Noonan & Moyers, 1997).

Principles of MI. In addition to clarifying the importance of the spirit of MI with regard to the theory and implementation of techniques, Miller and Rollnick (2002) outlined four principles that are set as guidelines in the use of MI: expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy. It is noted that in earlier writings (Miller & Rollnick, 1991; Rollnick & Morgan, 1996), five principles were outlined, including the principle to "avoid argumentation" (Rollnick & Morgan, 1996, p. 183), which appears to have been subsumed under the principle of rolling with resistance in more recent expositions (Miller & Rollnick, 2002).

The first principle, related to expression of empathy, is considered foundational to this approach and consistent with the client-centered nature of MI (Miller & Rollnick, 2002). This principle emphasizes acceptance (though not necessarily concurrence) of clients' views in order to communicate understanding, support, and normalization of ambivalence for further exploration (Miller & Rollnick, 2002; see also Isenhart, 2005). The second principle, developing discrepancy, reflects Miller and Rollnick's (2002) decision to de-emphasize the previously mentioned concept of cognitive dissonance

(Festinger, 1957) in favor of a more encompassing concept of eliciting from the client "discrepancy between present behavior and his or her broader goals and values" (Miller & Rollnick, 2002, p. 38). This principle concerns the client's view of the importance of a particular change as opposed to how much change must occur in order to meet a particular goal. The third major MI principle, rolling with resistance, involves the therapist's avoidance of attempts to persuade the client to make a particular change (Miller and Rollnick, 2002). Miller and Rollnick (2002) emphasized the importance of (a) avoiding direct confrontation of resistance, (b) reframing of client resistance as part of the process of change, providing an opportunity and choice in consideration of new or differing ideas, (c) respecting the client's abilities to contribute to solving his or her personal difficulties, and (d) recognition of resistance as "a signal for the counselor to shift approach" (p. 40). Support for client self-efficacy, the final MI principle, concerns the idea that without a client's optimistic outlook regarding his or her ability to effect a change, successful behavior change is unlikely to occur (Miller & Rollnick, 2002; see also Isenhart, 2005).

Treatment considerations and cautions. In outlining the processes and strategies of MI, Miller and Rollnick (2002) described a number of problematic interactions, or traps, which may occur between therapist and client. The "question-answer trap" involves repetitive questioning by the counselor with short responses (e.g., yes) from the client. The "trap of taking sides," also referred to as the "confrontation-denial trap" (Isenhart, 2005, p. 221), is one where the counselor identifies an issue and suggests ways to address the issue, while the client expresses hesitation, becomes defensive, and essentially argues against even having a problem. Next, the "expert trap" occurs when the counselor

assumes the role of expert in providing advice to change, as opposed to an MI standpoint in which the client is the expert in terms of knowledge of self, situation, and potential effects of change. The "labeling trap" involves attempts by the counselor to label clients or persuade them to accept a label, which may produce resistance. In addition, the "premature-focus trap" arises when the counselor and client have different views of the problem, often with the client viewing other issues as more important. The last trap identified by Miller and Rollnick is the "blaming trap," which concerns a focus on fault-finding of others on the part of the client, likely interconnected with defensive reactions. Isenhart (2005) described one additional trap, the "cheerleader trap," which involves the therapist demonstrating excessive optimism about change that may come across as unrealistic or suggest to the client that the therapist has misunderstood the severity of the situation.

Strategies of MI. Miller and Rollnick (2002) identified five primary strategies recommended for use in MI. These include: asking open-ended questions (versus questions allowing one or few word answers); reflective listening (as opposed to numerous other therapist behaviors such as giving orders, advice-giving, or persuasion); affirming or providing support (such as expressions of appreciation); summarizing (including a variety of types, such as summaries that connect current therapeutic content with that from an earlier meeting); and "eliciting change talk." The first four are referred to as "OARS (Open questions, Affirming, Reflecting, and Summarizing)" (p. 65) and are considered fundamental and reflective of a client-centered philosophy.

The fifth strategy, change talk, is described as more unique to MI and is considered the "guiding strategy for resolving ambivalence" (p. 76). It is a directive

process in which the counselor recognizes and reinforces client verbalizations of pro-change arguments and has been described as "the major goal in MI: to create the therapeutic atmosphere in which the client can engage in change talk" (Isenhart, 2005, p. 216). Examples of change talk may include client acknowledgement of the cons of the current situation, the pros of making a change, or optimistic or intentional statements regarding change (Miller & Rollnick, 2002). Amrhein, Miller, Yahne, Palmer, and Fulcher (2003) explored change talk in the context of commitment language, in which four categories of client expressions (i.e., desire for change, ability to change, reasons for change, and need for change) were considered underlying aspects of client commitment language. A variety of strategies for generating change talk, such as decisional balance exploration (i.e., pros and cons of change), open-ended evocative questions, and elicitation of the importance of change to the client, are suggested by Miller and Rollnick (2002).

MI, resistance, and motivation. The construct of resistance and its role in therapy was critical in the development of MI as a theory and method. Much like Miller's (1983) early descriptions of denial of alcohol problems, Miller and Rollnick (2002) stated that, from an MI perspective, "resistance is an interpersonal phenomenon" (p. 40) and that it "occurs only within the context of a relationship or a system" (p. 45). In this description, resistance is not viewed as a characteristic, or trait, of the client; rather it is a fluctuating component of an interpersonal relationship. Similarly, motivation is viewed as a "*state* of readiness or eagerness to change, which may fluctuate from one time or situation to another" (Miller & Rollnick, 1991, p. 14). Isenhart (2005) and Miller (1983) described the concept of motivation as arising from interpersonal communication and as reflective

of the nature of the therapeutic alliance, and Miller and Rollnick (1991) combined

definitional ideas of motivation into "*the probability that a person will enter into,*

continue, and adhere to a specific change strategy" (p.19). These views of client

motivation and resistance appear more consistent with previously discussed views of

resistance as a state variable (e.g., Engle & Arkowitz, 2006) than a client trait (e.g.,

psychoanalytic views; Beutler, et al., 2002).

   Application of MI. The general usage and application of MI has been an aspect of

developmental evolution over the years. Miller and Rollnick (2004) described at least

three differing ways in which MI may be applied to the treatment of problematic

behaviors. The first, and original, vision was as a preparatory mechanism implemented

prior to a client engaging in treatment (Miller, 1996). The goal with this approach is to

increase a person's openness to and motivation for change in order to increase the

chances "of a person entering, continuing in, adhering with, and benefiting from

treatment" (Miller & Rollnick, 2004, p. 300). A second potential use of MI is as a

catalyst, in and of itself, for change. In other words, MI may also be applied as a stand-

alone, brief treatment possibly without need for follow-up services. Miller and Rollnick

(2004) cautioned, however, against a view of MI alone as the treatment of choice for the

majority of problems. A third general application of MI involves implementation of an

MI style within therapeutic relationships and intervention strategies across various

theoretical orientations and treatment interventions, including those traditionally

considered more educational in nature.

   Research involving MI. With respect to the empirical literature involving MI

reviewed below, it may be noted that the MI interventions evaluated have often been

classified as adaptations of motivational interviewing, or AMIs (Burke et al., 2003; Burke et al., 2002). In fact, Burke et al. (2002) stated that "virtually *all* of the published empirical studies in this area … deal with the efficacy of AMIs, with no studies addressing the efficacy of motivational interviewing in relatively pure form" (p. 218).

Although originally applied primarily in substance abuse settings, specifically with alcohol (Miller, 1983), Hettema, Steele, and Miller (2005) noted that "the treatment outcome literature for MI is growing rapidly and has spread well beyond its original focus on addictive behaviors" (p. 94). Extensions of MI have become increasingly common in recent years, with applications ranging from illness management (e.g., pain-related disorders) to weight loss and other eating-related behavior (Britt et al., 2003). Given the large amount of accumulating research, this review of the current status of research on MI focuses on the major problems or health behaviors to which MI has been extended (including related issues as to the efficacy of MI in various areas), the nature/format of MI found in research studies, training and fidelity considerations in research, and MI as applied in groups.

A survey of systematic or qualitative reviews (Burke et al., 2002; Dunn, Deroo, & Rivara, 2001; Noonan & Moyers, 1997) and meta-analytic investigations (Burke, Arkowitz, & Menchola, 2003; Burke, Dunn, Atkins, & Phelps, 2004; Hettema et al., 2005; Rubak, Sandboek, Lauritzen, & Chistensen, 2005; Vasilaki, Hosier, & Cox, 2006) involving MI revealed alcohol-related problems as the single largest area of research emphasis in the application of MI. In comparison to placebo or no-treatment control groups, meta-analytic studies have generally found effect sizes with alcohol problems to be small to medium (.25 to .53, Burke et al., 2003; .35 to .53, Burke et al., 2004; .20 to

.56, Hettema et al., 2005), with variability across types of outcome measures, and at least one analysis (Vasilaki et al., 2006) showed greater effects when considered at short-term versus long-term follow-up points and with exclusion of dependent drinkers from analyses. Vasilaki et al. (2006) concluded that MI demonstrated efficacy for drinking problems versus no treatment and also as compared to the aggregated effect sizes of other various treatments (e.g., treatment as usual), though noted that no conclusions may be drawn that MI is more effective than any particular other treatment. Effect sizes for illicit drug use have also been variable, though often moderate on average (.56, Burke et al., 2003; .56, Burke et al., 2004) and ranging from small to medium, depending on follow-up time period (i.e., .51 at early follow-up periods versus .29 at later periods; Hettema et al., 2005).

With regard to other problems to which MI has been applied, evidence for efficacy is limited and highly variable. In the area of smoking behaviors, effect sizes have often been small or non-significant (Burke et al., 2002; Burke et al., 2003; Burke et al., 2004; Dunn et al, 2001; Hettema et al., 2005). Findings regarding MI with HIV-related risk behaviors have varied, with some authors concluding that the effects have been non-significant (Burke et al., 2002; Burke et al., 2003; Burke et al., 2004), while others described effects as large at times and highly variable (Hettema et al., 2005). Other commonly identified, though limited in number of studies, behavioral applications of MI include diet and exercise (Burke et al., 2002; Burke et al., 2003, Burke et al., 2004; Dunn et al., 2001; Hettema et al., 2005), eating disorders (Burke et al., 2002; Dunn et al., 2001; Dunn, Neighbors, & Larimer, 2006; Hettema et al., 2005), obsessive-compulsive disorder (Maltby & Tolin, 2005), co-morbid psychosis and substance use (Kavanagh et al., 2004),

water purification/safety (Hettema et al., 2005), treatment adherence (Burke et al., 2002; Hettema et al., 2005), and gambling (Hettema et al., 2005; Wulfert, Blanchard, Freidenberg, & Martell, 2006). It is notable that results from these additional behaviors are often based on a relatively small number of studies, including some having only one.

In terms of efficacy related to the format of MI, studies have generally supported the finding that MI as a prelude or addition to other treatments demonstrates the largest effect sizes (Hettema et al., 2005) and is more efficacious than as a stand-alone intervention in substance-related studies (Burke et al., 2003), though findings generally support MI either as a prelude or stand-alone treatment (Burke et al., 2002). Additionally, despite tendencies for studies not to demonstrate the efficacy of MI over comparable alternative treatments, a number of authors suggested that MI may be an important consideration for treatment due to findings of its tendency to be shorter in duration and speculations regarding its potential benefits related to cost-effectiveness (Burke et al., 2003; Dunn et al., 2001; Vasilaki et al., 2006). The practical impact of MI has also been addressed, such as findings of 51% improvement of individuals with MI treatment versus 31% with no treatment or standard care, significant within-treatment effect sizes, significant reduction of drinking frequency, and effects on other substance-related issues such as legal difficulties (Burke et al., 2003), with conclusions that MI generally shows clinical significance (Burke et al., 2002).

Efforts to address internal validity concerns have led to the development of several instruments specifically designed to measure aspects of MI competence and implementation of MI-related principles and techniques, with Madson and Campbell (2006) providing a comprehensive review of the state of such measures. The authors

examined five instruments (four exclusively for MI), and noted common strengths (e.g., consistency with MI principles, usefulness in training and/or supervision) and areas for development (e.g., variable reliability ratings, questionable validity determinations). It was also noted that certain tools, such as the Motivational Interviewing Skills Code (MISC; Miller, Moyers, Ernst, & Amrhein, 2003) were designed primarily for research purposes, while others, such as the Motivational Interviewing Supervision and Training Scale (MISTS; Madson, Campbell, Barrett, Brondino, & Melchert, 2005) were intended to have more practical utility (Madson & Campbell, 2006).

A final important consideration for the current study involves the employment of MI in a group format within research studies. Some reviews (e.g., Burke et al., 2002; Burke et al., 2003) excluded studies that utilized a MI group intervention, though the reasons for this were unclear. Walters, Ogle, and Martin (2002) provided an in-depth discussion of possible advantages (e.g., diffusion of individual resistance in a group setting) and disadvantages (e.g., less individual time to engage in change talk) of group motivational interviewing. The authors reviewed empirical literature with MI in a group format, concluding that little support for efficacy with college age problem drinkers (three studies), "slim evidence" (p. 380) for efficacy with outpatient adults with alcohol or drug problems (four studies), and encouraging evidence for efficaciousness in other behavioral areas such as HIV-risk (three studies) exists. It is notable that the length of group interventions varied considerably across studies, for example ranging from one session to a six-week format for adult outpatients. Walters et al. (2002) also noted that only one study demonstrated comparable within-study results involving both group- and individually-delivered MI interventions, though since publication of this review, at least

one additional study directly comparing individual and group-based MI for inpatient adults with alcohol dependence was located (John, Veltrup, Driessen, Wetterling, & Dilling, 2003). These researchers found that group-based MI was differentially related to increased involvement in self-help groups at six months over individually-administered MI, though the differences had disappeared at 12 months. Additionally, recent studies found encouraging results for group-based MI interventions with female (LaBrie, Thompson, Huchting, Lac, & Buckley, in press) and coed (LaBrie, Lamb, Pedersen, & Quinlan, 2006) college student samples under adjudication for alcohol-related issues, as well as for alcohol use in freshman college students (Michael, Curtin, Kirkley, Jones, & Harris 2006).

Readiness to Change

A potential empirically and clinically useful concept emanating from theories of motivation and change is that of *readiness to change*. Although lacking a universal definition, several ideas are offered regarding the construct of client readiness. Britt et al. (2003) stated that from a TTM perspective, "readiness for change is seen as the extent to which the individual has contemplated the need for change, and a decision balance between the pros and cons of change" (p. 194). DiClemente et al. (2004) described readiness as "a more generic concept than stages. Readiness typically indicates a willingness or openness to engage in a particular process or to adopt a particular behavior and represents a more pragmatic and focused view of motivation as preparedness" (p. 104). Additionally, the authors stated that readiness itself may be further subdivided for consideration in terms readiness for making a change and readiness to engage in treatment.

Rollnick and Morgan (1996) espoused a conceptualization of readiness as a continuum along the stages of change, leading ultimately to a decision to change and actual behavioral change (see also Rollnick, Heather, & Bell, 1992). The authors noted that persons may move back and forth along the continuum, ambivalence and uncertainty are likely to be encountered along the continuum, and that resistance may reflect a therapist acting at a later point in the continuum than the client. They also stated that assessing client readiness may be accomplished either formally (e.g., questionnaire) or informally (e.g., questioning in session). Additionally, Rollnick (1998) described a highly state-like view of readiness as a variable that may change in small time frames, including within session and from moment-to-moment.

Motivational Interventions and Readiness to Change

The empirical research on MI has yet to produce clear evidence for how MI actually exerts its effects (Burke et al., 2003; Apodaca & Longabaugh, 2009), though more recent meta-analytic findings have found some support for potential mechanisms of change talk, client discrepancy, and treatment-provider behavior inconsistent with MI (Apodaca & Longabaugh, 2009). While increasing motivation to change is a key part of the description of MI by its originators (Miller & Rollnick, 2002), this has not emerged as one of its primary mechanisms to this point. As noted in a recent article reviewing some misconceptions about MI, MI and the TTM are not part of the same theory or based on each other (Miller & Rollnick, 2009). However, the authors noted as part of the common confusion, as well as the potential applicability of integrating these theories, that "the stages provided a logical way to think about the clinical role of MI and MI in turn provided a clear example of how clinicians could help people to move from

precontemplation and contemplation to preparation and action" (p. 130). In their review of MI and adaptations of motivational interviewing (AMI) literature, Burke et al. (2002) concluded that "there is little direct evidence thus far to suggest that AMIs actually work by enhancing motivation or readiness to change" (p. 245). However, they also noted that study findings for AMIs did tend to increase readiness to change following treatment, though not necessarily in comparison to treatment or control groups.

The meta-analysis by Apodaca and Longabaugh (2009) of 19 (of a possible 152 that involved individual treatment of substance disorders) MI studies meeting inclusion criteria included evaluation of readiness to change as one of the possible MI change mechanisms. The authors noted at least one study in which MI effectively increased readiness versus a placebo control, another two studies found no differences versus traditional care, and two others found better results with active treatments than stand-alone MI. They noted that as "a central goal of MI is to increase client readiness to change" (p. 711), these results were surprising, as was also surprising the lack of inclusion of an evaluation of participant readiness following treatment in comparison to outcomes in any of the studies included.

A number of potential factors could impact the mixed and generally insufficient findings for differential effects on stages of change of MI interventions. As noted in the present literature review, measurement of the stages of change and readiness in the TTM has been challenging, and stage assignment and classification has yielded inconsistent and variable results. Some studies primarily rely on stage classification and movement within those stages as the measure of change, while others utilize a continuous scoring method for readiness. Additionally, the level of initial motivation may impact results. For

example, in a study of motivational enhancement therapy as compared to cognitive

behavioral therapy for bulimia nervosa by Treasure et al. (1999) that found no significant

differential increase in readiness to change for the motivational intervention, all the

participants were classified as in either the contemplation or action stage at the initial

assessment. Given the presupposition that the motivational condition would be most

beneficial for those in earlier stages of change, the authors purported this as a potential

reason for the lack of effects on readiness to change and noted matching the specific

treatment (e.g., MI) to the stage of change (e.g,, precontemplation) as an important

consideration.

Several findings point to treatment matching of intervention to stage or readiness

to change as a potential factor in the effectiveness of motivational interventions, and from

a theoretical TTM perspective, such interventions should be most appropriate and

effective at earlier levels of change. Heather, Rollnick, Bell, and Richmond (1996) found

that overall there were no group (motivational versus skill-based counseling) differences

in alcohol consumption for participants assessed as ready versus not ready to change

utilizing a stages of change measure. Those classified as not ready to change (i.e., in the

precontemplation, contemplation, or preparation stage) participating in the motivational

intervention showed better consumption outcomes than those in the skills intervention.

However, as is evident, the dependent variable in these analyses involved alcohol

consumption rather than readiness to change. A study of patients with cocaine

dependence also found a matching effect in that patients receiving a pre-treatment MI

intervention who were initially classified as low in motivation were more likely to finish

a detoxification program than those not receiving MI, whereas initially highly motivated

patients were more likely to complete the program if not in the MI group (Stotts, Schmitz, Rhoades, & Grabowski, 2001). Again, the dependent variable in this analysis was not readiness to change, and when utilized as a dependent measure, readiness differences were not found. Taken together, these studies do appear to provide some evidence supporting the idea that motivational interventions may be more effective for those in earlier stages of change, at least in relation to some other specific treatment outcomes.

Applications of Readiness and Motivational Enhancement Principles to Anger Treatment

The need for anger treatments to consider clients' resistance, alliance issues, and motivation/readiness to change is well-documented in the anger literature, and a variety of approaches have been suggested. In fact, Kassinove and Tafrate (2002) suggested that the first step in the treatment of anger should be the assessment of and strategies to increase readiness to change. Recognizing that most anger management interventions are designed for clients in the action stage of change, a number of authors have recommended use of strategies and approaches for enhancing client readiness for change as a prerequisite to or during the initial phase of anger management (e.g., Deffenbacher, 1995, 1999; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Kassinove & Tafrate, 2002; Tafrate & Kassinove, 2003).

Intervention Strategies

A first and fundamental recommendation involves the nonjudgmental communication of acknowledgement, validation, and empathic understanding of the client's perception of transgressions or injustices experienced, irrespective of the clinician's agreement with such perceptions (Deffenbacher, 1999, 2006; DiGiuseppe,

1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994). A second commonly suggested strategy involves both an accurate assessment of the clients' own personal goals with regard to anger and/or treatment and the obtaining of collaborative agreement on the goals and focus of treatment (Deffenbacher, 1999; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994). This process is suggested as helping determine whether the clients' goals relate to changing anger at all, and if not, if a goal related to exploration of anger and potential related issues (e.g., functional aspects) can be agreed on. Additionally, agreement on the methods that will be used to work toward these goals should be sought as well.

Various other strategies and techniques that have been suggested in the anger literature relate to attempts to increase the client's awareness of anger-related experiences, beliefs, and/or outcomes. Recommended strategies include exploring and identifying the potential consequences of anger for the individual, reviewing negative consequences that have been empirically supported as related to anger, use of Socratic questioning to examine the evidence for or against a position, exploration of personal anger episodes/experiences (e.g., self-monitoring), exploration and delineation of short-term versus long-term outcomes of anger, imagery and/or memory techniques of personal anger experiences to increase awareness of one's own anger and/or possible effects of anger on others, exploration/challenging of beliefs about healthiness/helpfulness of cathartic anger expression, exploration of ideas of personal responsibility for feelings/emotions following clinician acknowledgement of perceived transgression, presentation and discussion of objective assessment feedback, and exploration of

incongruence between anger and personal goals or values (Deffenbacher, 1995, 1999; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2001, 2007; DiGiuseppe, Tafrate et al., 1994; Howells & Day, 2003; Kassinove & Tafrate, 2002; Tafrate & Kassinove, 2003).

Finally, additional strategies have been recommended by several authors, including the importance of helping clients understand that alternative (i.e., more functional) scripts for anger are available and that exploration of potentially healthier scripts may be helpful in increasing readiness to change (Deffenbacher, 1999; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994). Others have also discussed the importance of distinguishing between two major types of anger (i.e., dysfunctional and adaptive/functional; DiGiuseppe, 1995; DiGiuseppe, Tafrate et al., 1994), which would appear directly related to interventions targeting the exploration of emotional scripts and potentially beneficial alternatives.

Suggestions for Implementation of Motivational Intervention Strategies

It is important to note that several recommendations for addressing and increasing readiness to change cut across a number of the above suggestions. For example, the use of Socratic, open-ended questioning was often suggested as a method of exploring various issues related to the consequences of anger and awareness of anger-related concerns, rather than being limited to one particular topic. Various writers described the critical importance of the style of presentation utilized in the above interventions, including more recent suggestions for the applicability of Miller and Rollnick's (1991, 2002) MI principles for these purposes, especially early in anger treatment (DiGiuseppe

& Tafrate, 2001, 2007; Howells & Day, 2003; Kassinove & Tafrate, 2002; Tafrate & Kassinove, 2003). DiGiuseppe and Tafrate (2001) noted similarities in common occurrences of low motivation in the treatment of substance-related problems, from which MI emanated, as a justification for drawing on such ideas. Importantly, Kassinove and Tafrate (2002) asserted that use of an MI presentation style may be more likely to reduce resistant reactions from angry clients. Several examples in which use of MI may be applicable to the treatment of anger are described next.

Tafrate and Kassinove (2003) suggested that the exploration of anger consequences identified by empirical research may best be accomplished using MI strategies of eliciting clients' perceptions of potential consequences through open-ended questioning and using reflective responses that highlight client ambivalence, rather than use of a didactic/educational presentation (see also DiGiuseppe & Tafrate, 2007). DiGiuseppe and Tafrate (2007) also discussed the importance of eliciting and selectively reinforcing client statements that reflect potential problems as a means of identifying personal consequences. Other statements that would be classified as change talk (e.g., intentions to make a change) should be recognized and reinforced as well. Kassinove and Tafrate (2002) suggested that in the exploration of ambivalent feelings on the part of a contemplative anger client, both sides of the client's ambivalence would be examined without overt encouragement toward one or the other from the clinician. A final example is the recommendation that an MI presentation style (e.g., explorative and nonjudgmental open-ended questions and reflections) is the preferred manner of providing feedback to clients on the results of objective assessment instruments (DiGiuseppe & Tafrate, 2007). The goal was noted as presentation of the information for the client's consideration,

which may be rejected if desired, rather than a forceful attempt to obtain client acceptance of all findings.

Empirical Status of Motivational Enhancement and Transtheoretical Considerations for Problematic Anger

Despite the recommendations regarding the potential benefits and application of TTM- and/or MI-related strategies, the paucity of empirical research evaluating these issues was identified as a significant concern (Deffenbacher, 2006; DiGiuseppe & Tafrate, 2001, 2007; Howells & Day, 2003; Tafrate & Kassinove, 2003). Specifically with regard to research involving anger and TTM concepts, Howells and Day (2003) noted the limited work applying these concepts to anger treatment. Deffenbacher (2006) described potential consequences related to a lack of attention to stage-of-change considerations (e.g., impasses in treatment, premature termination) and noted a need for the development and evaluation of interventions "not for anger reduction, but for change of readiness for anger reduction" (p. 67). With regard to the application of MI principles and strategies to the treatment of problem anger, as recently as DiGiuseppe and Tafrate's (2007) text on anger disorders, the authors observed that "to date, no empirical outcome studies have appeared that use motivational interventions for anger" (p. 358; see also Howells & Day, 2003; Tafrate & Kassinove, 2003). The following paragraphs briefly review published and unpublished studies having possible direct or indirect relevance to the applicability of the above principles to anger treatment.

Anger management with offenders. The first area of inquiry involves the application of TTM constructs to the treatment of criminal offenders with anger problems. These studies are primarily of interest in relation to the present study in that

few other studies have been conducted which involved TTM-based stages of change

measures specifically aimed toward individuals with problematic anger. Williamson,

Day, Howells, Bubner, and Jauncey (2003) investigated the use of a modified stage-of-

change based questionnaire, the Anger Readiness to Change Questionnaire (ARCQ), with

a prison inmate population of 418 adult males across 32 cognitive-behavioral anger

management programs. In evaluating the predictive validity of readiness to change in

relation to anger treatment outcome, the investigators found that those individuals who

initially scored higher in readiness, or at a more progressive stage of change, showed

greater anger improvement versus controls, but did not find significant differences in

anger outcomes in those who demonstrated greater increases in readiness over the course

of treatment. The authors concluded that this supported readiness more as a moderator

than a mediator variable in its relation to treatment outcome. In an additional published

study involving the same research sample, Howells et al. (2005) found some support for a

relationship between outcome and a measure of treatment readiness. However, a

limitation of the study was noted in that the researchers found very small effects on actual

anger outcomes from the treatment program. It is worth noting that the measure of

readiness (i.e., ARCQ) used in this study was scored by dimensional stage allocation (i.e.,

precontemplation, contemplation, action) in statistical analyses, not as a continuous

readiness to change score. Additionally, the studies above did not incorporate a

motivational component as part of the empirical investigation.

In an unpublished doctoral dissertation, Johansen (2006) evaluated the

applicability of stage-of-change measures with 23 mandated male offenders at a

transitional living facility (following release from prison). A 10-week cognitive-

behavioral anger management group served as the intervention, and a stage-of-change measure was adapted to focus on anger. Results found no relationship between stage of change as measured and change in anger, no significant differences in stage of change from pre- to post-treatment, and no significant change in anger as a result of treatment. Several significant observations were reported, including the majority of individuals being classified in the action stage at initial assessment (e.g., with potentially little room for movement), small sample size, lack of a control group, and potential for biased responding (e.g., potential benefit in appearing highly motivated). Another unpublished dissertation by Frank (2006) studied the effectiveness of seven-session psychoeducational cognitive-behavioral groups for 74 incarcerated males. The ARCQ (Williamson et al., 2003) was utilized as a measure of readiness to change (scored as a continuous variable), with findings of significant increases in readiness from pre- to post-intervention. It is important to note, however, that only 24 participants were included in these analyses, participants' initial readiness to change scores were fairly high, the sample involved voluntary inpatient participants, readiness increased more in Spanish-speaking than English-speaking participants, and no analyses were conducted relating readiness to change with anger outcomes.

Taken together, the above studies provide some limited, though mixed, support for the use of TTM-based measures tailored to highly angry individuals. The potential utility of the ARCQ was supported by its reliability (particularly when scored as a continuous measure) in an offender population, as well as some degree of predictive validity. While readiness to change was not found to be significantly related to treatment outcome in the above studies, these findings should be considered in light of the overall

lack of evidence found in the studies for the efficacy of the anger programs utilized

(Frank, 2006; Johansen, 2006; Williamson et al., 2003), as well as the relatively high

level of initial readiness levels noted (Frank, 2006; Johansen, 2006).

Motivationl interviewing for domestic violence. As noted previously, anger and

aggression are related but distinct concepts; however, the application of MI principles to

the treatment of partner violence provides some basis for consideration given the role that

anger may often play in domestic violence (DiGiuseppe & Tafrate, 2007). Musser,

Semiatin, Taft, and Murphy (2008) evaluated a pre-treatment two-session MI intake in

the treatment of men in a domestic violence program. The researchers assigned (not

completely randomly, but in blocks) 108 men presenting for domestic abuse treatment to

either a two-session individual MI intake condition or a standard intake condition. The

majority of the sample (84%) had some type of legal involvement in their referral.

Participants in the MI condition received an MI-based individual intake interview spread

over two sessions, for a total of approximately four hours, and the second session

included provision of feedback in an MI format on several measures administered at the

first session, including the State Trait Anger Expression Inventory (STAXI; Spielberger,

1988). All participants were then referred to a 16-session cognitive-behavioral group

treatment for domestic abuse. A stages of change measure that had been adapted for

domestic violence was used to assess treatment readiness and was administered before

the intake assessment and again before the first treatment session. No significant

differences between conditions on readiness to change partner abusive behavior were

found, but a number of other factors (e.g., positive in-session behaviors, homework

assignment compliance) were found to be impacted by the MI condition.

Motivational enhancement for Posttraumatic Stress Disorder. A third area of inquiry with potential relevance to the application of motivational strategies with anger involves the utilization of TTM and/or MI principles in the treatment of individuals with Posttraumatic Stress Disorder (PTSD), a diagnosis for which difficulties with recurrent anger outbursts are a criterion in the *DSM-IV-TR* (American Psychiatric Association, 2000), though neither necessary nor sufficient for this diagnosis. Anger itself is not the primary and only target of the treatment studies described below. However, when the studies are considered together these were among the only located that specifically involved the three major constructs of interest in the present study: TTM stages of change/readiness to change applied to anger, a motivational enhancement intervention, and a significant number of individuals with anger problems. Rosen et al. (2001) evaluated the usefulness of TTM readiness concepts in relation to both alcohol and anger problems with 102 male combat veterans with PTSD in a residential treatment program. Utilizing a modified stage of change measure specific to anger (with classification into stages), the researchers found through cluster analysis that participants could be appropriately separated into distinct categories relatively consistent with the TTM (e.g., a precontemplation profile) and that these identified clusters for anger were weakly related to alcohol clusters (suggesting independence of the readiness measurement of these two problems). An interesting notation in the discussion of the results was the finding that despite nearly 75% of the sample acknowledging anger as a problem (which the authors describe as suggesting relatively high motivation), significant variability in participants' readiness to change anger problems was found. The authors also concluded that "it is likely that patients in the precontemplation cluster, even if aware of negative

consequences from their anger, tended to externalize blame rather than take responsibility for how they respond to perceived provocations" (p. 242). Although they made observations regarding participants in different stages of change receiving differential benefits from specific strategies (e.g., active anger management techniques for those in action or maintenance stages), it was unclear exactly how these conclusions were drawn from the obtained data and statistical analyses.

A subsequent study was conducted by Murphy et al. (2004) involving the evaluation of a seven-session motivational enhancement group for PTSD, the development of which is detailed in other writings (Murphy, Rosen, Cameron, & Thompson, 2002; Murphy & Rosen, 2006). Essentially, the group utilized both TTM and MI principles in a group format to address various problems commonly associated with PTSD, including anger, for which patients often experience ambivalence about change. A primary purpose of the group was assistance with decision-making regarding changing of "behaviors, coping styles, or beliefs not previously recognized as problematic in order to increase patient engagement in treatment and promote adaptive post-treatment coping" (Murphy & Rosen, 2006, p. 13), also described as progression through the stages of change. The general approach and presentation/strategies were specified as consistent with MI (e.g., roll with resistance, highlight discrepancies), with a description of the role of the clinician "explicitly as a consultant who provides input to patients' decisions rather than as an expert who bestows his or her own conclusions" (p. 14). Preliminary evidence regarding the utilization of this group with 243 inpatient male combat veterans with PTSD suggested that ambivalence about change or a low level of awareness regarding the need for change was commonly found for a variety of behaviors and symptoms,

especially anger (Murphy et al., 2004). Additionally, their results indicated increased willingness to admit to the potentially problematic nature of various problems while in treatment. However, this early evidence must be tempered by limitations in the study, such as the lack of a control group for comparison and the utilization of a uncommon form of assessing readiness to change (i.e., identification of particularly problems by patients' as *might have*, *don't have*, or *definitely have*) with undetermined statistical properties.

Murphy, Thompson, Murray, Rainey, and Uddo (2009) treated veterans with Posttraumatic Stress Disorder (PTSD) and multiple co-morbid problems with the group motivational enhancement intervention described above. The group included four, one and one half hour sessions focused on increasing awareness of problems related to PTSD that they may need to change in 114 male veterans. These possible problems were varied in nature, with alcohol and anger included as potential concerns. The University of Rhode Island Change Assessment Scale (URICA; McConnaughy et al., 1983) was utilized as a measure of readiness to change, and participants completed two of these measures that were to relate to specifically chosen issues. Results of this investigation found no significant differences on the URICA scores for participants in the treatment versus the control group. However, a higher number of participants in the treatment group switched problems they had labeled "might have" to "definitely have," which the authors again noted as evidence of an increase in readiness to change, as well as significant findings on another measure related to openness to the need for change and personal responsibility.

Taken together, the above studies provide some limited and preliminary support for the use of both TTM stages of/readiness to change concepts and motivational

enhancement interventions for individuals whose problems may commonly include problematic anger, similar to the goals of the present study. However, as previously noted, the presence of problematic anger is neither necessary nor sufficient for a diagnosis of PTSD, and the stages of change/readiness evaluations above were not consistently utilized and sometimes idiosyncratic in nature. Additionally, in the Murphy et al. (2009) study the URICA measure was not clearly determined as modified for anger but completed in relation to whatever specific problems were selected. The potential effects of administering the readiness to change measures in this manner are unclear, and the authors noted that study participants appeared to have difficulty following the instructions for completing the URICA in this manner.

Motivational enhancement, readiness, and anger: Findings from Project MATCH. Finally, a particular finding of a study that included hypotheses in the area of readiness to change alcohol problems, Project MATCH (Project MATCH Research Group, 1997a), is interesting to consider with respect to MI-related interventions and anger. Project MATCH was a large-scale, multisite study of interventions for alcohol dependence in two samples (i.e., aftercare and outpatient treatment) of participants. Though limited comparability may be made with the present research in that the Project MATCH study was not directly related to the conceptualization or treatment of anger problems, one of the *a priori* hypotheses of the study was that the motivational intervention (i.e., motivational enhancement therapy, MET; Miller, Zweben, DiClemente, & Rychtarik, 1992) would be differentially effective with participants higher in anger due to the potential for anger as a therapeutic impediment and the focus of MET on reducing resistance (Project MATCH Research Group, 1997b). Results provided some support for

this hypothesis in that MET was found to have better outcomes than cognitive behavioral therapy with outpatients for highly angry participants (though not as compared to twelve-step based therapy). Discussion of this finding included uncertainty regarding the meaning of several findings, including the lack of differences between MET and twelve-step based therapy with highly angry participants, the finding that participants low in anger faired more poorly with MET in comparison to both cognitive behavioral and twelve-step based therapy, and the failure to find this anger matching effect in the aftercare sample. It is worth noting, however, that "the anger match among the out-patients was the most consistent matching result across time, persisting throughout the year after the treatment and at the 39-month follow-up" (Project MATCH Research Group, 1998, p. 595).

Results of the Project MATCH study therefore provide some support for matching intervention (i.e., motivational enhancement) to level of anger, at least in a population of outpatients with alcohol problems. Primarily this would appear lend support to the idea that high anger may be an impediment to treatment due to higher resistance; though in that study, the resistance occurred in the context of treatment focused on participant's alcohol problems (versus anger issues). As described previously, the anger management literature reviewed for this study often suggests that in a given population with high anger, interventions may need to be tailored to individuals' readiness to change those anger problems, and that high resistance and low levels of readiness may often be present in such populations. Also as explicated in the above literature review, the TTM and motivational interviewing literature better support the re-conceptualization of traditional ideas of *resistance* in the context of dynamics of the

therapeutic relationship and motivation/readiness issues on the part of the individual. As further explicated below, the present study utilized the concept of matching individuals (by levels of both anger and readiness) to interventions in its attempt to identify those who would be considered most appropriate to receive a motivational intervention.

The Present Study

Four primary findings supported by the above literature review form the rationale for the present study. First, the area of problematic anger is a significant, commonly occurring, and challenging clinical problem that is often misunderstood, inconsistently defined, and under researched. Second, among the challenges facing clinicians working with angry clients, encountering resistance, difficulties in forming a therapeutic alliance, and low motivation or readiness for change are both frequent and potentially disrupting. Third, the applicability of concepts and strategies from theories of motivation and change to anger management is often stressed in the literature on the conceptualization and treatment of anger problems. Finally, despite increasing calls for the incorporation of motivational enhancement strategies in anger management programs, little research to date has explored the potential benefit of including such strategies.

The primary goal of the present study was to address the gap in the literature between recommendations for applying TTM- and MI-related principles to the conceptualization and treatment of anger and empirical research of such applications. In order to accomplish this task, a brief motivational group intervention, incorporating both TTM- and MI-based treatment strategies, was developed for the present study, implemented, and evaluated. This intervention sought to increase participants' readiness to change problems with anger and is designed for individuals high in anger and

relatively low in readiness to change anger issues. The primary focus of the intervention was increasing participants' awareness of possible anger problems (e.g., through exploration of consequences related to anger and pros and cons of changing angry behaviors and feelings), and the delivery was conducted in a manner consistent with fundamental TTM and MI principles.

A brief overview of the development of the intervention and its major components is provided here, while a full description of the group and its components is provided in Appendix A. In addition, Appendix B contains an overview of the group utilized for training purposes that briefly reviews the literature and principles on which the intervention is based, along with explicit recommendations and guidelines for group facilitation, including the style of presentation and discussion of information in the group as consistent with MI principles (e.g., a focus on elicitation versus didactic presentation). Overall, choice of interventions for the micro-modules was based on the above review of the literature on the TTM, MI and its adaptations, and anger treatment. Additionally, the group intervention was reviewed by an expert in the treatment of anger, Eric R. Dahlen, PhD, and an expert in motivational interviewing, Michael B. Madson, PhD, with incorporation of suggestions for revisions to the manual.

The introductory section of the group intervention included an introduction of the leader and members, a review of the purpose of the group (i.e., exploration of various aspects of anger), a review of group rules and expectations (e.g., confidentiality and exceptions to confidentiality), an exploration of pertinent anger concepts (e.g., participants' definitions of anger, differences between anger and related concepts), and an overall focus on establishing initial rapport with group members (e.g., expressing

empathy). From the introductory section forward, emphasis was placed on development of rapport, including the expression of empathy. Additionally, a brief exploration of anger definitions was included to help set the stage for the remainder of the group.

The first micro-module, titled "Common Anger Episodes/Expressions/Triggers," included distribution and discussion of personalized feedback on anger assessment measures completed by participants. Incorporation of personalized feedback is a frequently included component of both brief interventions and motivational interviewing adaptations (Burke et al., 2002), with notation that evidence for whether feedback, MI, or the combination of both are involved in the mechanisms of change for MI is insufficient. Additionally, DiGiuseppe and Tafrate (2007) recommended the use of feedback on the results of standardized instruments as part of the process of preparing individuals for anger treatment, particularly with the use of an MI style for the feedback (see also Deffenbacher, 1995). The remaining core objectives of Micro-Module 1 involved collaborative identification and exploration of typical anger episodes/patterns, factors contributing to significant feelings of anger, and common forms of anger expression. These three foci were considered consistent with a common issue and challenge identified for angry clients of impaired ability to distinguish between functional and dysfunctional anger and access to alternative potential *scripts* for anger expression (Deffenbacher, 1999; DiGiuseppe, 1995; DiGiuseppe, Eckhardt et al., 1994; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate et al., 1994). Within this section, group members were asked to identify multiple types of anger reactions and expressions, potential triggers for anger, and potentially healthy and unhealthy ways they have managed their

anger. This process was intended to set the framework for an in-depth exploration of participants' anger experiences and expressions in the subsequent micro-modules.

Micro-Module 2, "The Good Things and the Less Good Things," included the primary objectives of exploring members' awareness and feelings about anger consequences, the pros and cons of anger experiences and expressions, short versus long-term effects of anger, and initial discussion of ambivalence about anger. The primary tool utilized to accomplish this exploration was a handout titled the *Anger Awareness Window*. This activity was adapted here for specific use with anger from the motivational group work with substance abuse clients described by Ingersoll, Wagner, & Gharib (2002). With angry individuals, the anger awareness activity was intended to also address one of the specific problems that may arise in working with anger clients: lack of awareness of and/or agreement on the consequences of anger issues (particularly short-term versus long-term consequences; Kassinove & Tafrate, 2002; DiGiuseppe, Tafrate et al., 1994). This section was also recommended as an appropriate place in the group discussion to illuminate and explore possible dysfunctional beliefs about anger, such as that cathartic anger expression is healthy and that anger as an effective means of controlling others (see DiGiuseppe, Tafrate, et al., 1994; Howells & Day, 2003; Tafrate & Kassinove, 2003; and DiGiuseppe & Tafrate, 2007 for further explication of problematic beliefs likely to impact anger treatment).

The third and final micro-module, called "Pros and Cons of Changing and Staying the Same," included the objectives of increasing awareness of ambivalent feelings related to anger and its consequences and about the possibility of changing one's anger. These objectives were primarily accomplished through use of an activity entitled the *Decisional*

Balance Worksheet, which again was adapted from an activity described in the text on motivational groups for substance use by Ingersoll et al. (2002). The main goal of decisional balance exercises are to highlight and increase understanding of both sides of an issue, which as noted by Miller and Rollnick (2002) in their MI text "has the advantage of getting people talking and feeling comfortable and also of clarifying both sides of their ambivalence" (p. 80). Given that lack of agreement on the focus or goal of treatment (i.e., anger) has been a commonly identified potential impediment in the treatment of anger (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2001), part of the goal in the current intervention of highlighting the ambivalence about the problem through use of the decisional balance technique was to assist in increasing awareness of the pros of changing and cons of the status quo in order to facilitate movement toward participants' view of anger as a reasonable and appropriate target of treatment.

The closing section focused on concluding the group by reviewing the themes and patterns described by group members during the group discussion and sharing thoughts and feelings about the group. Because MI is a relationship approach rather than a technique (Miller & Rollnick, 2002; 2009), the various techniques outlined above were considered integral to the standardized administration of the group intervention but not as important as the MI style with which the group was facilitated.

<div align="center">Research Questions</div>

This study addressed the following specific research questions:

1. Is the single-session group motivational enhancement intervention developed here efficacious for increasing readiness to change problematic anger?

2. Is the single-session group motivational enhancement intervention developed here efficacious for increasing short-term treatment-seeking behaviors?

3. Can any treatment gains (i.e., increased readiness to change) from such an intervention be maintained over a short-term follow-up?

CHAPTER II

METHODOLOGY

Participants

A power analysis was conducted to determine the number of participants that would be necessary for the present study. This analysis was based on a mixed 2 (Group) X 2 (Time) Analysis of Variance (ANOVA) design where Group assignment serves as a between-subjects variable with two levels (Treatment Group vs. no-treatment Control Group) and Time serves as a within-subjects variable with two levels (pre-treatment vs. post-treatment). Given that a sample size of approximately 30-35 participants per between-subjects condition should yield 75% power to detect a moderate relationship (Borenstein, Rothstein, & Cohen, 1997), the present study required a minimum of 60 completers. For the purposes of the study, participants designated as completers were those finishing Phases I and II of the process, described in detail below.

Participants included undergraduates enrolled in psychology courses at The University of Southern Mississippi (USM). A total of 608 college student volunteers were screened during the Phase I (i.e., screening) time period for inclusion in this study. Of those screened, one participant was dropped due to missing data. Of the remaining 607 participants, 156 (25.7%) met inclusion criteria for the rest of the study. Of those qualifying, 70 (44.8%) completed Phase II (i.e., intervention) of the study ($n = 35$ in the Treatment Group and $n = 35$ in the Control Group). However, one participant was dropped from analyses due to failure to complete the ARCQ, leaving a total of 69 (44.2%) participants ($n = 34$ in the Treatment Group and $n = 35$ in the Control Group). Of the 69 participants who completed Phase II, 53 (76.8%) also completed Phase III (i.e.,

follow-up) of the study. Of the Phase III participants, the Treatment Group demonstrated 29.5 % attrition and the Control Group demonstrated 17.1% attrition for a loss of 10 participants ($n = 24$) and 6 participants ($n = 29$), respectively. The demographic characteristics of treatment and control participants in Phase II and Phase III are presented in Table 1.

<div align="center">Instruments</div>

Screening Form

The Screening Form (Appendix C) requested name and contact information for participants and was administered during the screening phase of the study. Participants were also asked to create code names that were used to maintain confidentiality throughout the study, and instructions regarding the creation and use of the code names were provided.

Demographic Form

The Demographic Form (Appendix D) requested basic demographic data (i.e., date of birth, sex, age, race/ethnicity, gender, marital status, year in college). Also included on this questionnaire were questions of whether they were currently enrolled in an anger management treatment program (or participated in or completed a program within the past 12 months) or any other form of mental health counseling (including, if appropriate, for what issue), and whether they were currently taking psychotropic medications (and if so, what specific medications). Finally, potential participants were asked to rate the degree to which they have a problem with anger on a 5-point scale. This form was administered during the screening phase of the study.

Table 1

Demographic Characteristics of Phase II (n = 69) and Phase III Participants (n = 53)

| | Phase II | | | | Phase III | | | |
| | Treatment | | Control | | Treatment | | Control | |
Characteristic	N	%	n	%	n	%	n	%
Age (years)								
18-25	32	94	32	92	22	92	27	93
26-34	2	6	3	8	2	8	2	7
Gender								
Male	3	9	4	11	2	8	3	10
Female	31	91	31	89	22	92	26	90
Marital Status								
Single	28	82	33	94	20	83	28	97
Married	3	9	1	3	3	12	0	0
Other	3	9	1	3	0	0	1	3
Year in College								
Freshman	10	29	11	31	7	29	10	35
Sophomore	14	41	8	23	8	33	7	24
Junior	5	15	7	20	5	21	5	17
Senior	5	15	9	26	4	17	7	24
Race/Ethnic Group								
African American	14	41	8	23	7	29	6	21
Caucasian	19	56	24	68	16	67	20	69

Table 1 (continued).

Demographic Characteristics of Phase II (n = 69) and Phase III Participants (n = 53)

	Phase II				Phase III			
	Treatment		Control		Treatment		Control	
Characteristic	*N*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Race/Ethnic Group								
Hispanic	1	3	1	3	1	4	1	3
Did not Identify	0	0	2	6	0	0	2	7

Anger Readiness to Change Questionnaire

The Anger Readiness to Change Questionnaire (Williamson et al., 2003; Appendix E) was adapted specifically for the measurement of anger-related readiness to change from the Readiness to Change Questionnaire (RCQ; Rollnick, Heather, Gold, & Hall, 1992), a 12-item instrument designed to measure concepts related to Prochaska and DiClemente's (1982) stages of change concepts of the transtheoretical model of change (TTM). Items are presented in a Likert-scale format with five options ranging from strongly disagree (− 2) to strongly agree (+ 2), with each of three scales (i.e., precontemplation, contemplation, and action) yielding a score from − 8 to + 8. The ARCQ can be scored either categorically (through stage assignment based on highest stage score called the Quick Method, or through meaningful pattern analysis called the Refined Method as suggested by Heather & Rollnick, 1993) or on a continuum yielding one Readiness to Change Score (RCS) with higher scores corresponding to more advanced stages of change (Williamson et al., 2003). The RCS is obtained by reversing the score on the precontemplation scale and adding it to the scores on the contemplation

and action scales, with a subsequent possible range from – 24 to + 24. When used as a continuous measure of readiness the ARCQ demonstrated good internal consistency (α = .82), and evidence of validity has been provided through factor analytic methods and convergence with other readiness measures (Williamson et al., 2003). Citing Budd and Rollnick's (1996) confirmatory factor analysis of the RCQ, which found the best fit in a single second-order factor, Williamson et al. (2003) noted that findings suggest a good fit for data using a continuous measurement of readiness to change, and they concluded that the ARCQ can best be utilized in this manner. Given the goals of the present study and the findings noted above involving the RCQ and ARCQ, the ARCQ was scored as a continuous dimension of readiness for change anger, utilizing the RCS as the primary variable of interest for statistical analyses.

State-Trait Anger Expression Inventory-2

The State-Trait Anger Expression Inventory-2 (Spielberger, 1999) is a 57-item self-report instrument developed for the purpose of assessing the experience and expression/control of anger. Items on the STAXI-2 are presented in a Likert-type format ranging from 1 (almost never) to 4 (almost always) and are rated at a 6th grade reading level. The STAXI-2 was normed on both normal adult and inpatient psychiatric patient populations. Alpha coefficients were generally high (.84 or greater) and exceeded .70 for all groups. The STAXI-2 is divided into six primary scales, five of which were used in the present study. The T-Ang scale (Appendix F) assesses one's tendency to experience state anger and includes Angry Temperament (T-Ang/T) and Angry Reaction (T-Ang/R) subscales. T-Ang has a long history of extensive use in the study of anger and was not changed in the second edition of the STAXI (Spielberger, 1999). Evidence of convergent

and discriminate validity comes from comparisons with many other measures of mood, cognition, and behavior (Deffenbacher et al., 1996; Spielberger, 1999). The state-trait theory of anger on which the T-Ang scale is based has also received considerable support in the literature, demonstrating the measure's construct validity (Deffenbacher et al., 1996; Spielberger, 1988, 1999).

The remaining subscales include two measures of anger expression and two measures of anger control (Appendix G): Anger Expression-Out, Anger Expression-In (AX-I), Anger Control-Out (AC-O), and Anger Control-In (AC-I). AX-O assesses the aggressive expression of anger toward other persons or objects, while AX-I measures the tendency to hold in or suppress feelings of anger. AC-O taps the prevention of external anger expression toward others or objects, and AC-I evaluates the control of anger through efforts to calm down or cool off. Evidence of convergent and discriminate validity comes from comparisons with other measures of anger and theoretically similar and dissimilar constructs and from findings that STAXI-2 scores have physiological and behavioral correlates (Spielberger, 1999).

The T-Ang and AX-O scales were the primary scales of interest for the present study and were used as part of the inclusion criteria for the study and used secondarily as measures of potential change in participants' anger level and reactions, though given the primary focus of the intervention on increasing participant readiness to change versus changing problematic anger, hypotheses regarding possible changes on these scores are not included. The scales measuring participants' typical style of expression and control of anger were also used in secondary analyses. Finally, participants in the Treatment Group

received a Personal Feedback Form (Appendix H) regarding their results on the T-Ang,

T-Ang/T, T-Ang/R, AX-O, and AX-I scales.

Rating Forms

All participants in the second phase of the study completed a Rating Form,

developed by the researcher for the present study, at the immediate post-experimental

intervention time period. Depending on group assignment, participants received either

Rating Form A (Appendix I) if assigned to the Treatment Group or Rating Form B

(Appendix J) if assigned to the no-treatment Control Group. Rating Form A consisted of

nine questions regarding participants' views of having anger problems, likelihood of

seeking treatment for anger, ratings of the group, ratings of the facilitator, and the

helpfulness/unhelpfulness of the group. The first seven questions were rated on a scale

from 1 to 5, with lower numbers representing poorer ratings, while the last two questions

(regarding group helpfulness) were open-ended questions with space for comments. The

purpose of Rating Form A was two-fold. First, it was constructed to assess participants'

subjective assessment of having an anger problem and self-reported intention to seek

treatment following the experimental group intervention. Second, it was intended to

provide an assessment of the quality of the group intervention and facilitation from

participants' perspectives. Rating Form B consisted of the first two questions from Rating

Form A regarding participants' ratings of their views of having an anger problem and the

likelihood of seeking treatment for anger. These questions were scaled from 1 to 5, with

lower number represented poorer ratings. Rating Form B was included to provide a

comparison point for participants in the control group on these two questions of interest.

Follow-Up Questionnaire

Approximately one month from the immediate post-intervention time period, all participants from the second phase of the study were requested to complete a Follow-up Questionnaire (Appendix K). This questionnaire was developed for the present study and included four questions. The first asked participants to rate the degree to which they have an anger problem on a 5-point scale. The next question requested that participants rate the degree to which they had considered seeking treatment for anger within the past month (rated on a scale from 1 to 5), while the third inquired as to whether participants have enrolled or attended an anger management program within the past month (yes or no). The final questions asked participants who had not enrolled in or attended an anger management program in the previous month to indicate contributing factors (from a list provided followed by a space to write in additional reasons) to a participant's decision (e.g., anger is not a problem, discomfort disclosing personal information). The Follow-up Questionnaire was included to assess participants' self-reported time spent considering seeking help, actual treatment-seeking behaviors on the part of participants' between the completion of the intervention and one-month follow-up, and possible contributing factors affecting a decision not to seek treatment.

Procedure

Because data were collected over multiple points in time using multiple methods, the study was divided into 3 phases: screening (Phase I), experimental intervention and post-intervention assessment (Phase II), and follow-up (Phase III). Table 2 provides a summary of the three phases, including procedures utilized and instruments administered.

Table 2

Flowchart for Study Phases I, II, and III

Phase I (Screening)
• Conducted on-line

- o Participants signed up via Experimetrix research website

- o Instruments administered: Consent Form; Demographic Questionnaire; Screening Form; ARCQ; STAXI-2

- o Required inclusion criteria: 18 years or older; score in the upper quartile on T-Ang or AX-O scales of the STAXI-2; RCS of 10 or less on the ARCQ; not currently receiving professional anger treatment

- • Approximate time: 30 minutes

- • Participants received 1 research credit

Phase II	
Experimental Intervention	Post-Intervention Assessment
• Conducted in person	• Conducted in person
• Participants were randomly assigned to Treatment or Control Group	• Participants in Treatment Group completed assessment immediately following experimental group intervention
• Participants were contacted via phone and/or email to time on campus	
• Treatment Group:	• Instruments administered:
o Completed Group Confidentiality Contracts	o Treatment Group: Rating Form A; ARCQ; T-Ang
o Participated in 90-minute Motivational Anger Group	o Control Group: Rating Form B; ARCQ; T-Ang
o Approximate time: 90 minutes	• Approximate time: 15 minutes

Table 2 (continued).

Flowchart for Study Phases I, II, and III

Phase II	
Experimental Intervention	Post-Intervention Assessment

• Control Group:
 	
    o Participants proceeded directly to
 	
    Post- Intervention Assessment
	• All participants received 4 research
	
	credits

Phase III (Follow-Up)

• Conducted on-line
 	
• Treatment Group:
 	
    o Participants were contacted via phone or email approximately 1 month following
 	
    Phase II
 	
    o Instruments administered: ARCQ; STAXI-2; Follow-up Questionnaire
 	
• Approximate time: 30 minutes
 	
• Participants received 1 research credit
 	
• Entered into a drawing for 1of 6 Target or Amazon.com gift cards (if requested)

Note. ARCQ = Anger Readiness to Change Questionnaire; STAXI-2 = State-Trait Anger Expression Inventory-2; T-Ang = Trait Anger Scale; AX-O = Anger Expression-Out; RCS = Readiness to Change Score.

Phase I: Screening

       To be eligible to participate in this study, prospective participants underwent screening to make sure that they were generally angry and not already highly motivated to change their anger. Specific inclusion criteria were: (1) at least 18 years old, (2) scored in the upper quartile on the Trait Anger (T-Ang) subscale or the Anger Expression–Out (AX-O) subscale of the State-Trait Anger Expression Inventory-2 (STAXI-2;

Spielberger, 1999), (3) obtained a Readiness to Change Score (RCS) on the Anger

Readiness to Change Questionnaire (ARCQ; Williamson, Day, Howells, Bubner, &

Jauncey, 2003) of 10 or less, and (4) were not already enrolled in anger treatment. As

there were no previously recommended RCS cut-off scores for specifically determining

high versus low levels of readiness to change, early screening data were reviewed to

determine a cut point that appeared to eliminate those thought to be highest in readiness

to change. This cut point was set at an RCS of 10, and those screening participants falling

above this level were excluded from the remainder of the study. The total number of

participants excluded due to RCS scores greater than 10 was 45, which was 22% of those

participants meeting all other inclusion criteria ($n = 201$).

Potential participants were recruited through the department's research website

(www.experimetrix.com) and completed a consent form (Appendix L) and the following

instruments online: Screening Form, Demographic Form, ARCQ, and STAXI-2. This

process took approximately 30 minutes and was worth one research credit. Potential

participants were informed that they had the potential to earn up to five additional

research credits if they qualified for the study and completed the remaining phases.

Additionally, they were informed that following completion of all three phases of the

experiment, participants would be entered in a drawing to receive one of six $40.00 gift

certificates to Target or Amazon.com if entering is requested (Appendix M). Approval

for this protocol was obtained from the Institutional Review Board (see Appendix N).

Phase II: Experimental Intervention and Post-Intervention Assessment

Participants meeting inclusion criteria ($n = 156$) were randomly assigned to one of

two conditions: Treatment or Control. Within approximately two to three weeks, they

were then contacted via telephone or email by the researcher to schedule a time to come
to campus. Across both conditions, participants were asked to come to a specified
classroom in the psychology building. They were given information for potential meeting
times over a two-week period for which they were asked to sign up for an approximate
two-hour block of time. These participants were scheduled to form small groups ranging
in size from 3-6 members. Participants were informed of their assigned condition when
they arrived for their scheduled time slot. A total of 35 participants completed Phase II
for each condition, though one participant was dropped from analyses due to missing data
($n = 35$ for the Treatment Group and $n = 35$ for the Control Group).

  Treatment group. Participants assigned to the Treatment Group received the 90-
minute Motivational Anger Group intervention developed for this study (see Appendix
A) conducted by one of two trained graduate research assistants. Training of graduate
assistants regarding the implementation of the group intervention was conducted by the
researcher and included a 2-hour in-person training session, additional feedback,
recommendations, and communication with the researcher by e-mail, as well as
additional required and recommended readings in relevant areas. Both research assistants
were female and advanced graduate students enrolled in the Counseling Psychology
doctoral program at The University of Southern Mississippi. Each had completed a
minimum of one semester of supervised counseling practicum experience, and both had
received training in the provision of anger management services by an expert in anger
management treatment, Eric R. Dahlen, PhD. Neither research assistant had previously
participated in formalized training for Motivational Interviewing.

Upon arrival at the scheduled group time, each Treatment participant was required to complete a Group Confidentiality Contract (Appendix O). Within the introductory section of the group, participants were also reminded that the session was being recorded, including a review of the purpose of this procedure and the disposition of the tapes as outlined in the consent procedures. As part of Micro-Module 1, participants were distributed brief personalized feedback (Appendix H) on anger assessment results from the STAXI-2 completed during Phase I. This was accomplished by providing sealed envelopes that participants selected by code name. Participants were then asked to review the forms individually while being provided feedback on the meaning of the results by the group facilitator. Micro-Modules 2 and 3 involved activities and discussion to increase participants' awareness of anger issues and highlight ambivalence about changing anger. At the conclusion of the group, participants were distributed handouts containing information on common negative consequences of anger and specific local community resources for anger management treatment.

Control group. This condition was designed to be a no-treatment Control Group so that participants received no active treatment or placebo. Participants in this condition proceeded directly to the Post-Intervention Assessment conducted by a third graduate research assistant not involved in the provision of the group intervention.

Post-intervention assessment. Participants in both experimental conditions completed the following questionnaires: Rating Form A (Treatment Group) or B (Control Group), the ARCQ, and the T-Ang scale. Participants in the Treatment Group completed these questionnaires immediately after the completion of the Motivational Anger Group intervention; those in the Control Group completed the questionnaires in lieu of

treatment. At this point in the study, all participants received four research credits. Participants were informed that they would be contacted by telephone and/or e-mail in approximately one month with a reminder and instructions regarding filling out the final series of questionnaires on-line. Additionally, all participants, regardless of group assignment, received a listing of local treatment agencies that provide anger management treatment services (Appendix P). This portion of the study lasted approximately fifteen minutes.

Phase III: Follow-Up

All participants ($n = 69$) were contacted via phone and/or e-mail approximately one month after the completion of Phase II and given instructions to log on to the Experimetrix website in order to complete the final set of questionnaires. These questionnaires included the ARCQ, STAXI-2, and the Follow-up Questionnaire. This phase of the experiment lasted approximately 30 minutes. Those completing the final set of questionnaires received one research credit and were entered into a drawing to receive one of six $40.00 Target or Amazon.com gift cards if requested. A total of 53 participants completed Phase III ($n = 24$ in the Treatment Group and $n = 29$ in the Control Group).

<div align="center">Hypotheses</div>

To address the primary research questions posited in this study, the following statistical hypotheses were developed. Any additional analyses conducted outside of these hypotheses were considered secondary to the purpose of the study.

1. Treatment participants will demonstrate a within-subjects difference on Readiness to Change (RCS) scores (obtained from the ARCQ) such that post-intervention (Phase II) RCSs will be higher than screening (Phase I) RCSs.

2. There will be a between-groups difference (treatment versus control) at the post-intervention time period (Phase II) in that RCSs of treatment participants will be higher than control participants.

3. There will be a between-groups difference (treatment versus control) at the follow-up time period (Phase III) in that RCSs of treatment participants will be higher than control participants.

4. For treatment participants, post-intervention (Phase II) RCSs will be positively related to reported treatment-seeking behaviors (i.e., participant self-report of having sought out anger treatment services) at the follow-up (Phase III) time period.

5. Treatment participants will report more treatment-seeking behaviors at the follow-up (Phase III) time period than control participants.

CHAPTER III

RESULTS

Preliminary Analyses

Scale Reliabilities

Reliability analyses were conducted on all measures administered at Phase I utilizing the entire sample ($N = 607$) to assess internal consistency (see Table 3). Adequate alpha coefficients (i.e., $\alpha > .70$) were found for all measures except the Precontemplation scale of the ARCQ ($\alpha = .60$). As planned, the primary statistic of interest from the ARCQ was the overall Readiness to Change Score (RCS); therefore, primary analyses were not affected by the low internal consistency of the Precontemplation scale.

Screening Measure Characteristics

As part of the Phase I screening process to determine eligibility for continuation in the remaining phases of the study, participants were required to demonstrate clinically significant levels of anger. This was determined by evaluation of scores on the Trait Anger Scale (T-Ang) and Anger Expression-Out (AX-O) subscale of the State-Trait Anger Expression Inventory (STAXI-2). Participants' scores on at least one of these scales were required to fall in the upper quartile (i.e., "high" scores) according to norms adjusted for age and gender.

Means and standard deviations on Phase I screening measures for Phase II participants are presented in Table 3.

Table 3

Phase II Participants' Screening Measures

Measure	α^a	Treatment		Control	
		M	*SD*	*M*	*SD*
ARCQ					
RCS	.86	3.87	5.95	2.11	6.70
Precontemplation	.60	1.82	2.54	.74	2.74
Contemplation	.80	1.48	3.20	1.25	3.32
Action	.79	.57	2.77	.12	2.61
STAXI-2[b]					
T-Ang	.87	24.50	6.57	23.51	4.83
AX-O	.79	20.38	4.52	18.69	2.92
AX-I	.75	19.71	4.10	18.40	4.93
AC-O	.87	19.53	4.75	20.11	4.03
AC-I	.87	20.24	4.39	18.03	5.19

Note. Treatment Group $n = 34$ and Control Group $n = 35$. ARCQ = Anger Readiness to Change Questionnaire; RCS = Readiness to Change Score; STAXI-2 = State-Trait Anger Expression Inventory-2; T-Ang = Trait Anger Scale; T-Ang/T = Angry Temperament; T-Ang/R = Angry Reaction; AX-O = Anger Expression-Out; AX-I = Anger Expression-In; AC-O = Anger Control-Out; AC-I = Anger Control-In.

[a]Reliability estimates based on entire Phase I sample ($N = 607$)

A multivariate analysis of variance (MANOVA) was conducted on data from all Phase II participants on the screening measures at the Phase I time period (i.e., RCS, T-Ang, AX-O, Anger Expression-In, Anger Control-Out, and Anger Control-In) to determine if any differences were demonstrated across the two treatment conditions (Treatment Group and Control Group) following random assignment to the conditions. The multivariate test was

not significant, $F(6,62) = 1.68$, $p = .141$. It was noted that Levene's test evaluating homogeneity of variance across the groups suggested unequal error variances for the AX-O ($F = 4.94$, $p = .03$) subscale of the STAXI-2. However, given that the sample sizes were comparable, ANOVA has been shown to be robust to violations of equal variance (Hair, Black, Babin, Anderson, & Tatham, 2006).

Participant Attrition

As noted previously, there was a 29.5% (i.e., 10 participants) attrition observed for participants in the Treatment Group and a 17.1% (i.e., 6 participants) attrition in the Control Group between Phases II and III of the study. Analyses were conducted using demographic data and measures administered during Phase I to evaluate whether attrition may have been related to these variables. Results of chi-square analyses for categorical demographic variables (i.e., gender, race/ethnicity, marital status, year in college, and status in counseling other than anger management) and logistic regression analysis for age and Phase I screening measures (i.e., Readiness to Change Score, Trait Anger Scale, Anger Expression-Out, Anger Expression-In, Anger Control-Out, and Anger Control-In) were non-significant, suggesting that attrition could not be predicted by any of these variables in the study.

Perceptions of Treatment and Therapists

In order to assess the quality of the Motivational Anger Group intervention, Treatment Group participants were asked to rate their experience in the group along several dimensions (e.g., the overall quality of the group) on a scale from 1 to 5, with lower scores representing poorer ratings. Table 4 presents the means, standard deviations, and rating percentages for these questions.

Table 4

Treatment Group Participants' Ratings of the Group Experience

Question	M	SD	Ratings (%)				
			1	2	3	4	5
How would you rate the overall quality of the group in which you participated?	4.50	.66	0	0	9	32	59
How much do you feel you learned from the group?	4.15	.82	0	3	18	41	38
How likely would you be to recommend the group to others?	4.12	1.01	3	3	18	32	44
How would you rate the group leader's interest in you as a group member?	4.56	.61	0	0	6	32	62
How would you rate the clearness of the group leader's communication to the group?	4.82	.39	0	0	0	18	82

The majority of participants rated the overall quality of the group at a 4 (32%) or 5 (59%), as well as how much they felt they learned from the group (41% and 38%, respectively). Participants generally reported their likeliness to recommend the group to others at a 4 (32%) or 5 (44%). With respect to group leader characteristics, most participants rated the group leader's interest in them at a 4 (32%) or 5 (62%), and all participants rated the clarity of the leader's communication at a 4 (18%) or 5 (82%).

Given that two different research assistants were involved in conducting the group intervention, additional analyses were conducted to determine if differences existed in the ratings of the group intervention and leader depending on the facilitator. Levene's test of homogeneity of variance was significant ($F = 7.342$, $p = .011$) for one of the items (*How would you rate the clearness of the group leader's communication to the group?*), suggesting that the variance of the groups on this item could not be assumed to be equal. Because the sample sizes of the two groups across leader were also unequal (i.e., $n = 21$ and $n = 13$), a non-parametric Mann-Whitney U test was conducted on these items to determine if differences existed, which found no significant results for any of the questions. These results suggest that group leaders did not have a differential impact on perceptions of the facilitators or intervention.

Primary Analyses

A primary intention of the present study was to determine whether a brief, one-session motivational group intervention would be effective in increasing readiness to change (as measured by the RCS) for individuals with problematic anger. In order to evaluate this question, a mixed 2 (Group) X 2 (Time) Analysis of Variance (ANOVA) was conducted utilizing the RCS at the Phase I (pre-treatment) and Phase II (post-treatment) time periods as the within-subjects factor and group assignment (Treatment or Control Group) as the between-subjects factor. Means, standard deviations, and results of the ANOVA are presented in Table 5. Significant main effects were found for both group assignment (Treatment versus Control) and time period (Phase I and Phase II). Additionally, a significant interaction was found for group assignment by time period (see Figure 1). Effect sizes for each of these significant findings were small.

Table 5

Means, Standard Deviations, and ANOVA Results for Group Differences (Treatment Versus Control) on Readiness to Change Scores

(RCSs) at Phase I and Phase II Time Periods

Time	Treatment $n = 34$		Control $n = 35$		ANOVA					
	M	SD	M	SD	Group F	η^2	Time F	η^2	G X T F	η^2
					5.26*	.07	6.40**	.09	5.56*	.08
Phase I	3.87	5.95	2.11	6.70						
Phase II	7.12	5.98	2.23	7.67						

Note. G = Group; T = Time. η^2 = effect size. Degrees of freedom for all ANOVA F values = (1,67).

*p = .02.

**p = .01.
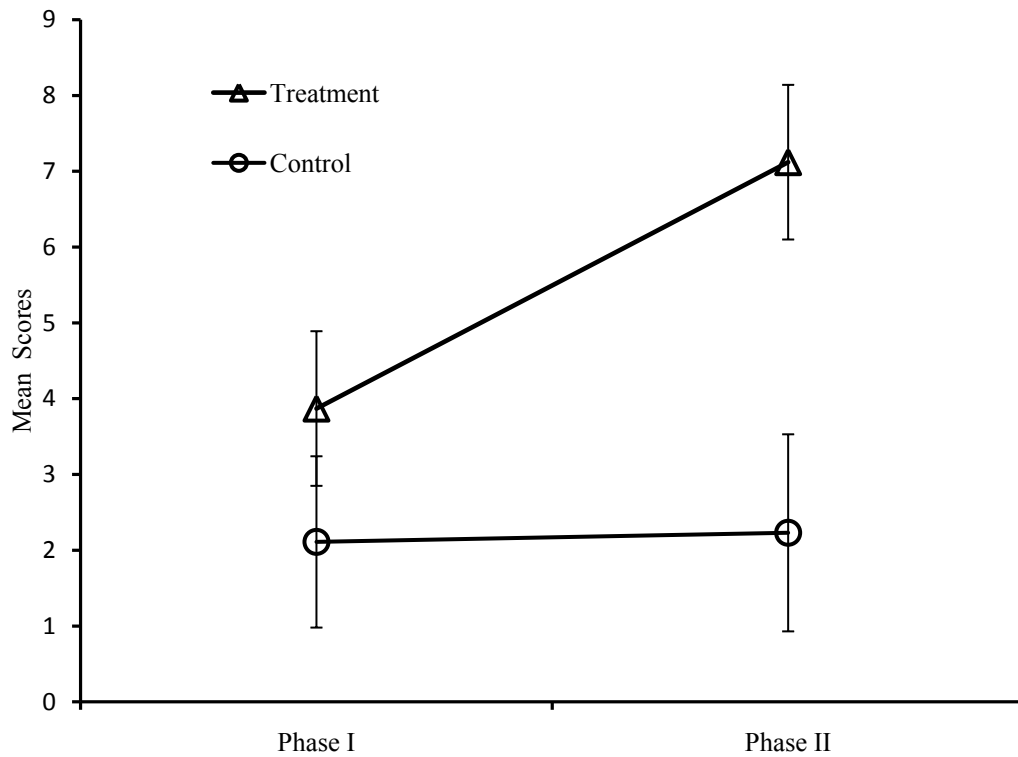
Figure 1. Mean Readiness to Change Scores for Treatment and Control Groups at Phase I and Phase II Time Periods. Vertical lines depict standard errors of the means.

Hypothesis 1

Separate paired samples t-tests (Treatment and Control Groups) were conducted following the significant group assignment by time period interaction found in the mixed model 2 X 2 ANOVA for Phase I and Phase II RCS scores. A significant result was found for Treatment Group RCS differences at Phase I and Phase II, $t(33) = -3.31$, $p =$ .001 (one-tailed). No significant RCS differences were found between the Phase I and Phase II time periods for the Control Group, $t(34) = -.13$, $p = .449$ (one-tailed). These findings support Hypothesis 1 in that participants in the Treatment Group were found to

have higher RCSs following the group intervention received in Phase II ($M = 7.12$) than at Phase I ($M = 3.87$).

Hypothesis 2

To evaluate this hypothesis, an independent samples t-test for the Treatment and Control Groups was conducted following the significant group assignment by time period interaction found in the mixed model 2 X 2 ANOVA for Phase I and Phase II RCSs. Results found a significant difference between the Treatment Group ($M = 7.12$) and the Control Group ($M = 2.23$), $t(67) = 2.95$, $p = .002$ (one-tailed). Hypothesis 2 was therefore supported in that Treatment Group participants reported higher RCSs when assessed following the group intervention in Phase II than Control Group participants at Phase II receiving no intervention.

Hypothesis 3

A mixed 2 (Group) X 2 (Time) Analysis of Variance (ANOVA) was conducted utilizing the RCS at the Phase II (post-intervention) and Phase III (follow-up) time periods as the within-subjects factor and group assignment (Treatment or Control Group) as the between-subjects factor. Means, standard deviations, and ANOVA results of this procedure are presented in Table 6. No significant main effect was found for group assignment, and no significant interaction between group assignment and time period was found. There was a significant Time main effect, suggesting that RCSs across both groups were lower at Phase III than at Phase II, though the effect was small. Hypothesis 3 was not supported in that no significant differences were found between the RCSs of the Treatment and Control Groups at follow-up.

Table 6

Means, Standard Deviations, and ANOVA Results for Group Differences (Treatment Versus Control) on Readiness to Change Scores

(RCSs) at Phase II and Phase III Time Periods

	Treatment n = 24		Control n = 29		ANOVA					
Time	M	SD	M	SD	Group F	η^2	Time F	η^2	G X T F	η^2
					3.54	.06	8.51*	.14	2.07	.04
Phase II	6.75	6.77	1.90	8.29						
Phase III	3.74	8.74	.87	7.40						

Note. G = Group; T = Time. Degrees of freedom for all ANOVA F statistics = (1,51).

*p = .005.

Within this analysis, Box's test was significant ($F = 3.85$, $p = .009$) suggesting that the covariance matrices of the RCSs at Phase II and III were not equal across the groups. However, as noted previously, ANOVA is robust to violations of variance equality when the sample sizes are comparable (Hair et al., 2006).

Hypothesis 4

Treatment and Control Group participants were asked at the Phase III time period if they had sought treatment for anger issues within the previous month. Planned analyses to evaluate the relationship between treatment-seeking behaviors reported at Phase III and RCSs at Phase II for Treatment Group participants could not be conducted because participants in both the Treatment and Control Group conditions reported no engagement in treatment-seeking behaviors. Hypothesis 4 was therefore not supported.

Hypothesis 5

As with Hypothesis 4, planned analyses involving treatment-seeking behaviors at the Phase III time period could not be conducted due to a lack of endorsement of treatment-seeking behaviors by either condition, Treatment or Control. No support was found for Hypothesis 5.

CHAPTER IV

DISCUSSION

The purpose of this study was to develop and conduct an initial evaluation of a brief, theoretically-sound group intervention to enhance readiness for anger management among individuals with problematic anger. The intervention was based on the Transtheoretical Model (TTM) of change and Motivational Interviewing (MI) principles. Although many have recommended the application of such interventions to angry clients (e.g., Kassinove & Tafrate, 2002; Howells & Day, 2003), this study provided the first known real-world evaluation of such an intervention.

College student participants determined to have sufficient anger problems combined with somewhat lower readiness to change those problems were randomly assigned to a treatment or no-treatment control group. Those in the treatment condition participated in a single-session group intervention developed for this study to increase readiness for anger management. Findings supported the efficacy of this treatment in increasing readiness to change in individuals with problematic anger. Participants receiving treatment reported increased readiness to change their anger than those in the control group immediately after the completion of treatment (i.e., Phase II time period) as compared to individuals in the Control Group. However, this treatment effect was not maintained across the 1-month follow-up. One month after the end of treatment, treatment participants were indistinguishable from those in the control condition on readiness to change their anger. In fact, both treatment and control participants demonstrated a decrease in anger readiness to change from immediately post-treatment to 1-month follow-up. Finally, no participants in either condition reported during the

follow-up assessment that they had in fact sought professional assistance for problem anger during the previous month (i.e., the interval of time between the completion of treatment and the 1-month follow-up).

Motivational Interventions for Anger

The empirical literature on applying MI and TTM principles to anger problems is sparse; however, there were two noteworthy studies described in the above literature review which can be used to help understand the present findings. The first involved the application of a pre-treatment two-session MI intake in the treatment of partner violence men (Musser et al., 2008). As noted, no impact on readiness to change partner abusive behavior was found, though positive effects of MI were found in other areas such as compliance with homework assignments. Aside from the obvious difference that the present study focused on anger and Musser and colleagues' (2008) study dealt with domestically violent men, there are other differences that require comparisons to be tentative. First, they did not administer their readiness measure immediately following the second intake session, and the length of time between the completion of the MI intake session and starting the treatment was reported as variable and not specified. It is possible that more immediate changes in readiness may have been observed, similar to the present study, had the measure also been administered following completion of the second MI intake session two weeks later. Given the length of time that may have existed between completion of the MI intake and administration of the second readiness measure, the lack of significant findings may in fact mirror the present results.

A second issue is the comparability of the samples, with the majority of the Musser et al. (2008) study sample involving treatment-seeking males (most with legal

complications) as compared to a non-treatment seeking primarily female population in the present study. A third issue involves various problems that exist in equating anger and aggression, an issue addressed earlier in the literature review for the present study. As noted by DiGiuseppe and Tafrate (2007), while anger may play a prominent role in domestic violence, the two are far from synonymous. Finally, several differences in the nature of the MI intake in the Musser et al. (2008) study and the present study make comparisons more difficult, including the MI intake being conducted in two sessions (versus one), for four hours total (versus one and one-half hours), and completion of the interview in an individual (versus group) format.

Another comparison study reviewed earlier is the Murphy et al. (2009) study involving treatment of male veterans with Posttraumatic Stress Disorder (PTSD) and multiple co-morbid problems using a group motivational enhancement intervention. Though no significant differences were found on the University of Rhode Island Change Questionnaire (URICA; McConnaughy et al., 1983), the researchers noted significant findings in that the members of the group rerated problems they had labeled "might have" to "definitely have." This was purported as evidence of some impact on readiness to change from the MI intervention, generally consistent with the findings of this study. However, comparisons of the study by Murphy et al. (2009) with the present study are complicated by a number of differences, most prominently the lack of focus on anger-related issues. Anger was included as one possible problem of a number of potential issues, so the number of individuals dealing significantly with anger issues in the study is unclear. Additionally, the URICA measure was not clearly determined as modified for anger in this particular study but completed in relation to the specific problems selected.

The potential effects of administering the readiness to change measures in this manner are unclear, and the authors noted that study participants appeared to have difficulty following the instructions for completing the URICA in this manner. The number of sessions and time spent in the group were also significantly longer than in the present study. Additionally, the samples of the studies were quite different. Ultimately, these differences limit the direct comparisons that can be made with the present study.

Matching Interventions to Readiness to Change

As noted in the above literature review, some limited empirical support has been found for matching motivational interventions to clients' level of readiness to change (e.g., Heather et al., 1996; Stotts et al., 2001), though generally in relation to outcomes other than readiness to change (e.g., alcohol consumption). Despite efforts in the present study to account for predictions of a matching effect (i.e., utilizing the motivational intervention for those lower in readiness to change), this was difficult to fully and accurately accomplish. There were no established cut-offs for the dependent measure utilized in this study when scored as a continuous variable to determine high versus low readiness, and as mentioned previously, the stage method of allocation has questionable validity and low reliability, at least in the case of the precontemplation scale for the ARCQ. The cut-off for this study was selected by the researcher based on early screening data to attempt to eliminate those potentially highest in readiness to change. However, as further explicated below, when the ARCQ for Phase II participants was scored utilizing stage classification, only 14.7% would have been classified as precontemplative. An alternative division could be made between *ready* and *not ready* to change similar to that in the Heather et al. (1996) study, in which a total of 64.7% of the present study

participants could have been classified as *not ready* (i.e., precontemplative or contemplative). These classifications cannot be considered definitive, given the poor reliability of the precontemplation subscale and recurrent noted difficulties with distinct stages of change classifications.

While the finding in the present study of increased readiness to change following participation in the motivational group cannot be taken as substantive support for matching hypotheses given the difficulties noted in determining high versus low readiness, it is encouraging that a significant effect was found despite these challenges and in the context of efforts made to exclude participants likely highest in readiness to change. Additionally, it can be noted that it has not been universally purported that MI interventions would be primarily effective only with those in earlier stages of change. Use of MI has been described as potentially applicable across all the proposed stages of change (DiClemente & Velasquez, 2002), and the focus and strategies utilized would likely differ for more progressive stages. Miller and Rollnick (2002) described a second phase of MI following enhancement of intrinsic motivation, which they labeled "strengthening commitment for change" (p. 126). Potential foci in this proposed second phase could include interventions such as advice-giving and development of a specific change plan, and the authors purported that the move to this phase would be cued by assessing signs of increased readiness for change. It may also be noted that a meta-analysis article that included one of the originators of MI (William Miller) as an author noted in its discussion of possible matching effects that "MI may be contraindicated for clients who are already clearly committed to change and ready for action" (Hettema, et al., 2005, p. 105). It appears evident that there is a need for additional research in this

area.

Specific Motivational Techniques

As noted in multiple writings by the originators of MI (e.g., Miller & Rollnick, 2009, 2002; Rollnick & Miller, 1995), MI is not considered a technique or set of techniques but an approach to relationships. In their recent article clarifying some aspects of MI, Miller and Rollnick (2009) clearly differentiate MI from a number of different techniques or therapies often confused with it, including the TTM, client-centered counseling, and others. Included in this discussion are the techniques of decisional balance and assessment feedback. Both techniques are clearly distinguished from MI, though not described as mutually exclusive within the principles of MI. Both techniques have often been incorporated into clinical applications of MI as well, serving as part of the rationale for their inclusion in the group intervention developed for this study.

Interestingly, of the specific techniques reviewed as part of the meta-analysis of MI studies by Apodaca and Longabaugh (2009), both feedback and decisional balance were found to be two of the techniques (along with offering change options and emphasizing responsibility) able to predict outcomes, with decisional balance found to be the most strongly related across two studies. Additionally, a recent study intended to evaluate MI versus MI with feedback for heavy drinking in 279 college students found that MI combined with feedback had the most impact on drinking as compared to MI with no feedback, feedback only, or assessment only (Walters, Vader, Harris, Field, & Jouriles, 2009). In fact, the MI and feedback conditions individually were not significantly different than completing baseline assessment measures only. The findings of positive effects of the present study's motivational intervention on readiness provide

some continued support for the use of such techniques within an MI framework, though as these were not the only components of the group, no judgments can be made on the individual contributions of such techniques.

<div align="center">Readiness to Change in Angry Individuals</div>

A driving factor in the present study was the commonly found observation in the anger literature that individuals with anger problems may often be classified as low in readiness to change those problems (e.g., DiGiuseppe & Tafrate, 2007; Howells & Day, 2003; Kassinove & Tafrate, 2002). However, empirical data to support this conclusion appear to be lacking. Williamson et al. (2003) found that in a sample of 418 male convicted offenders recruited for participation in anger management programs, 14.3% of the sample would be classified in the precontemplation stage, 28.7% in the contemplation stage, and 57% in the action stage according to the ARCQ (descriptive data were not reported for scoring the ARCQ as a continuous measure). While the authors noted one limitation of their study as potential socially desirable responding despite procedures for anonymity, it is notable that the majority of the sample was classified in higher stages of readiness. However, it is unclear from the information in the article how individuals were determined to have levels of problematic anger and what those levels were.

For comparison purposes, results of the current study were examined from a stages of change standpoint. Utilizing the Quick Method of stage classification for the ARCQ, 14.7% of Phase II participants would be classified in the precontemplation stage, 50% in the contemplation stage, and 35.3% in the action stage. These data are quite comparable in showing that a significant percentage of participants would be classified in more progressive stages of change. However, several caveats must be noted. First, as

consistent with the findings of Williamson et al. (2003), results of the present study found low reliability for the precontemplation scale. Additionally, the results of Williamson et al. suggested that differentiating the action and contemplation stages using the ARCQ may be difficult (and thus stage classification generally) due to the correlation between those two stages. Third, as noted previously in the decision to utilize the continuous method of scoring the ARCQ to obtain the RCS in the present study, the authors found that readiness as a second-order factor demonstrated good fit.

The overall observation of possibly higher levels of readiness to change anger problems than expected may be further explicated from the current study results and other study comparisons. It was noted that of the 201 participants meeting criteria for inclusion in the present study based on anger measures, a total of 45 participants (22%) were excluded due to RCSs above 10. Given that an individual with an RCS above 10 would be much more likely to be classified in either the contemplation or action stages, it can be assumed that the majority of those individuals would be higher in readiness to change. It is notable, however, that results of the present study found that despite having been determined as having anger problems, high variability in readiness to change appears to exist. RCSs for Phase II participants ranged from -15 to +10, with 10 being the maximum score allowed for inclusion in Phases II and III of the study, and -24 to +24 as the minimum and maximum possible scores. This appears generally consistent with the variability found in the study by Williamson et al. (2003) and Rosen et al. (2001). In the Rosen et al. (2001) study with PTSD veterans, the authors found significant variability in group participants' readiness to change anger problems (utilizing a different stage of change measure adapted for anger) despite having approximately 75% identify anger as

an issue.

It is notable that the finding of significant variability in readiness to change anger problems appeared generally consistent across quite disparate populations, given that the present study involved a non-treatment seeking population of college students with anger problems versus inmate prisoners in anger management programs (Williamson et al., 2003) or veterans in a treatment program for PTSD (Rosen et al., 2001). Among the potentially significant factors noted in the anger literature that would appear likely to affect angry individuals' motivation or readiness to change is that many persons presenting for anger treatment may have significant external motivation (e.g., coercion by family, court order) to attend such treatment (e.g., Deffenbacher, 2006; Tafrate & Kassinove, 2003). Thus, it might be expected that lower levels of readiness may be found in populations reflecting this factor. This did not appear to be the case, however, in that the readiness to change findings in the prisoner population, where it was noted that "many participants were under some obligation (or perceived coercion) to attend" (Williamson, et al., 2003, p. 306), were similar to those in the current study in terms of percentages of stage classification. However, this observation must also be tempered given the previously noted difficulties with stage classification and potentially biased responding described in the prisoner population. Additionally, differences may also exist in the type and level of coercion with which individuals may present in outpatient treatment-seeking populations versus inmate populations.

<div align="center">Limitations</div>

A number of important limitations to the present study must be noted. First, it is possible that the significant increase in readiness found in Phase II for Treatment

participants was a function, at least partially, of demand characteristics. In essence, the potential for participants to have deduced the goal of the experiment and responded in a way that would support this goal (i.e., demand characteristics; Orne, 1962) cannot be ruled out in these results. Given that the measure of readiness was administered both pre- (Phase I) and post-intervention (Phase II), it may be that through participation in the Motivational Anger Group, by nature of which explored issues related to possible anger problems and changing, participants determined that increasing their willingness to consider changing their anger was a key goal and responded accordingly.

Second, the final three hypotheses involved measurement at an approximate one month follow-up (Phase III) following completion of Phase II of the study. However, some degree of attrition occurred differentially across the Treatment and Control Groups in that 10 participants (29.5%) and 6 participants (17.1%), respectively, did not continue through completion of Phase III. It is possible that findings regarding these hypotheses may have been different without this attrition, though this cannot be determined. It may be unlikely that this would be the case, however, particularly with respect to hypotheses four and five given that no participants in Phase III indicated seeking out anger treatment in the interim between Phases II and III. Additionally, it is possible that attrition was caused by other factors not accounted for in the study. As noted in the results section, neither demographic nor scores on major screening measures included in this study were found to predict attrition.

A third limitation involves the lack of a standardized evaluation (e.g., an assessment of MI fidelity such as the Motivational Interviewing Supervision and Training Scale; MISTS; Madson, Cambell, Barrett, Brondino et al., 2005) with respect to the

group intervention utilized in this study. It is possible that implementation of the group intervention was not conducted in a manner sufficiently consistent with MI and TTM principles. While no determination can be made regarding this possibility at this time, it was noted previously that group members' ratings of the intervention were generally quite positive. Also, the manual created for the group and the training for the group facilitators explicitly outlined the principles of MI and TTM to be applied to the facilitation of the group, and multiple readings for review were included. However, it is possible that the amount and level of training of the facilitators were insufficient. The fact that a positive effect was found on the target dependent variable related to readiness, however, would suggest that the training and implementation of the group accomplished its intended purpose. Unfortunately, whether this effect was primarily due to the appropriate application of MI-related principles cannot be determined by these results. Additionally, it is possible that the two research assistants conducting the groups differed in their implementation of the group, despite receiving the same training instructions and utilization of the same instruction manual. As noted in the results section, though, analyses of potential differences in participant ratings of the groups and leader across leader found no significant differences. Therefore, with the data available in this study there were no significant suggestions of differential effects on the groups by the two group facilitators.

A fourth limitation of the study involves the characteristics of this particular sample that may limit the generalizability of the findings. First, the study was composed of a non-treatment seeking population. Much of the work with angry individuals occurs in clinical treatment settings in which this service is actively sought out, which may

involve differences from the population in this study. Second, the sample in this study was voluntary, which may not reflect much of the clinical anger treatment occurring in other settings. Often people presenting for anger management services may be court-ordered or otherwise coerced to enter treatment and may exhibit differing characteristics than voluntary populations. However, the voluntary nature of the sample utilized in this study is consistent with the majority of anger treatment studies utilized in the meta-analysis of anger treatments by Deffenbacher (2006). This continues to point to the need for additional studies for involuntary and coerced patients. It would be anticipated that the intervention utilized in this study may be highly applicable to these populations given the presupposition that many such individuals would be poorly motivated for change. However, as noted previously in this section, studies that involved offenders who may have been coerced or otherwise motivated for participation in anger management appeared to have similar, often somewhat high, levels of readiness to change as measured by current TTM-based instruments.

Another potentially limiting factor of the present study sample is the involvement of predominantly female participants, though not by design. While it is possible that the generalizability to highly angry males may be more limited, some arguments may suggest otherwise. DiGiuseppe and Tafrate (2007) noted that while gender differences in anger (e.g., experience, expression) may exist, research over the years has failed to consistently find specific gender differences across studies and ultimately conclude that research "has produced mixed results" (p. 333). Additionally, the authors noted in their review of anger treatment meta-analyses that treatment has generally been shown to be effective across sexes. With respect to the results of this investigation, gender was not found to be related

to the differential attrition of the groups from Phase II to Phase III. Finally, while the sample size was considered sufficiently large enough to detect a treatment effect, the effect sizes for the significant differences on RCSs at Phase II in the study were quite small.

A final potential limitation of this study involved the exclusive use of self-report data. It is possible that response bias could have played a role in these results and cannot completely be eliminated as a factor. However, a number of additional considerations may support its use in this case. First, given that the population screened was a voluntary, non-treatment seeking population, there would be little evidence to support the idea that individuals signing up for the study would be motivated to over- or under-endorse levels of anger or readiness to change anger. It is possible that in reviewing the consent form for the study and its explanation as a study involving a psychoeducational group for attitudes about anger, some individuals may have been motivated to answer survey questions in a manner that would increase their likelihood of inclusion in the remaining two phases of the study. However, the inclusion criteria were not specified on the consent form, were rather stringent in nature, and involved multiple assessment instruments. Given that the ideal candidate would possess low readiness to change (i.e., low RCS) combined with high levels of anger (i.e., high trait anger and/or anger outward expression scores), it seems unlikely that a substantial proportion of screening participants would be able to successfully deduce the criteria necessary for inclusion. However, this possibility cannot be completely ruled out.

An additional consideration related to the use of self-report measurement is its prevalent use in both anger- (Deffenbacher, 2006) and MI-related (Burke et al., 2003)

research. There have also been calls for additional use of alternative measures of outcome in the anger literature (Deffenbacher, 2006), as well as indications that when included, treatment studies have suggested effectiveness for various types of outcome measures (DiGiuseppe & Tafrate, 2001, 2007). Also, support was found for additional types of outcome measures (e.g., collateral ratings) often incorporated in MI studies (Burke et al., 2003). Given the focus of the current study on increasing readiness to change rather than a specific outcome of a problem (e.g., anger, substance use), a number of possible types of outcome measures (e.g., physiological screenings or measurement, recidivism incidences, therapist treatment ratings) were either not appropriate or feasible. The literature review for this study suggested that the most commonly utilized measures of readiness or motivation to change are some form of self-report assessment, often related to the stages or change. Additionally, self-report measures would intuitively appear to be a valid manner of identifying persons with problematic anger from a non-treatment seeking population. However, future research with such a population could utilize alternative methods, such as referrals from healthcare providers for individuals suspected of or reporting anger issues. Additional evaluation of the impact of interventions, such as the motivational group intervention in this study, could also include reviews of audio-taped sessions to evaluate in-session change-talk by participants, such as the in the analysis method utilized in a study of a motivational interview for drug use by Amrhein et al. (2003) who found that commitment language was predictive of positive outcomes for abstinence.

Implications and Future Directions

Numerous authors have described the need for increased emphasis on

motivational enhancement strategies in the treatment of problematic anger (e.g.,

Deffenbacher, 2006; DiGiuseppe & Tafrate, 2007; Howells & Day, 2003; Tafrate &

Kassinove, 2003). The current study developed and then evaluated a brief group

intervention for enhancing treatment readiness for anger-related problems, providing the

first known test of such an intervention for problematic anger. The results provided

preliminary support for a brief, one-session group intervention incorporating MI and

TTM principles in temporarily increasing participants' readiness to change their anger.

The implications of the present findings for anger management and recommendations for

future research are discussed here.

The present study has implications for the use of an MI-based strategy in a group

format for anger issues. Though the evidence supporting the employment of MI

principles in groups was noted previously as mixed and somewhat lacking (Walters et al.,

2002), findings of the current study were generally consistent with some other

encouraging findings regarding the use of MI group interventions, such as for alcohol use

in college student populations (e.g., LaBrie et al., 2006; Michael et al., 2006). A more

recent meta-analysis by Lundahl, Kunz, Brownell, Tollefson, and Burke (2010) of 119

MI studies also found limited data regarding group applications due to the small number

of studies available using a group format. They ultimately concluded that a combined

individual and group approach may be more advisable than a group-only intervention.

Given the potential advantages to group administration of interventions, including cost-

effectiveness, it is encouraging that a significant result was found utilizing the group

format in the present study. It is also believed that the motivational anger group

intervention developed here could easily be adapted to an individual or combined format

with use of similar applications of these techniques.

With respect to administration of the specific group intervention developed for this study, feedback from the research assistants administering the Motivational Anger Group noted several benefits from the group format, as well as some suggestions for modifications. One of the perceived benefits was the ability for participants to recognize that others have similar anger reactions and experiences (i.e., they are not the only ones with these issues). By virtue of the group format, it was also possible for participants to hear and identify with others' anger experiences and negative consequences. From the facilitator standpoint, this aspect of the process appeared to assist with the development of internal discrepancies by members making connections to their own behaviors. In a qualitative review of participant comments on the post-intervention rating form about the *Most Helpful* parts of the group, identifying similarities and/or hearing others' issues were the most consistently reported benefits (a total of 18 participants, or 52.9%). Facilitators also noted that the MI-style of the format seemed to make the group less threatening for participants' to openly share, including appearing to reduce defensiveness by approaching participants' anger as an area of exploration rather than a foregone conclusion of a problem. The personalized feedback was observed to be useful in either confirming what some participants may have suspected about their anger or raising the possibility of an issue. The worksheets/handouts were generally seen as helpful, including giving the participants an opportunity to record the most salient points for them individually on the sheets, though some possible modifications of the activities were suggested as described below.

During the intervention, some participants indicated confusion about the process

of completing the Anger Awareness Window. Some degree of clarification and possible

reorganization of the domains of the short- and long-term consequences rows may be

beneficial (e.g., list possible domains as applicable to either short- or long-term

consequences rather than implying only one or the other). Some other participants were

noted to view parts of the Decisional Balance Worksheet as possibly redundant or have

difficulty generating answers for each section. Given that exploration of all four areas of

exploration (i.e., benefits/costs of changing and benefits/costs of staying the same) are

standard aspects of decisional balance exercises (e.g., Miller & Rollnick, 2002), inclusion

of possible sample examples in each section may provide additional help in generating

ideas. These issues noted with the worksheets may help explain a qualitative observation

of participants' group impressions. The most consistent participant comments written on

the rating forms of the *Least Helpful* group aspects involved the worksheets, though the

number was small (a total of five participants, or 14.7%).

Another implication of the present study concerns the use of the ARCQ with

college students. The original ARCQ was developed and evaluated in a sample of male

offenders in prison participating in an anger management program. Use of this instrument

for the present study with a primarily female, non-treatment seeking college student

population found comparable reliability estimates for this population, suggesting that the

ARCQ has additional utility outside of its original population. However, additional

research is needed to further evaluate use of the ARCQ in outpatient anger management

treatment programs, including either court-mandated and/or voluntary populations. It was

also noteworthy that the present results confirmed the poor reliability of the

precontemplation scale of the ARCQ previously reported (Williamson et al., 2003), as

well as the improved and most substantial reliability estimates using a continuous score on the ARCQ, the RCS. Overall, results provided additional support for prior suggestions that TTM stage classifications may not be as useful or appropriate as viewing readiness to change as a continuous variable (e.g., Budd & Rollnick, 1996; Williamson et al., 2003), at least in this case when applied to the area of anger. Ultimately, the problem in measurement of TTM-related concepts such as readiness to change or stages of change continues to be a significant issue in need of further study and refinement.

Given that the readiness enhancement intervention appeared to be efficacious in the short-term but not by the 1-month follow-up, additional research is needed to sort out a few possible explanations. First, it will be important to determine whether the treatment effect observed in the present study will replicate and whether it is not merely a result of demand characteristics. For example, future studies may utilize suggestions from Orne's (1962) writings, such as incorporating a post-experimental inquiry by someone other than the experimenter to assess participants' beliefs about the hypothesis of the experiment. Alternatively, a pre-inquiry procedure could be employed in which pre-tests are administered, the intervention is explained (but not administered), and post-tests are administered with instructions to complete the measures as if they had participated in the intervention.

Assuming that the treatment effect can be replicated and shown not to be primarily due to demand characteristics, the intervention may have some utility in a context where participants could be rapidly transitioned into treatment. As an example, facilities (e.g., a university counseling clinic) with established anger management programs could offer screening programs in which problematic anger is assessed and

those determined appropriate could be referred for participation in the motivational group intervention. Participants in the intervention could then be offered the opportunity to sign-up immediately for entry into the anger management program, thereby potentially reducing a delay in agreeing to treatment and providing an immediate outlet for taking action.

It would be helpful to compare the intervention with a somewhat longer version (e.g., a 2-session intervention) to determine whether an increased dose might result in a longer-lasting effect. Preliminary support for an MI dose effect was found in the Lundahl et al. (2010) meta-analysis, with the authors concluding that the findings "suggest that it cannot hurt to provide more MI" (p. 153), though results were not definitive. Some studies have utilized a 2-session format in which an initial interview and assessment is followed by a second session in which feedback on the results are presented in a motivational interview (e.g., Brown & Miller, 1993). This would be easily adaptable for the present intervention by conducting an individualized anger assessment interview combined with objective assessment (including the STAXI-2) during the first session, followed by participation at another time in the Motivational Anger Group.

The intervention developed for the present study is considered most appropriate for individuals not seeking help for anger-related problems. As such, one potential application would be in the brief screening and early intervention of problematic anger. Similar interventions could be applied to college students, persons in a variety of health-care settings, and even individuals seeking mental health treatment for other conditions. In addition, minor modifications could make it appropriate as a pre-treatment intervention with persons entering anger management. Within the context of expected entry into a

specific treatment program, one useful modification could be incorporation of information about and opportunity for discussion about the nature of the treatment offered, including exposition of potential questions and concerns on the part of participants. The group format of the Motivational Anger Group may be particularly well suited for this task if the anger management services will be conducted in groups in that it may begin socializing participants to the group process and expectations for participation. Another significant modification could be the incorporation of strategies for goal identification and setting at the conclusion of the group. Problems in agreement on the goals or target of treatment have been consistently identified as an important clinical issue with angry patients (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2001), and if utilized at the outset of an anger management process, this modification to the group would be considered a logical next step in the process.

Should the intervention prove useful in future research, it may be helpful to incorporate dismantling strategies to identify what may be the most critical elements. Research of this nature may assist in both the further refinement of this particular intervention, as well as add to the literature on the mechanisms of change in interventions stemming from MI and/or TTM principles. Of particular benefit in future studies may be the incorporation of an evaluative measure (e.g., the MISTS; Madson, Cambell, Barrett, Brondino et al., 2005; Motivational Interviewing Skills Code; MISC; Miller et al., 2003) of the application of MI principles in the use of the motivational anger group. Studies including such measures would continue to address one of the noted limitations of specific AMI studies: a lack of significant and consistent focus on treatment integrity (Burke et al., 2002). While the current group was not intended to be representative of

pure MI, it was intended that MI principles be adhered to and explicitly followed in administration of the group intervention; therefore, evaluation of the intervention in this measure would likely be beneficial.

It should be noted that with respect to treatment integrity issues, Burke et al. (2002) also identified a common lack of standardization of procedures (such as through use of a manual) as an integrity threat to studies as well. The present study provided a clearly outlined procedural manual for the administration of the motivational anger group, anticipating that it would assist in attaining consistent application of the intervention. However, the meta-analytic study by Hettema et al. (2005) actually found smaller effect sizes for MI treatment guided by manuals. The authors concluded from further analyses of their own experiences with manual-guided MI that overly strict adherence to a manual (e.g., whether an individual indicated readiness for an intervention or not) may even be inconsistent with MI itself. These findings suggest the need for additional research in this area, potentially comparing manual-guided and non-manual-guided MI interventions. However, the implication may be that while manuals may be considered important to assist with treatment integrity, the nature of the manual may need to be such that it allows and explicitly instructs facilitators to be flexible and adaptive in the application of the intervention techniques in response to the participants. Such interventions have previously been developed, for example in the motivational substance group interventions developed by Ingersoll et al. (2002) that provide a selection of strategies to choose from depending on the in-session responses of participants.

Finally, a potential future direction for application of the motivational group utilized in this study involves the concept readiness for treatment versus readiness for

change. In their study of readiness to change in offenders, Howells et al. (2005) included a measure related to treatment readiness. The focus of the items utilized in this measure was more on attitudes toward anger management treatment programs, such as the perceptions of possible helpfulness and openness to disclosure to others. In this study, which also included the ARCQ, the researchers found only one participant variable, treatment readiness, predictive of treatment outcome in that "the extent of change (improvement) in an individual undertaking the programs was shown to be predictable to a modest extent from pre-treatment readiness for treatment" (p. 308). However, a couple of caveats in the use of the measure appear obvious in that it was a questionnaire adapted from an alternative structured interview and no reliability data were reported or could be located for the instrument. The results from that study are intuitively intriguing in relation to the present study in that it was predicted that the intervention to increase readiness would subsequently be positively related to seeking out treatment, a hypothesis that was not supported in the current study. It is noted, however, that neither assessment of specific treatment readiness nor incorporation of discussion of treatment issues (e.g., nature and types of anger treatment, discussion of what the treatment is like) in the motivational group were incorporated in the present research. Each of these areas may provide fruitful areas of future research in that measurement of anger treatment readiness may provide an important and unique contribution to the evaluation of motivation and readiness, as well as the possibility of adding exploration of individuals' perceptions and potential misunderstanding of the nature of anger management treatment into interventions.

In summary, this research addresses an important gap in the anger management literature as the first known attempt to develop and evaluate a brief motivational enhancement intervention for angry individuals. It is hoped that these encouraging results will provide additional impetus for further research in applying these principles within the context of anger treatment.

APPENDIX A

MOTIVATIONAL ANGER GROUP

Introduction/Opening

Approximate Length: 15 minutes

Objectives:
1. Introduce and explain purpose of the group
2. Review group rules
3. Review anger concepts
4. Establish rapport

Components:
➢ Have members sign Group Confidentiality Contracts as they arrive
➢ Have members select sealed envelopes with their code names on them the with Personal Feedback Forms enclosed as they arrive to the group (ask them to wait to open them until a later point in the group)
➢ Welcome members to the group
➢ Leader introduces self
➢ Remind members that the group is being videotaped and the purposes of this and disposition of the tapes
➢ Have members introduce selves (using first names only)
➢ Orient members to the group
    o This is a discussion-oriented, interactive group in which active participation and discussion by group members is critical for the success of the group
    o Members have been selected for the group based on their responses to the previously administered questionnaires that suggested they were eligible for participation
        ▪ Use this to introduce the purpose of being here in the group (e.g., Your answers to some of the questions indicated that you regularly experience at least some degree of significant angry feelings and reactions…)
        ▪ Today I would like us to spend some time exploring some various aspects of anger, such as attitudes and beliefs about anger, experiences of anger, and good and bad things about anger.
    o Remind participants that the group is structured as a one-time meeting that will last approximately 1.5 hours
➢ Review basic group rules
    o Confidentiality – each person is asked to respect the privacy of other group members; also review exceptions to confidentiality (harm to self or others; abuse or neglect)
    o Safety – behaviors such as name calling, verbal attacks or abuse, or threats are not appropriate

- Respect – purpose is to learn and explore together and respect for differences, including for others' opinions and views, is a key part of group participation
- Members are only to share what they feel comfortable sharing

➢ Rapport building
- From the beginning of the group forward, the focus should be on establishing and maintaining rapport through use of the MI presentation style designed to decrease resistance
    - At this point (and others), the facilitator should be attend carefully to members statements and feelings about their view of the causes of their anger
    - It is important to acknowledge and communicate an empathic understanding (though not necessarily agreement with) participants' views of having been wrong or transgressed by others. This may be especially important to decrease the chances of participants feeling invalidated by the facilitator, believing that the facilitator is siding with the object(s) of their anger, and/or that the facilitator believes that standards or values are not important.

➢ Briefly explore basic anger concepts as a foundation for discussion (Reminder: the introductory section should only take about 15 minutes, so this discussion should be kept fairly brief)
- Inquire about participants' definitions of anger using open-ended questioning (e.g., "What does anger mean to you?)
- Ask about differences between anger and aggression
- Ask about common terms for anger, including differences in degrees of intensity, etc.
- As needed (following elicitation from participants), the following information may be provided:
    - Anger is a basic emotion, or "felt emotional state"
        - It involves mostly learned internal experiences that include thoughts, images, verbal behaviors, and bodily responses in response to others' behaviors
    - Anger differs from aggression (i.e., behavior intended to cause harm)
    - The following are commonly used terms for anger: rage, annoyance (differing levels of intensity); pissed off, mad, fury, agitated

➢ Provide brief overview/description of rest of the group:
- Common Anger Episodes/Expressions/Triggers
- The Good Things and the Less Good Things
- Pros and Cons of Changing and Staying the Same
- Closing

Micro-Module 1: Common Anger Episodes/Expressions/Triggers

Approximate Length: 20 minutes

Objectives:
1. Provide brief feedback on assessment results
2. Identify typical anger episodes and patterns of group members
3. Identify various factors that may contribute to increased feelings of anger
4. Identify common types of anger expression

Materials Required:
1. Individualized feedback forms for participants
2. Flipchart/Dry-Erase Board/Chalkboard

Components:
➢ Present brief feedback on selected STAXI-2 results
  o Ask each participant to open the envelope containing his or her Personal Feedback Form (participants receive these at the beginning of the group by selecting the sealed envelope bearing the correct code name)
  o Review norms comparison (e.g., what scores falling above the 75th percentile mean in comparison to normative group) – refer to graphs of participants profiles and suggested descriptors corresponding to scores falling above the 75th percentile
  o Inquire whether 1-2 people would like to share their reactions or results with the group
  o At this point, use specific strategies including asking open-ended questions, verbalizing reflections, affirming the participants, and summarizing participant statements/material
    ▪ May use open-ended questions such as, "What are some reactions to the results presented?"
    ▪ Related to the answers given, use techniques such as reflection (e.g., "You're frustrated about the results," "You don't see yourself that way.") and rolling with resistance (e.g., "This number seems awfully high to you.")
    ▪ Affirm participant's willingness to open up, share, and discuss some of their reactions with the group
    ▪ Summarize the discussion of results/reactions with a few sentences, asking for any other comments that may be added
    ▪ Use the summarization to assist the transition into discussion of anger patterns (e.g., Now that we have discussed reactions to the assessment results, let's talk about some common anger events or patterns that may occur)
➢ Discussion of common anger patterns and events
  o Present discussion in a non-pathological context – it is important to avoid labeling these events as problems or concerns, so avoiding references to specific concerns at this point is key

- o May use introduction such as "Let's spend the next few minutes going through typical incidents involving anger/instances in which you get angry," followed by open questions such as "What are some examples recently in which you got angry? What are some examples of when you felt you handled your anger well? What about when you believe you didn't handle it as well?"
    - ▪ In the process of eliciting information from participants, use open-ended questions to trace through some of the events from beginning to end (e.g., what specifically happened, how did you feel, where did anger fit in, how did it come out)
- o Check for reactions of other group members (in agreement or difference) – use reflection and open-ended questions to continue eliciting talk from participants (e.g., "It sounds like what ….. described doesn't really fit with you. Can you give us an example of an anger event that fits better with you?")
- o Continue to affirm group members' active participation and helpful contributions.
- o Review typical anger episodes/incidents of several members and use summarization to transition from what has been shared in this discussion to exploring some of the common contributors to angry feelings
- ➢ Discussion of common anger triggers/contributing factors
    - o Continue use of open questions such as "What are some of the times that you are most likely to get angry? Are there some things that happen/you think/you feel that are more likely to lead to feelings of anger? What are some of the most common triggers for your anger? What things are most likely to set you off?"
    - o Use summarization to review some of the common triggers/pre-anger states described by group members and move on to ways that anger may generally come out/be expressed by participants.
- ➢ Discussion of common methods of anger expression
    - o Use open questions such as "What are some of the most common ways you express your anger? How does your anger most often come out?" to elicit various methods of expression specific to participants
    - o The following examples of anger expression may be used to help provide information on common forms and should only be used by the group facilitator as deemed appropriate (e.g., elicitation strategies for participants have stalled; few types have been offered by participants; very common types of expression have been neglected/not mentioned):
        - ▪ Types of anger expression could include: direct expression, thinking before responding, time out, reciprocal communications, physical assaults of people, physical assaults of others, negative verbal anger expression including verbal assaults or noisy arguing, dirty looks, body language, anger in/suppression, anger in/critical, anger control, corrective action, diffusion/distraction, passive-aggressive sabotage, relational victimization, social isolation of the target
    - o Briefly collectively summarize the most common types of anger expression generated by the group prior to using some form of linking summary to tie in the major topics covered in this area (reactions to assessment feedback,

generated responses to common types of anger events, factors contributing to angry feelings, and methods of anger expression).

- o Following summarization, use transitional statements (e.g., "Now that we have identified some of your most common types of anger events, triggers, and expression, let's spend some time talking about the good things about anger.) to introduce The Good Things and the Less Good Things

Micro-Module 2: The Good Things and the Less Good Things

Approximate Length: 25 minutes

Objectives:
1. Explore members' feelings about and awareness anger and related consequences
2. Identify pros and cons of the experience and expression of anger
3. Facilitate consideration of short-term versus long-term consequences of anger
4. Begin exploration of ambivalent feelings about anger

Materials Required:
1. Handout 1: *Anger Awareness Window*
2. Flipchart/Dry-Erase Board/Chalkboard
3. Pencils

Components:
➢ As stated at the end of micro-module 1, following summarization, use a transitional statement such as "I'd like for us to discuss some of the good things about anger behaviors.
➢ Provide members with Handout 1: *Anger Awareness Window*
   o Explain the components of the handout
   o Beginning with the good things, have members begin to identify good things regarding anger in particular areas (e.g., social)
      ▪ Generate a list of responses from participants under the good things category using open-ended questioning (e.g., What are some of the benefits you get from anger? What are some things it helps you with?)
      ▪ Only as needed or appropriate and after primary attempts at elicitation of ideas from group members, the following possibilities may be used for providing information and assistance in generation of items:
         • Potential benefits of anger (when mild-moderate): open expression of feeling; asserting one's rights, thoughts, and feelings; problem-solving; correcting concerns; appropriate limit-setting on others' behavior; motivation for effective and adaptive coping behavior; signals dissatisfaction
      ▪ List identified items on board
   o Move to the not-so-good things side and have members generate examples that would fall under this category
      ▪ Using open-ended questioning, form a list of responses generated by group members under the not-so-good things category
      ▪ Once again, only after significant attempts at elicitation from group members, consider the following possibilities for providing some information and assistance in generation of items:
         • Common consequences of anger: problematic interpersonal conflicts, medical problems (cardiovascular disease, stroke, cancer, hypertension, increased death rates, etc.), negative evaluations by others, disliked by others, avoided by others

                (loneliness), reduced social support, verbal and/or physical assaults on others, erratic behavior (e.g., driving), altercations with law, property destruction, occupational dissatisfaction & maladjustment (e.g., stress/burnout), lower pain tolerance, inappropriate risk taking, alcohol & drug use, violation of moral norms, serious crimes, deficits in coping skills,

- Throughout use of the Anger Awareness Window sheet, use open-ended questions to participants regarding short-term vs. long-term effects/consequences of anger to help with generation of good things and less good things (e.g., an example might be time projection ideas – "How long would you stay at a job where you were mistreated or belittled?" – in the short term, angry reactions may tend to get your employees to do what you want them to do how you want them to do it. In the long-term, how long might the employee stay or what effects on employee turnover might there be?)
  - An additional consideration in this area may be common anger myths that would relate to good and less good things (e.g., research on findings of negative effects of venting/cathartic behaviors related to anger – in the short term, aggressive venting of angry feelings be seen as relieving some of the pressure/providing an outlet as a positive benefit, whereas research has shown that in the long term this type of catharsis/venting may have negative effects on health, etc.)
- List generated items on board

o Ask for 1-2 members reactions to seeing these lists of the good and not-so-good things about anger once generated
- Use reflective listening skills to explore the reactions/answers of members, as well as monitoring for resistance statements and incorporating a rolling with resistance stance
- As appropriate throughout activity, facilitate exploration/discussion through the use of open-ended questions about how aspects of the good things and not-so-good things identified may reflect things that are important in members lives (e.g., values they hold, goals they have for themselves and their lives)

o Use a linking summarization to review the generated lists of good things and less good things, observations of and reactions by members to the listed items on the group-generated *Anger Awareness Window,* and ways discussed that these items may related to participants' values/goals in life (**including selectively attending to and reflecting those statements indicating items that may be in conflict with specific goals or values in order to help facilitate discrepancy) to conclude this section and introduce the idea of discussing the pros and cons of changing related to anger.

Handout 1
Anger Awareness Window

	Good Things	Not-So-Good Things
Short-Term: **Social** **Emotional** **Financial**		
Long-Term: **Health** **Work/School** **Relationships** **Legal**		

*Adapted from: Ingersoll, Wagner, & Gharib (2002)

Micro-Module 3: Pros and Cons of Changing and Staying the Same

Approximate Length: 20 minutes

Objectives:
1. Increase members' awareness of ambivalence about anger and anger-related behaviors and consequences
2. Increase members' awareness of ambivalence about change

Materials Required:
1. Handout 2: *Decisional Balance Worksheet*
2. Flipchart/Dry-Erase Board/Chalkboard

Components:
➢ After introducing the idea of discussing the pros and cons of changing anger, describe the idea of decisional balance or weighing the pros and cons of change
  ○ The metaphor of a balance scale or seesaw may be used to discuss this concept, including a drawing on the board. On each side of the scale, the weights represent differing sides – one for perceived benefits of making a change and the other for perceived disadvantages of an identified course of action. Sometimes shifts may occur that cause one side to be more heavily weighed down than the other.
➢ Provide members with Handout 3: *Decisional Balance Worksheet*
➢ Explain components of handout, including that costs of change and benefits of not changing influence someone staying the same, while benefits of change and costs of not changing influence decisions to try something new
  ○ Using open-ended questioning, ask group members to generate examples
  ○ As able and appropriate, try to use examples related to the important things/values discussed by members (e.g., not living up to an important value may be a cost related to anger remaining the same and add a reason to make a change; living up to one's most important value might be a benefit of change and fall on the side of changing)
  ○ Get member feedback and give nonjudgmental assistance on which box the examples given would fall in (obtain examples for each box)
  ○ Ask if there are ones that may be assigned more importance than others (though may differ among group members)
  ○ Continue to use reflection, affirmations, and rolling with resistance throughout the activity as the primary means of facilitation of participation
➢ Use summarization to conclude the activity, including pointing out that for some participants, the balance may lean in one direction or the other ("What does that mean to them?")

Handout 2
Decisional Balance Worksheet

	Costs/Cons	Benefits/Pros
Making a Change		
Not Changing		

*Adapted from: Ingersoll, Wagner, & Gharib (2002)

Closing

Approximate Length: 10 minutes

Objectives:
1. Conclude group
2. Review major themes

Materials Required:
1. Handout 3: *Anger Fact Sheet*
2. Handout 4: *Anger Treatment Resources*

Components:
➢ Discuss briefly the major themes covered in the group, primarily involving themes, patterns, and generated discussion by the participants, including ideas about tipping the decisional balance scale
➢ Have group members share something they observed, learned, or received from group today
➢ Reinforce that group members are the best judge of what is right for them, including in whether change is needed
➢ Thank members for participating
➢ Provide members with Handout 3: *Anger Fact Sheet* and Handout 4: *Anger Treatment Resources*
➢ Conclude with brief description of *Handout 4* on local community resources for anger treatment, including availability of and research support found for the treatment of anger if participants decide or have decided that they would benefit from a program focused on changing anger.

Handout 3

Anger Fact Sheet

<u>Anger may contribute or lead to:</u>

❖ Conflicts with others and worsening of conflicts that already exist.

❖ Negative evaluations and/or dislike by others. Family, job, and
❖ social interactions may all be affected, including leading to avoidance
and loneliness.

❖ More common occurrence of major medical problems, such as
cardiovascular disease, stroke, and cancer, as well as death.

❖ Lower self-evaluation related to the effects of anger.

❖ Verbal or physical assaults, often targeted at persons supposedly loved
and/or respected.

❖ Saying and doing things that are later regretted, such as name calling an
inappropriate gesturing.

❖ Erratic driving, possibly leading to altercations with the law.

❖ Property destruction, committed in a fit of anger.

❖ Occupational dissatisfaction and maladjustment, problems with
coworkers, lowered productivity, and increased probability of job failure.

❖ Poor decision making and inappropriate risk taking.

❖ Highly disruptive behavior, clouded thinking, and crimes of passion.

❖ The belief that one needs to drink, use illegal drugs, gamble, or engage in
other bad habits.

Does your anger place you at risk for any of these problems?

Handout 4

Anger Treatment Resources

Anger is a common, normal emotion that can range from mild to extremely intense. Anger can have some benefits, especially when mild, but at higher levels can contribute to a number of problems (for example, relationship difficulties, medical issues). Problematic anger is something that can be changed. Research has shown that effective treatments for anger do exist that can help people learn to handle their anger more effectively, including in how they experience anger physiologically, how they think about anger and anger-provoking situations, how they manage angry reactions, and how they express their anger. If your anger has caused you difficulties and/or you believe that you have an anger problem, below are several local agencies that provide anger treatment services.

The following local facilities offer specific anger management programs:

Community Counseling and Assessment Clinic
The University of Southern Mississippi
Contact: (601) 266-4601
Format: Individual Therapy
Approximate Length: 8-12 weeks

University Clinic for Family Therapy
The University of Southern Mississippi
Contact: (601) 266-5475
Format: Group Therapy
Approximate Length: 10 sessions

The following local agencies/practitioners indicated provision of counseling services for anger problems:

Behavioral Health Care Center at Wesley
239 Methodist Hospital Blvd
Contact: (601) 268-5026

Lifeway Counseling Services
6102 U S Highway 98
Contact: (601) 268-3159

APPENDIX B

INTRODUCTION TO THE MOTIVATIONAL ANGER GROUP

The protocol described here was developed to serve as a guide for conducting a single-session motivational enhancement group intervention for individuals with clinically dysfunctional anger and low readiness to change their anger. The Motivational Anger Group was designed to reflect the spirit of motivational interviewing (MI; Miller & Rollnick, 2002) as applied to and integrated with recommendations from the anger literature for addressing resistance and increasing motivation with anger clients. Additionally, the transtheoretical model (TTM; Prochaska & DiClemente, 1982) of change forms the conceptual basis for assessing motivation in clients (i.e., low readiness or an early stage of change) and utilizing interventions (e.g., MI) tailored to a client's level of motivation. The general approach to facilitation of the group is consistent with the spirit of MI, while selected strategies used in the group are drawn from the literature on MI, including various adaptations of motivational interviewing (AMIs; Burke, Arkowitz, & Dunn, 2002) such as Ingersoll, Wagner, and Gharib's (2002) motivational substance abuse group, and recommendations from the anger literature regarding the early phases of anger treatment. This group is designed as a single session intervention lasting approximately 1.5 hours, with 5-8 group members as the target group size. The overall goal of the group is to increase participants' readiness to change their anger through a focus on exploring anger-related issues and consequences. It is anticipated that this group may be incorporated into anger management treatment programs as an optional pre-treatment preparatory session for those identified as or suspected of having low motivation to change. The following paragraphs briefly review the major components of MI (and AMIs as applicable) and recommendations from the anger literature, including underlying principles and overt guidelines for facilitation of the group.

Miller and Rollnick (2002) defined MI as "a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (p. 25). The authors consider MI to be a form of communication versus a collection of specific interventions. The "spirit" of MI is intended to be collaborative versus confrontational, evocative versus educative, and focused on the autonomy of the client

versus the authority of the counselor. Four principles are outlined as themes guiding the process of MI: expression of empathy, development of discrepancy, rolling with resistance, and supporting client self-efficacy. Client resistance is viewed as reflective of dissonance in the therapeutic process/relationship, with common signs including becoming argumentative or interruptive, negation of the problem or responsibility (e.g., blaming), and ignoring behaviors. The counselor's role is seen as one of eliciting "change talk" (e.g., disadvantages of particular issue, advantages of changing, intentions of changing, optimism toward change) from clients versus advocating for change (e.g., arguments to change, assuming expert role, criticizing or blaming, labeling behaviors, attempting to intervene at levels past client readiness, and emphasizing counselor goals over client goals).

Within the context of the underlying themes of MI described above, several methods are suggested as consistent with MI. The acronym OARS represents four of these: open-ended questioning, affirming, reflective listening and summarizing. Reflective listening, from an MI perspective, is considered an active intervention that may include both simple and more complex forms of reflection (Madson, Campbell, Barrett, Rugg, & Stoffel, 2005). For example, simple reflections typically involving repetition of what the client has said in a neutral manner that communicates recognition and validation of the client's statement (Substance Abuse and Mental Health Services Administration, 1999). More complex reflections may include amplifying what the client says (e.g., a carefully-toned exaggeration without a sarcastic overtone) or use of a *double-sided* reflection that highlight's both sides of a client's ambivalence (e.g., drawing from a previous client statement that argues for the other side; Miller & Rollnick, 2002).

While the OARS methods are generally seen as more reflective of the client-centered aspects of MI, a fifth method, eliciting change talk, is viewed as a more directive component in terms of the selective focus and reinforcement of particular types of client statements (Miller & Rollnick, 2002). Eliciting and reinforcing change talk may be partially accomplished through the purposeful use of OARS methods at appropriate moments. A number of additional strategies have been described for eliciting change talk, such as use of the importance ruler (e.g., "Why are you at a ___ and not zero?"), exploration of pros and cons (i.e., decisional balance), elaboration (e.g., on a particular

reason to change), querying extremes (e.g., worst consequences if behavior continues; best things that may happen from change), looking back (e.g., comparing past behaviors before problem to present), looking forward (e.g., what might be different with change or look like with no change), and exploration of personal goals and values (e.g., how are behaviors consistent or inconsistent with identified values). Within the context of rolling with resistance, pertinent suggestions may include use of various reflections targeting resistance (e.g., acknowledging disagreement, perceptions), shifting focus, reframing of client statements (e.g., using educational reframing regarding client's positive statements about alcohol tolerance), agreement with a twist (i.e., reframe follows a reflection), and emphasis on autonomous choice and control of the client.

In addition to the above techniques, one extension emanating partly from the spirit of MI has been outlined that incorporates what have been described as the common components of brief interventions using the acronym FRAMES (Miller & Sanchez, 1994). FRAMES refers to: FEEDBACK on a person's risk or impairment, emphasizing change as personal RESPONSIBILITY, the presence of ADVICE to change, offering a MENU of options for change, use of therapeutic EMPATHY, and enhancing SELF-EFFICACY. Although not all of the components (e.g., advice to change) are considered consistent with MI (Rollnick & Miller, 1995), the presence of personalized feedback is often a component of brief interventions and empirically evaluated AMIs (Burke et al., 2002) and is considered consistent with the brief, single-session nature of the Motivational Anger Group.

A number of authors in the anger literature have described commonly encountered problems in anger treatment (especially in the early phases) that often involve difficulties in the therapeutic alliance, resistance, and/or low motivation or readiness to change (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2007; Howells & Day, 2003). Given the reasoning behind the development of this intervention, it is notable that low readiness or motivation has been suggested as potentially the most significant challenge in working with anger problems (DiGiuseppe & Tafrate, 2001). Frequent difficulties encountered in working with angry individuals may include discomfort on the part of the therapist (Norcross & Kobayashi, 1999), coercion into treatment (e.g., Deffenbacher, 2006; Tafrate & Kassinove, 2003;), clients' externally focused problem

view (e.g., DiGiuseppe, 1995; Tafrate & Kassinove, 2003), lack of agreement on the goals/target of treatment (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2001), beliefs related to anger (e.g., DiGiuseppe & Tafrate, 2007; Howells & Day, 2003), perceptions of lack of clinician empathy (e.g., Deffenbacher, 2006; Tafrate & Kassinove, 2003), lack of awareness of alternative anger scripts or responses (e.g., DiGiuseppe, 1995, Deffenbacher, 1999), ambivalence and/or resistant client behaviors (e.g., DiGiuseppe, 1995; Deffenbacher, 2006), and lack of perceived need for change and/or awareness of a problem (e.g., Deffenbacher, 1995; DiGiuseppe & Tafrate, 2001). Specific problematic beliefs related to anger have been identified by various writers in the anger field (e.g., DiGiuseppe, Tafrate, & Eckhardt, 1994; Howells & Day, 2003; Tafrate & Kassinove, 2003; DiGiuseppe & Tafrate, 2007), including failing to accept emotional responsibility, condemning thoughts, self-righteous ideas, viewing cathartic anger expression as healthy, viewing anger as effective in controlling others, belief in the justifiable nature of one's anger, threatening misinterpretations of events, rigid demands, perceived lack of clinician empathy, and problem or situation exaggeration.

In order to address and manage the challenges above, various proposed strategies and interventions (often consistent with and/or related to principles of MI and the TTM) may be found in the anger literature. Several authors (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2007) described the importance of communicating nonjudgmental acceptance, acknowledgement, and empathic understanding of (independent of clinician agreement with) the client's perceptions of injustice by others. Others noted that securing agreement on goals and the means of addressing those goals in treatment (e.g., exploration versus remediation of problem) are key aspects of anger treatment (e.g., DiGiuseppe, Eckhardt, Tafrate, & Robin, 1994; DiGiuseppe, Tafrate, et al., 1994;). Many additional recommendations of authors (e.g., DiGiuseppe, 1995; Tafrate & Kassinove, 2003) fall under the broad goal of increasing an individual's awareness of anger-related concerns. Recommended strategies for accomplishing this task have included review of common anger consequences (e.g., Kassinove & Tafrate, 2002), Socratic questioning such as inquiring of the client's view of the impact of anger on a relationship (e.g., Deffenbacher, 1995; DiGiuseppe & Tafrate, 2007), exploring and/or self-monitoring personal anger experiences (e.g., Howells & Day, 2003; Tafrate & Kassinove, 2003),

exploring short- versus long-term anger consequences (e.g., DiGiuseppe, Tafrate et al., 1994; Kassinove & Tafrate, 2002), imagery techniques to explore prior anger incidents (e.g., Deffenbacher, 1995), exploration of dysfunctional anger beliefs regarding cathartic expression (e.g., DiGiuseppe, 1995, DiGiuseppe & Tafrate, 2007), exploration of personal emotional responsibility (e.g., DiGiuseppe, 1995), provision of feedback from objective assessments (e.g., Deffenbacher, 1995; DiGiuseppe & Tafrate, 2007), and exploration of areas of incongruence between personal goals and anger (e.g., Tafrate & Kassinove, 2003). Additionally, distinguishing functional versus dysfunctional anger (e.g., DiGiuseppe, 1995) and increasing individuals' awareness of alternative anger scripts or responses are recommended as well (e.g., Deffenbacher, 1999; DiGiuseppe, Eckhardt et al., 1994).

Importantly, various authors noted that some recommendations may be useful throughout much of the early phases of anger treatment, such as the use of Socratic and open-ended questioning for much of the exploration components described above, as well as the use of an overall presentation style that is consistent with MI principles (e.g., Kassinove & Tafrate, 2002; Howells & Day, 2003). They suggest that MI principles may reduce the occurrence of resistant behaviors and facilitate exploration of ambivalence regarding anger. For example, an open-ended and reflective MI-style of inquiry is suggested in exploring empirically supported and/or theoretically identified anger consequences (i.e., elicitation from participants as able versus didactic presentation; Tafrate & Kassinove, 2003), exploring personal anger consequences experienced by the client, identifying and reinforcing client change talk, and presenting and discussing personalized objective assessment feedback (DiGiuseppe & Tafrate, 2007).

As stated, the above mentioned themes and interventions are intended to guide the approach used by the facilitator of the Motivational Anger Group. Within this context, a number of clear guidelines emerge for use throughout the process of group facilitation:

1. *Collaboration/Evocation* – Each aspect of the group is intended to be collaborative, interactive, and evocative in nature. This means that the facilitator generally attempts to elicit material from participants before providing information. This is accomplished through open questioning, Socratic dialogue,

and group interaction. Educational information derived from anger theory and research is provided as necessary (e.g., to fill in potentially important gaps, elaborate on information discussed, reframe client statements, etc.); however, the provision of such information is secondary, occurring after attempts to elicit information, and is used sparingly. For example, the facilitator may briefly elicit definitions and meanings of anger and related concepts from participants and provide brief educational information as needed. Additionally, the facilitator primarily uses open-ended questioning of participants to identify common anger experiences, triggers, and methods of expression.

2. *Autonomy* – The facilitator conveys the message that participants have the right to make their own decisions about whether anger is a concern for them and whether or not to choose to work on changing their anger in the future. The group is designed to tip participants' decisional balance so that they will be more likely to realize the problematic nature of their anger and to consider the possibility of treatment. However, the group is not designed to overtly advise group members to change, but to assist them in exploring various aspects of their anger and ambivalence about change in order to facilitate personal decision making in this area. This is accomplished through reflective listening to convey empathy and create an environment of acceptance (though not necessarily agreement) and through the emphasis placed on personal autonomy. The facilitator stresses that the decision to change lies with each group member, and the atmosphere created in group is to be one conducive to personal responsibility, choice, and control. This is also intended to facilitate an atmosphere emphasizing personal emotional responsibility.

3. *Discrepancy* – A core aim of this group involves the development of discrepancy within clients regarding the importance of changing anger. Consistent with this idea, major components of the group involve examining decisional balance considerations with the members. Primary topics in this area include the pros and cons of anger and the good and less good things about changing or staying the same. To foster discrepancy, the facilitator elicits, elaborates, and helps to identify inconsistencies between identified goals/values and current behaviors related to

anger. Additionally, methods such as complex reflection to highlight ambivalence are also considered important. In exploring the possible adaptive and maladaptive aspects of anger and pros and cons of changing anger, the facilitator attempts to highlight differences between types of anger (e.g., functional and dysfunctional) and the existence of alternative methods of handling angry reactions through elicitation of such information from participants (also refer to guideline 1 above).

4. *Resistance* – Signs of resistance are common and to be expected in this population (e.g., Deffenbacher, 2006; DiGiuseppe, 1995). However, this protocol is designed to minimize resistance in several ways.

    a. First, the concept of rolling with resistance, in which the facilitator changes or uses alternative responses and strategies to handle resistance rather than expecting the client to change, will be employed throughout the group. An example might include acknowledging participant disagreement with personalized feedback on assessment results and reflection of participant feelings regarding feedback. As consistent with guideline 2, feedback is approached in a manner that participants are free to accept part or all of assessment results as they choose.

    b. Second, the facilitator should communicate an empathic understanding of participants' views of having been the victim of a transgression(s) or injustice on the part of someone else. It is not agreement with a participant's view that is considered important, but the acknowledgement and validation of the client's feelings about the negative event(s).

    c. Third, the importance noted above of agreeing on a goal for treatment, combined with the commonly encountered view of angry clients that the problem lies with others rather than themselves (e.g., DiGiuseppe, 1995; DiGiuseppe & Tafrate, 2001), is reflected in the primary focus of the group (i.e., exploration of participants' anger-related experiences and the nature of those experiences as functional or dysfunctional, rather than active efforts to change anger problems).

    d. Fourth, a Socratic and MI-style of open-ended questioning is employed in the exploration of potential anger-related consequences, such as in the

differentiation of short- and long-term anger outcomes and exploration of common dysfunctional anger beliefs and ideas (e.g., benefits of catharsis; anger's effectiveness in controlling others).

5. *Self-efficacy* – The facilitator provides regular reinforcement of group members' self-efficacy regarding their ability to change their anger. Statements made by group members indicating awareness that the responsibility for choosing to change falls with them are highlighted and reinforced. Similarly, statements regarding the possibility, feasibility, and facilitator belief in the abilities of participants to change are incorporated. Additionally, affirmation strategies focusing on aspects such as members' attendance, efforts, willingness to share, active participation, and identified strengths are used regularly to reinforce self-efficacy.

6. *Change Talk* – The facilitator actively monitors change talk by participants and seeks opportunities to elicit, selectively reinforce, elaborate, affirm, and summarize it. For example, use of the Decisional Balance Worksheet is expected to be particularly conducive to eliciting and reinforcing change talk in the areas of recognizing disadvantages of current anger-related issues and recognizing potential advantages of change.

7. *Summarization* – Summarization skills are frequently used by the facilitator at key points during the group. These include transitional summaries when shifting content, brief collecting summaries to highlight themes in participants' responses, and linking summaries to connect information within the group. Such summaries are also considered a useful tool for highlighting members' ambivalent feelings expressed in the group. They may also beneficial for reviewing various aspects of anger and its consequences that have been identified through group discussion and exploration in order to facilitate the members' awareness of possible anger issues or concerns.

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APPENDIX C

SCREENING FORM

Please fill out all requested fields below. **All responses will be kept confidential**.

Name:_____

Home Phone:_____

Cell Phone:_____

E-mail:_____

Creation of a Code Name/Number:

Please identify a code name that will be used for confidentiality purposes throughout the study. All responses to questionnaires and forms will be kept confidential. All forms and questionnaires completed after the consent form and this Screening Form will include an area in which to write your code name, and your responses will be recorded through use of this code name. A separate master list of code names and corresponding participant names will be maintained in order to be able to contact individuals meeting criteria for inclusion in the remainder of the study and to remind a participant if a code name is forgotten. Otherwise, no attempts will be made to connect data obtained from questionnaires and forms to specific participants. Additionally, if any information specific to only you (for example, written feedback on selected assessment results) is distributed to you during the study, this will be accomplished through use of your code name only.

Select a code name that is unique to you, but also something that will be easy for you to remember. It is advisable for you to write down your selected code name to help you remember it. If you select a word for your code name, adding a number or two at the end will help to make it more unique and lessen the possibility of two or more individuals choosing the same code name. Please be sure not to use your USM ID number or social security number as your password.

Code Name:

_____

APPENDIX D

DEMOGRAPHIC FORM

Code Name: _____

Please circle or fill in the appropriate response:

Date of Birth:_____

Age:_____

Gender (circle one): Male   Female

Race/Ethnic Group: _____

Marital Status: _____

Year in College:_____

Are you currently enrolled in an anger management treatment program? Yes   No

Have you completed an anger management treatment program in the past 12 months? Yes   No

Are you currently receiving any form of counseling for psychological/emotional concerns?
Yes   No

    If you are currently receiving counseling, please briefly describe the primary issue for

    which treatment is being provided:

    _____

Are currently taking any medications for the treatment of psychological/emotional problems (e.g., antidepressant)? Yes   No

    If you are currently taking any of these types of medications, please list the specific

    medication(s):

    _____

To what degree do you have a problem with anger?

Very Little				Very Much
1	2	3	4	5

APPENDIX E

ITEMS ON THE ANGER READINESS TO CHANGE QUESTIONNAIRE (ARCQ)

Code Name: _____

The following questionnaire is designed to identify how you personally feel about how you manage angry feelings right now. Please read each of the questions below carefully, and then decide whether you agree or disagree with the statements. Please check the answer of your choice to each question. **Your answers are completely private and confidential.**

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. I don't think I have too many problems with anger	☐	☐	☐	☐	☐
2. I am trying to control my anger more than I used to	☐	☐	☐	☐	☐
3. I'm entitled to get angry, but sometimes I go too far	☐	☐	☐	☐	☐
4. Sometimes I think I should try to control my anger	☐	☐	☐	☐	☐
5. It's a waste of time thinking about anger	☐	☐	☐	☐	☐
6. I have just recently changed how I deal with anger	☐	☐	☐	☐	☐
7. Anyone can talk about wanting to do something about anger, but I am actually doing something about it	☐	☐	☐	☐	☐
8. I am at the stage where I should think about managing my anger	☐	☐	☐	☐	☐
9. My anger is a problem sometimes	☐	☐	☐	☐	☐
10. There is no need for me to think about changing how I deal with anger	☐	☐	☐	☐	☐
11. I am actually changing how I deal with anger right now	☐	☐	☐	☐	☐
12. Controlling anger better would be pointless for me	☐	☐	☐	☐	☐

APPENDIX F

ITEMS ON THE TRAIT ANGER SCALE (T-Ang)

Code Name: _____

Directions: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to indicate how you <u>generally</u> feel. There are no right or wrong answers. Do not spend too much time on any one statement, but give the answer that seems to describe how you <u>generally</u> feel.

	Almost Never	Some-Times	Often	Almost Always
1. I am quick tempered..................................	1	2	3	4
2. I am a hotheaded person............................	1	2	3	4
3. I have a fiery temper.................................	1	2	3	4
4. I get angry when I'm slowed down by other's mistakes...	1	2	3	4
5. I feel annoyed when I am not given recognition for doing good work....................................	1	2	3	4
6. I fly off the handle....................................	1	2	3	4
7. When I get mad, I say nasty things.............	1	2	3	4
8. When I get frustrated, I feel like hitting someone.....	1	2	3	4
9. I feel infuriated when I do a good job and get a poor evaluation..	1	2	3	4
10. It makes me furious when I am criticized in front of others...	1	2	3	4

APPENDIX G

ITEMS ON THE ANGER EXPRESSION AND CONTROL SCALES

Code Name: _____

Directions: A number of statements are listed below which people use to describe their reactions when they feel angry. Read each statement and then blacken the appropriate circle to indicate how often you generally react or behave in the manner described when you are angry. There are no right or wrong answers. Do not spend too much time on any one statement.

		Almost Never	Sometimes	Often	Almost Always
1.	I control my temper	O	O	O	O
2.	I express my anger	O	O	O	O
3.	I take a deep breath and relax	O	O	O	O
4.	I keep things in	O	O	O	O
5.	I am patient with others	O	O	O	O
6.	If someone annoys me, I'm apt to tell him or her how I feel	O	O	O	O
7.	I try to calm myself as soon as possible	O	O	O	O
8.	I pout or sulk	O	O	O	O
9.	I control my urge to express my angry feelings	O	O	O	O
10.	I lose my temper	O	O	O	O
11.	I try to simmer down	O	O	O	O
12.	I withdraw from people	O	O	O	O
13.	I keep my cool	O	O	O	O
14.	I make sarcastic remarks to others	O	O	O	O
15.	I try to soothe my angry feelings	O	O	O	O
16.	I boil inside, but I don't show it	O	O	O	O
17.	I control my behavior	O	O	O	O
18.	I do things like slam doors	O	O	O	O
19.	I endeavor to become calm again	O	O	O	O
20.	I tend to harbor grudges that I don't tell anyone about	O	O	O	O
21.	I can stop myself from losing my temper	O	O	O	O

Code Name: _____

	Almost Never	Sometimes	Often	Almost Always
25. I try to be tolerant and understanding	O	O	O	O
26. I strike out at whatever infuriates me	O	O	O	O
27. I do something relaxing to calm down	O	O	O	O
28. I am angrier than I am willing to admit	O	O	O	O
29. I control my angry feelings	O	O	O	O
30. I say nasty things	O	O	O	O
31. I try to relax	O	O	O	O
32. I'm irritated a great deal more than people are aware of	O	O	O	O

APPENDIX H

PERSONAL FEEDBACK FORM

Code Name: _____

<u>Anger Experience and Expression Profile</u>

%ile	T-A	A-T	A-R	O-A-E	I-A-E	%ile
≥99	-	-	-	-	-	≥99
95	-	-	-	-	-	95
90	-	-	-	-	-	90
85	-	-	-	-	-	85
80	-	-	-	-	-	80
75	-	-	-	-	-	75
70	-	-	-	-	-	70
65	-	-	-	-	-	65
60	-	-	-	-	-	60
55	-	-	-	-	-	55
50	-	-	-	-	-	50
45	-	-	-	-	-	45
40	-	-	-	-	-	40
35	-	-	-	-	-	35
30	-	-	-	-	-	30
20	-	-	-	-	-	20
15	-	-	-	-	-	15
10	-	-	-	-	-	10
5	-	-	-	-	-	5
≤1	-	-	-	-	-	≤1
%ile	T-A	A-T	A-R	O-A-E	I-A-E	%ile

anything above the double black lines above is considered a high score

	My %ile	High scores (75th percentile or above) suggest:
Trait Anger (T-A)		Experience frequent angry feelings and significant frustration. Feel unfairly treated by others often.
Angry Temperament (A-T)		Quick temper that is expressed with little provocation. Often impulsive and have difficulty controlling anger.
Angry Reaction (A-R)		Very sensitive to being criticized, offended, or poorly evaluated by others and react with intense angry feelings.
Outward Anger Expression (O-A-E)		Express anger through frequent aggressive acts toward persons or property (e.g., assault, slamming door, insults, threats).
Inward Anger Expression (I-A-E)		Tendency to suppress angry feelings, though frequently experience intense anger.

APPENDIX I

RATING FORM A

Code Name: _____

Please circle or fill in the appropriate response to all requested fields.

1. To what degree do you have a problem with anger?

Very Little				Very Much
1	2	3	4	5

2. How likely are you to seek professional help managing your anger during the next year?

Very Unlikely				Very Likely
1	2	3	4	5

3. How would you rate the overall quality of the group in which you participated?

Poor				Excellent
1	2	3	4	5

4. How much do you feel you learned from the group?

Very Little				Very Much
1	2	3	4	5

5. How likely would you be to recommend the group to others?

Very Unlikely				Very Likely
1	2	3	4	5

6. How would you rate the group leader's interest in you as a group member?

Highly Uninterested				Highly Interested
1	2	3	4	5

7. How would you rate the clearness of the group leader's communication to the group?

Very Unclear				Very Clear
1	2	3	4	5

8. What did you find most useful/helpful about the group?

9. What did you find least useful/helpful about the group?

APPENDIX J

RATING FORM B

Code Name: _____

Please circle the appropriate response to each question.

1. To what degree do you have a problem with anger?

Very Little				Very Much
1	2	3	4	5

2. How likely are you to seek professional help managing your anger during the next year?

Very Unlikely				Very Likely
1	2	3	4	5

APPENDIX K

FOLLOW-UP QUESTIONNAIRE

Code Name: _____

Please circle or fill in the appropriate response to all requested fields.

1. To what degree do you have a problem with anger?

Very Little				Very Much
1	2	3	4	5

2. Since participating in the previous part of this study 1 month ago, how much thought have you given to seeking professional help managing your anger?

Very Little				Very Much
1	2	3	4	5

3. Have you enrolled in or attended an anger management program in the last month?

Yes   No

4. If you have not enrolled in or attended an anger management program, which of the following reasons played a role in your decision not to do so (check all that apply):

☐ ____Anger is not a problem for me.
☐ ____I don't have time right now.
☐ ____I should be able to do this on my own.
☐ ____People might think less of me.
☐ ____My anger is not bad enough to need help.
☐ ____I'm not sure how to get help.
☐ ____It costs too much.
☐ ____I doubt it would work.
☐ ____Concerns over confidentiality.
☐ ____I'm not sure what it would be like.
☐ ____Talking to friends or family is just as helpful.
☐ ____I don't like the idea of telling a stranger my problems.
☐ Other (please specify)

APPENDIX L

ONLINE CONSENT FORM

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Consent is hereby given to participate in the study entitled: <u>Anger Exploration Group</u>

1. <u>Purpose:</u> This study is being conducted to better understand anger in college students and determine whether a 1-session psychoeducational group affects attitudes toward anger.

2. <u>Description of Study:</u> This study consists of three parts. The first part is open to all USM students age 18 and older, but the remaining parts are only open to those who qualify based on information collected during the first part.

   a. <u>Part 1: Screening</u> involves completing a series of brief online questionnaires about anger and related emotions. This will take approximately 30 minutes and will be worth 1 research credit. Individuals who meet criteria for inclusion of the remaining parts of the study will be contacted via email and/or telephone to schedule the next part of the study within approximately 2 weeks.

   b. <u>Part 2: Experiment</u> involves coming on campus to complete additional questionnaires and/or participate in a 1-session psychoeducational group. Participants will be randomly assigned to one of two experimental conditions: group or no-group. Those assigned to the group condition will attend a single session psychoeducational group lasting approximately 90 minutes. This group is designed as an interactive discussion-based exercise focused on various aspects of anger (e.g., attitudes and beliefs about anger, experiences related to anger). Group sessions will be videotaped to facilitate the evaluation and training of the graduate students leading them, and will be held strictly confidential (see below). Immediately following the group, participants will be asked to fill out another series of questionnaires. Participants assigned to the no-group condition will also come to campus to complete questionnaires but will not participate in any sort of group. Persons agreeing to participate in Part 2 should know that their chances of being assigned to either condition are approximately 50%. This part of the study will require up to 2 hours and be worth an additional 4 research credits for all who complete it, regardless of condition.

   c. <u>Part 3: Follow-Up</u> involves completing a series of brief online questionnaires similar to those completed in Part 1. This part of the study will be completed approximately 1 month after Part 2 (participants will receive a reminder via email and/or telephone) and will only be offered to students who participated in Part 2. This is expected to take approximately 30 minutes and will be worth 1 additional research credit.

   Participants who meet inclusion criteria (assessed in Part 1) and complete all parts of the study will earn 6 research credits (1 for Part 1, 4 for Part 2, and 1 for Part 3). Additionally, students who complete all parts of the study will have the

option of being entered in a drawing to receive gift cards worth $40 from Amazon.com or Target. Students who do not meet inclusion criteria will earn 1 credit from their participation in Part 1 but will not be eligible to participate in the rest of the study.

3. Benefits: Participants are not expected to derive any direct benefit from participating in this study. Although we hope that the group experience will be positive, it has not previously been evaluated, and so its effects remain unknown. However, it is hoped that this study will contribute to our understanding of anger and related attitudes and ideas.

4. Risks: The foreseeable risks of participating in this study are minimal. All questionnaires are self-report and noninvasive. Participation is voluntary and may be terminated at any time. Although participants in the group condition of Part 2 are encouraged to contribute to group discussion, they will only be asked to share information with which they feel comfortable and will not be pressured to disclose sensitive personal information. Group interactions always entail the risk that a participant will disclose information another member has revealed in confidence, however, every effort will be made to minimize this risk. Additionally, there is always a chance of participants becoming upset or distressed as a result of the content of the questionnaires or in response to material discussed in the group, although this risk is considered low. You should be aware that USM has no mechanism to provide compensation for participants who may incur injuries as a result of participating in research projects. If you become distressed at any point during the study, please discontinue participation and notify the researcher(s). Information is provided below (and will be available from the researcher at any time during the study) for facilities where you can obtain counseling services if you are interested. Any new information that develops during the study will provided to you if that information might affect your willingness to participate.

Examples of local agencies offering counseling services:

University Counseling Center   Community Counseling and Assessment Clinic
200 Kennard Washington Hall   Owings-McQuagge Hall Rm. 202
Phone: (601) 266-4829   Phone: (601) 266-4601

Pine Belt Mental Healthcare Resources
Phone: (601) 544-4641

5. Confidentiality: Confidentiality will be maintained throughout the study in a variety of ways.
   a. Completed forms, questionnaires, and videotapes will be stored in a locked filing cabinet and will be destroyed after six years.
   b. Identifying information, including names, phone numbers, and e-mail addresses, will be collected from participants during Part 1 of the study so that those who qualify for the study can be contacted and scheduled to participate in the remaining parts. Participants will be asked to generate a code name during Part 1 that will be used on all other forms completed during the screening process and the remainder of the study. A master list will be maintained containing only names and codenames of participants for the purposes of contacting individuals meeting criteria for participation in the

remainder of the study (e.g., for scheduling and reminder purposes) and to remind a participant in case the code name is forgotten. No attempts to connect information from completed questionnaires containing code names with actual participant names will be made.

c. Participants assigned to the group condition will also be asked to sign a Group Confidentiality Contract at the beginning of the group meeting which reminds them of the importance of maintaining confidentiality. Additionally, group leaders will explain the meaning, importance, and legal/ethical exceptions to confidentiality at the beginning of the group.

d. Should any participant assigned to the group condition disclose information during the group that triggers a legal/ethical obligation on the part of the group leader to break confidentiality, the group leader will immediately notify a member of the Counseling Program faculty who will assist the group leader in determining whether further action is necessary. Conditions which could trigger such an obligation and which will be discussed with group members at the beginning of the group include:

  i. You reveal specific intent to inflict serious bodily harm on yourself or someone else and are determined to be an imminent risk for hurting yourself or another person;

  ii. You reveal information that indicates the likely presence of ongoing abuse or neglect of a child or vulnerable adult; and

  iii. You have a medical emergency which requires urgent care.

6. Participant's Assurance: Whereas no assurance can be made concerning the results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and subjects may withdraw from this study at any time without penalty or prejudice. Questions concerning the research should be directed to Greg Futral, M.S., at (601) 266-5103 (glfutral@yahoo.com) or Eric R. Dahlen, Ph.D. at (601) 266-4608. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001.

7. Consent to Participate:

   a. I must be at least 18 years of age to participate in this study;

   b. All information I provide will be kept confidential according the guidelines above;

   c. I will complete a set of questionnaires today, and if meeting criteria and agreeing to participate in the remainder of the study, I will complete a second set of questionnaires at the end of the second and third parts of the study. Additionally, if assigned to the group condition, I will attend a one-time group meeting;

   d. Group sessions will be videotaped, with tapes used strictly for training and research purposes and stored in locked file cabinets and destroyed in accordance with the procedures described above;

   e. I will receive 1 research credit for completing the series of questionnaires today;

      f.   If I meet criteria for and agree to participate in the remainder of the study following the screening, I will receive 4 research credits for completion of the second part of the study and 1 research credit for completion of the third part of the study. Additionally, I will be entered in a drawing for gift cards described above at my request.

By signing below, I signify my understanding of this disclosure statement. I understand that my participation in this research is completely voluntary. If I am contacted and decide to participate in the remainder of the study, I may withdraw my consent and stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I also acknowledge that I have been informed of the purpose, benefits, and risks of participating in this study. I have been provided contact information so that I may ask questions about information on this consent form and/or the research. Additionally, I agree to allow my responses to questionnaires to be used for research purposes. I understand that I will only be contacted by the researcher(s) about completing the remainder of the study (after the screening process) if I meet the necessary characteristics for inclusion, and I understand that if I meet the necessary characteristics, I will be contacted by email or telephone by the researcher(s). By signing below, I signify that I am at least 18 years of age and I am interested in participating in the remainder of the study.

Please Note: Typing your name below constitutes your electronic signature.

Participant's Electronic Signature: _____

Date:_____

APPENDIX M

GIFT CERTIFICATE DRAWING REQUEST

If you wish to be entered in the drawing for 1 of 6 $40.00 gift cards to Target or Amazon.com, please provide your name, email, and phone number below.

_____
Name

_____
Email

_____
Telephone

APPENDIX N

IRB APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 28030603
PROJECT TITLE: **Anger Exploration Group**
PROPOSED PROJECT DATES: **03/01/08 to 03/01/09**
PROJECT TYPE: **Dissertation or Thesis**
PRINCIPAL INVESTIGATORS: **Gregory L. Futral**
COLLEGE/DIVISION: **College of Education & Psychology**
DEPARTMENT: **Psychology**
FUNDING AGENCY: **N/A**
HSPRC COMMITTEE ACTION: **Expedited Review Approval**
PERIOD OF APPROVAL: **03/24/08 to 03/23/09**

Lawrence A. Hosman   _3-26-08_
Lawrence A. Hosman, Ph.D.   Date
HSPRC Chair

APPENDIX O

GROUP CONFIDENTIALITY CONTRACT

1. This document serves as a contract for confidentiality of the members participating in this group session.

2. By signing this form, you acknowledge the need to keep personal information shared in the group private.

3. Any personal information shared by another group participant should be considered private information.

4. In order to participate in the group, each participant must agree to protect this private information. Any information obtained about other group members must not be shared with anyone else.

5. If you agree to abide by the above statements, please acknowledge your agreement by signing and dating the space below.

_____   _____

Signature   Date

APPENDIX P

ANGER TREATMENT RESOURCES

Anger is a common, normal emotion that can range from mild to extremely intense. Anger can have some benefits, especially when mild, but at higher levels can contribute to a number of problems (for example, relationship difficulties, medical issues). Problematic anger is something that can be changed. Research has shown that effective treatments for anger do exist that can help people learn to handle their anger more effectively, including in how they experience anger physiologically, how they think about anger and anger-provoking situations, how they manage angry reactions, and how they express their anger. If your anger has caused you difficulties and/or you believe that you have an anger problem, below are several local agencies that provide anger treatment services.

The following local facilities offer specific anger management programs:

Community Counseling and Assessment Clinic
The University of Southern Mississippi
Contact: (601) 266-4601
Format: Individual Therapy
Approximate Length: 8-12 weeks

University Clinic for Family Therapy
The University of Southern Mississippi
Contact: (601) 266-5475
Format: Group Therapy
Approximate Length: 10 sessions

The following local agencies/practitioners indicated provision of counseling services for anger problems:

Behavioral Health Care Center at Wesley
239 Methodist Hospital Blvd
Contact: (601) 268-5026

Lifeway Counseling Services
6102 U S Highway 98
Contact: (601) 268-3159

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