The effects of a rational emotive behavior therapy intervention on irrational beliefs and burnout among middle school teachers in the state of Iowa

Shirley Anderson

University of Northern Iowa

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THE EFFECTS OF A RATIONAL EMOTIVE BEHAVIOR THERAPY INTERVENTION ON IRRATIONAL BELIEFS AND BURNOUT AMONG MIDDLE SCHOOL TEACHERS IN THE STATE OF IOWA

An Abstract of a Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

Dr. Terry Kottman, Committee Chair

[Signature]

Dr. John W. Somervill, Dean, Graduate College

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May 2000
ABSTRACT

The purpose of this study was to investigate the effects of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs. This study specifically examined the impact of a REBT bibliotherapy intervention on middle school teachers' irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment, using the Maslach Burnout Inventory-Educators Survey (Maslach, Jackson, & Schwab, 1986) and the Irrational Beliefs Test (Jones, 1968).

The subjects in this study consisted of 167 middle school teachers in the State of Iowa. These teachers taught sixth, seventh, or eighth grade or a combination of these grades.

Data were gathered in the spring of 1999 and the winter of 1999. A pretest-posttest control group experimental design investigated differences between the control and experimental group on the dependent variables pre-post change scores in irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment. The participants in the experimental group were given information about the study that explained the principal tenets of REBT bibliotherapy intervention and how their beliefs could affect their feelings of energy, attitude toward others, and perceptions of accomplishments and achievements. They also received a REBT bibliotherapy intervention, a modified form of Beliefs that Disturb (Woods, 1990), which contained an individual analysis of their irrational beliefs scores. In addition, they received a written explanation of the concepts of feelings of energy, attitude toward others, and perceptions
of accomplishments and achievements, as well as an individual analysis of their burnout scores. The control group was given modified information about the study that explained the concepts of feelings of energy, attitude toward others, and perceptions of accomplishments and achievements. They also received an individual analysis of their burnout scores.

The results of the study did not show a statistically significant difference between the control and experimental groups on any of the four research hypotheses. The results of the study suggested that further investigation of the correlates of irrational beliefs and burnout is warranted.
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Approved:

Dr. Terry Kolitman, Chair

Dr. Mary Selke, Committee Member

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Shirley Anderson
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May 2000
DEDICATION

I would like to dedicate this dissertation in memory of my mother and father. They instilled in me at a very early age the importance and value of education. It is through their sacrifices, encouragement, and support that I have arrived at this goal. I also would like to thank my sister and brother for their encouragement in this process.

To my friends, thank you for always being there for me as well as your continued support of my endeavors in life.
ACKNOWLEDGEMENTS

There are many people who were instrumental in the completion of this project. The many middle school teachers who participated in this study are commended for their time and efforts. A special thank you is extended to my dissertation committee who focused my efforts throughout my studies and the dissertation. The five members of my dissertation committee, Dr. Terry Kottman, Dr. Mary Selke, Dr. Ann Vernon, Dr. William Waack, and Dr. Joel Wells, were always a source of help, encouragement, and assistance throughout the study.

Sincere gratitude is reserved for Dr. Terry Kottman, chairman of my dissertation committee and advisor for my doctoral studies. Words alone cannot express my gratitude for her support and encouragement throughout my doctoral program and completion of the dissertation.

I would like to extend a special thank you to my friend, Robert E. Kramer, Professor Emeritus. His help in assisting in designing the study, analyzing the data, and formatting of materials and tables were greatly appreciated. His guidance and patience with me made my idea come to life.

I would also like to thank Dr. Paul Woods, a fellow of the Institute for Rational-Emotive Therapy. He graciously extended to me the use of his publication, Beliefs that Disturb. He also gave approval for the modifications to his publication, Beliefs that Disturb for my dissertation study. I also would like to thank him for his willingness to read and make recommendations regarding materials for the study.
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Burnout in teaching continues to be a problem in the field of education. Increasingly we find those burned out educators who cannot look beyond getting through a day and have little energy left for establishing or maintaining relationships with others. These “rust outs” no longer exhibit fire or excitement in their teaching (Dedrick & Raschke, 1990). Such teachers continue their work in the classroom, but they perform tasks far below their ability. They tend to see additional expectations and responsibilities of the job as yet another burden associated with their work. Also problematic is the fact that they find it difficult to promote positive relations among staff, students, parents, and administration. Thus, the issue of burnout is an immediate concern for both the educational community and educational process because of its negative impact on the quality of educational instruction and on the interpersonal relationships in the classroom and in the learning community (Webber & Coleman, 1988).

Farber (1991) stated that “Teacher stress and burnout have affected and will continue to affect the lives of teachers and their families, administrators and their families, students and their families, and all of society” (p. 313). Friedman and Farber (1992) supported the supposition that burned out teachers negatively affect the teaching process. However, in spite of the fact that burnout is the leading cause of teachers leaving the teaching profession, there have been only a limited number of studies designed to investigate personality variables and individual differences predicting burnout (Maslach & Jackson, 1986). There also is a lack of evaluative research studies
that investigate effective interventions in reducing the level of burnout in individuals (Maslach, Jackson, & Leiter, 1996; Schaufeli, Maslach, & Marek, 1993).

**Problem Statement**

According to Maslach and Jackson (1986), additional studies need to be initiated to explore the correlates of burnout. Even though some researchers have explored burnout and personality, there still is a need for additional studies to clarify the most critical personality variables associated with and predictive of burnout (Maslach & Jackson, 1986). Schaufeli et al. (1993) contended that researchers needed to study burnout in a broader theoretical context: an exploration of how general psychological concepts can be applied to burnout. Maslach (1993) related the need for extensive research to be completed on personality and individual differences, since the majority of studies regarding burnout have been based on social-psychological analysis rather than an analysis of the role of personality variables and individual differences on burnout.

Since burnout is an ongoing problem in education, it is important to explore correlates between burnout and individual differences. One of these individual differences could be irrational beliefs. Irrational beliefs are defined as rigid, absolutistic ideas that often lead to emotional maladjustment (Ellis, 1996; Ellis & Bernard, 1985; Ellis & Dryden, 1997; Ellis & Harper, 1961) and result in faulty thinking among teachers (Webber & Coleman, 1988). The examination of the correlation between burnout and irrational beliefs may provide information that could possibly lead to reducing burnout among educators (Farber, 1991; Maslach, 1978; Maslach & Jackson, 1986; Maslach et al., 1996). Through the exploration of individual factors, such as irrational beliefs, a
better understanding of burnout may occur. Investigations of correlates may also furnish insight into the impact of irrational beliefs on the level of burnout in individuals.

A review of the literature yielded no empirical studies which could provide evidence that counseling interventions have worked on reducing the level of burnout. Schaufeli et al. (1993) stressed the importance of determining effective interventions for dealing with burnout. Maslach and Jackson (1986) and Maslach et al. (1996) emphasized the need for research to establish what interventions work and what interventions do not work in the reduction of the level of burnout in individuals. Information gleaned from empirical studies on individual differences may provide information to improve and design future interventions for change with regard to burnout among individuals.

This study was designed in response to the lack of empirical evidence supporting the efficacy of counseling interventions on the level of burnout among educators. Specifically it has examined the use of a Rational Emotive Behavior Therapy (REBT) on changing individuals’ irrational beliefs and reducing their levels of burnout.

Establishing Linkage Between Irrational Beliefs and Burnout Using a Preliminary Study

Bernard (1990) conducted a study to explore the link between stress and irrational beliefs. He found a link between teacher attitude and teacher stress and concluded that the beliefs and attitudes which teachers hold about themselves mediate stress. Ellis (1978, cited in Bernard, 1990) contended that individuals create their stress by their perceptions and cognitions, how they perceive and evaluate situations in their lives (Ellis, Gordon, Neenan, & Palmer, 1997). According to Bernard (1990), “rational thoughts lead to a lower amount of stress and help you control the amount of stress you experience” (p.
103). Since burnout is assumed to be a confirmation of stress (Belacastro & Gold, 1983; Belacastro, Gold, & Grant, 1982), one can assume there is a link between irrational beliefs and burnout.

As a necessary first step in establishing a link between irrational beliefs and burnout, a preliminary study was conducted among middle school/junior high teachers in the State of Iowa. Its purpose was to establish a relationship between irrational beliefs and burnout. One-hundred seventy-nine teachers completed the Irrational Beliefs Test (IBT; Jones, 1969) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, Jackson, & Schwab, 1986).

The data from these instruments were analyzed using a Pearson product moment correlation. Results of the analysis established a significant positive correlation with certain subscales of the IBT (Jones, 1969) and certain subscales of the MBI-ES (Maslach et al., 1986). The correlation data supported the hypothesis that there is a link between certain irrational beliefs and specific factors of burnout and also suggested that individuals with high levels of irrational beliefs also had higher levels of burnout. Thus, the results of the preliminary phase of the study supported further investigation of the constructs, irrational beliefs and burnout.

**Purpose of the Study**

Today the teaching profession has been “subject to increased pressure by society to correct social problems (for example drug, alcohol, and sexual abuse), educate students in academic and skills areas, provide enrichment activities, meet the individual needs of all students with a wide range of abilities, and encourage moral and ethical development”
(Schwab, 1986, p. 18). Other demands on teachers may be self-imposed. When beliefs take the form of excessive demands, they may interfere with teachers’ short and long term goals, their level of stress, and sense of well being. And, while teachers may have negative emotional and behavioral reactions to some of these interactions and demands, there are limited preventative mental and emotional health education programs for teachers in the schools. Administrative personnel often offer teachers staff development programs about classroom management, standards and benchmarks, interventions and strategies for academic and behavioral difficulties, organizational matters, and principal and district mission and goals. It appears there is a need for staff development programs for teachers to enhance their learning about themselves, to discover how their beliefs may affect them, and to learn effective ways to deal with emotional and behavioral reactions.

The purpose of this study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers’ irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment. The REBT bibliotherapy intervention appeared to be a valuable tool for staff development in which educators could investigate their irrational beliefs and burnout.

Significance of the Study

The writer’s intensive review of the literature revealed no published research studies to assess the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the relationship between the constructs, irrational beliefs
and burnout factors of emotional exhaustion, depersonalization, and diminished personal accomplishment in teachers. There has been a lack of research studies designed to assess irrational beliefs of teachers in the State of Iowa with the exception of the preliminary study conducted by the researcher. In addition, there have been no empirical research studies in the literature using both the correlates of irrational beliefs and burnout.

The intent of this research was to provide a vital link to ascertain whether individuals who have more irrational beliefs also have a greater propensity toward burnout than do those individuals who have fewer irrational beliefs. In addition, it was hoped that this study could provide support for developing counseling strategies and interventions to help change teachers' irrational beliefs and perhaps lessen a proclivity toward burnout. It was also determined that this study could be important in providing additional information and knowledge about individual differences pertaining to the conceptualization of burnout. Finally, results of the study might be used to provide empirical evidence regarding the strength of a REBT bibliotherapy intervention in the reduction of the level of burnout and irrational beliefs among teachers in the State of Iowa.

Hypotheses

In order to investigate the relationship burnout and irrational beliefs four hypotheses were investigated.

1. There will be a statistically significant difference between the Irrational Beliefs Test (IBT; Jones, 1969) total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention.
(That is, the experimental group will have a lower IBT (Jones, 1969) total score than the control group on the posttest measure.)

2. There will be a statistically significant difference between Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) emotional exhaustion total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a lower emotional exhaustion total score than the control group on the posttest measure.)

3. There will be a statistically significant difference between Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) depersonalization total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a lower depersonalization total score than the control group on the posttest measure.)

4. There will be a statistically significant difference between Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) personal accomplishment total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a higher personal accomplishment total score than the control group on the posttest measure.)
Assumptions

1. The burnout measure is a valid and reliable measure of burnout.
2. The belief measure is a valid and reliable measure of irrational beliefs.
3. The treatment is an effective counseling intervention for changing irrational beliefs.

Delimitations

1. The subjects were middle school teachers in the State of Iowa.
2. Subjects of this study were selected by a stratified random sampling from the Basic Educational Data Survey (BEDS) by the Iowa Department of Education utilizing a Statistical Analysis System (SAS) program.

Limitations

1. The findings are limited to middle school teachers in the State of Iowa.
2. The generalizability of the study may be restricted to middle school educators.
3. The demographic profile from which subjects were drawn may not be representative of other middle school teachers.
4. The methodology may have allowed the “Hawthorne Effect” to occur among participants.
5. The use of self-report instruments to assess the constructs, irrational beliefs, and burnout may result in socially acceptable responses.
Definitions

For consistency of interpretation, the following terms are defined:

Burnout: “Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among those who do ‘people work’ of some kind” (Maslach & Jackson, 1986, p. 1).

Irrational Beliefs: Absolutistic beliefs that are self-defeating and lead to inappropriate emotions that sabotage a person’s life goal pursuit and attainment (Crawford & Ellis, 1989; Ellis, 1984a).

Irrational Beliefs Test (IBT; Jones, 1969): A measure used to assess the level of irrational beliefs in individuals.

Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986): A measure used to assess emotional exhaustion, depersonalization, and reduced personal accomplishment in teachers.

Stress: “The nonspecific response of the body to any demand made on it” (Seyle, 1974, p. 27).
CHAPTER II
REVIEW OF LITERATURE

The purpose of this study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers' irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment. The review of literature focuses on the theory of Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention and a multidimensional concept of burnout.

This focus was elected since there have been no published empirical studies on the reduction of burnout using counseling-based techniques, specifically Rational Emotive Behavior Therapy (REBT) strategies. Also in this area, since there have been no research studies conducted using the variables of irrational beliefs and burnout, the review of the literature was approached through an individual examination of each variable, irrational beliefs and burnout, related to this dissertation study. The review of the literature examined studies using the Irrational Beliefs Test (IBT; Jones, 1969) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986), the two measures used in this dissertation study.

This section of the review of the literature is divided into two parts. The first part examines the theory of Rational Emotive Behavior Therapy (REBT) and studies using the Irrational Beliefs Test (IBT; Jones, 1969). The second part of this section analyzes burnout as a multidimensional concept and investigates empirical studies using the
Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986).

**Theory of Rational Emotive Behavior Therapy**

Rational Emotive Behavior Therapy (REBT) is comprised of several components. This section presents the REBT philosophy, foundation, and theoretical concepts. These are delineated and clarified through a discussion of the REBT components. The first component is the ABCDEF model of REBT. Second is a discussion of rational and irrational beliefs and irrational conclusions. Last is a discussion of the cognitive, emotive, and behavioral techniques of REBT.

**The ABCDEF Theory of Irrational Thinking and Disturbance of REBT**

The ABCDEF theory is the conceptual foundation and cornerstone of irrational thinking and emotional disturbance in REBT (Corey, 1991; Ellis 1996; Ellis & Bernard, 1985; Ellis & Dryden, 1997). The ABCDEF conceptual schema illustrates the basic theory of REBT and the role of the thinking and cognitive processes in emotional disturbance (Corey, 1991; Dryden & DiGiuseppe, 1990; Ellis, 1991b; Rorer, 1989; Wessler & Wessler, 1980). The ABC part of the ABCDEF framework in REBT bibliotherapy intervention is the "method of viewing human personality and its disturbance" (Ellis, 1973, p. 4). The first three parts of the ABCDEF theory in REBT bibliotherapy intervention are the ABC's comprised of the activating event (A), the belief system (B), and the emotional and behavioral consequences (C).

**Activating event (A).** The "A" stands for the activity, activating event, action, agent, experience, object, person, situation, or stimulus in the ABC model that causes an
individual to become disturbed (Ellis, 1973; Ellis & Bernard, 1985; Ellis & Dryden, 1997). The "A" can stand for all inferences, interpretations, and perceptions about the activating event (Dryden & DiGiuseppe, 1990). Webber and Coleman (1988) described the activating event as generally unpleasant and bothersome to a person only if it creates negative emotions.

Beliefs (B). The "B" stands for an individual’s belief system or thinking process about the activating event in the ABC model. Grieger and Woods (1993) described the belief system as a person’s software program “B” which is triggered by the events at point “A.” Related beliefs or the “B” can be rational or irrational. A rational belief is a reasonable or realistic demand; whereas an irrational belief is viewed as an absolutistic and inflexible demand.

In REBT, there are three types of demands (Ellis, 1996). First are demands placed on self. When individuals believe they absolutely must be successful all the time, they may experience guilt, anxiety, depression, despair, or worthlessness (Ellis, 1996) if they do not achieve their lofty goals. Second are demands placed on others. When individuals believe that others absolutely must treat them fairly and considerately and this does not happen, they may experience anger, rage, fury, and resentment (Ellis, 1996). Last are demands placed upon the environment or world. Individuals believe that the conditions under which they live absolutely must be comfortable and pleasurable. When this does not happen, individuals may experience feelings of rage, self-pity, and low frustration tolerance (Ellis, 1996).
Consequences (C). The “C” stands for the cognitive, emotive, and behavioral consequences of a person’s beliefs about the activating event (Dryden & DiGiuseppe, 1990). There is an emotional and behavioral reaction or consequence of what an individual feels and what he or she does at point “C” to deal with the event at point “A” (Grieger & Woods, 1993). Some of the negative emotional consequences to “A” may include anger, anxiety, depression, guilt, hurt, self-deprecation, self-pity, and shame (Ellis & Bernard, 1985; Grieger & Woods, 1993).

Ellis (1991a) stated that the “A,” “B,” and “C,” as well as cognitions, emotions, and behaviors, all affect one another. Webber and Coleman (1988) contended that feeling, thinking, and behaving are interactional variables in REBT. Ellis (1991a) believed that the activating event (A) does not and cannot cause consequences (C). He postulated that the way individuals believe (B) about what happens in their lives causes them to create their own actions and consequences (C; Grieger & Woods, 1993).

The disputation of beliefs (D), the development of a new philosophy or effect (E) and a new feeling (F) are the main goal of REBT. The addition of these three components extends the ABC model into the ABCDEF model.

Disputation of irrational beliefs (D). The removal of emotional disturbance involves the disputation of irrational beliefs (D) and the attainment of a new philosophy or effect (E) that gives individuals the ability to think and behave more rationally (Ellis & Bernard, 1985). The disputation process involves teaching individuals that their interpretations, philosophies, attitudes, or beliefs, rather than the activating event, cause their cognitive/behavioral effects (Ellis, 1991a). The disputation process utilizes “the
logico-empirical method of scientific questioning, challenging, and debating (Ellis & Grieger, 1977). This process involves rewriting individuals' "software programs" to bring about a philosophical change in their irrational ways of thinking and believing (Grieger & Woods, 1993, p. 51).

The disputation process can be divided into three steps. These steps are (a) the detection of irrational beliefs (IB) and realization that they are unrealistic; (b) refutation of IB and helping individuals realize that their viewing of them is not realistic; and (c) a plan for helping individuals lead a healthier lifestyle through the comprehension of irrational and rational beliefs (Phadke, 1982 cited in Ellis & Bernard, 1985). In essence, the disputation process helps individuals challenge their beliefs and to arrive at a rational conclusion (Grieger & Woods, 1993). It also leads to the surrender of irrational beliefs (Ellis & Grieger, 1977).

The disputation of irrational beliefs can be done with cognitive, emotive, and behavioral techniques. Cognitive disputation uses techniques such as bibliotherapy, positive imagery, cognitive homework, and problem-solving methods. Emotive strategies could include rational-emotive imagery, role-playing, and self-statements. Behavior techniques and strategies may include homework assignments based on in-vivo desensitization and flooding paradigms.

Acquisition of the new effect (E). Through the disputation process, a new effect and philosophy (E) is acquired and assimilated into an individual's thinking (Corey, 1991; Ellis, 1996; Ellis & Grieger, 1977). A cognitive effect, as well as a behavioral effect, may occur at point "E" (Corey, 1991; Ellis, 1973). The cognitive effect involves
realizing that the belief is irrational and changing the thought process into more realistic thinking. The change on the cognitive level is a result of direct philosophic confrontation (Ellis, 1973). The behavioral effect may cause a reduction in psychosomatic reactions (Ellis, 1973). Since practitioners of REBT offer and accept no reason for human unhappiness, they “reveal, attack, and radically uproot the major sources of needless, self-defeating, and socially destructive behavior” (Ellis, 1973, p. 66). As a result, new beliefs and philosophy allow individuals to view themselves, others, and the world in a new light. With the development of new, effective, and rational thoughts, individuals enhance their life and often get the results they want (Grieger & Woods, 1993).

A new feeling (F). Through the disputation (D) and new effective coping (E), individuals acquire new emotion or feeling about the activating event (A). The new feeling (F; Corey, 1991) causes an individual to have more rational self-talk (beliefs) and to have less self-defeating consequences (C). The new feeling (F) allows individuals to cope more effectively and to have more positive thoughts and beliefs about a situation (A). It should be noted that in “F,” individuals reduce the negative intensity of the feeling but do not eliminate the feeling in its entirety.

Rational and Irrational Beliefs

According to Ellis (1962), a person’s belief system is comprised of rational and irrational beliefs. He contended that “both rational and irrational beliefs are evaluations of reality, not descriptions, or predictions of it” (Walen, DiGiuseppe, & Wessler, 1980, p. 72).
Rational beliefs. Rational beliefs use the terminology of desires, wishes, wants, and preferences. Ellis (1973) stated that individuals may have rational, reasonable, or realistic beliefs about the activating event (A). According to Walen et al. (1980), rational beliefs (a) are true; (b) are not absolutistic; (c) result in moderate emotion; and (d) help individuals attain their goals. These authors contended that rational beliefs are logical and consistent with reality. Rational beliefs are expressed as desires, hopes, wants, wishes, or preferences, and not as demands. They often lead to mild to strong feelings, yet they are not disturbing to individuals. Rational beliefs offer satisfaction in living and minimize conflict with self, others, and the environment. They enable connection and involvement with others, as well as occupation in personally fulfilling endeavors.

Irrational beliefs. Ellis (1984b) stated that “Irrational beliefs are those cognitions, ideas, philosophies that sabotage and block people’s fulfilling their basic most important goals” (p. 20). Irrational beliefs use the terminology of oughts, musts, demands, commands, and expectations (Ellis & Bernard, 1985). Irrational beliefs are beliefs or cognitions of disturbance (Ellis & Bernard, 1985). According to Walen et al. (1980), irrational beliefs (a) are not true; (b) are a command; (c) lead to disturbed emotions; and (d) do not help individuals attain their goals. They are illogical and unrealistic, and often are based on an inaccurate premise or inaccurate deduction. Walen et al. also contended that irrational beliefs are not supported by empirical evidence and often are an overgeneralization. He suggested that such beliefs represent an absolutistic philosophy and are expressed as demands (versus wishes), shoulds (versus preferences), and needs (versus wants). Too, he pointed out that irrational beliefs often are debilitating and non-
productive. Such beliefs, he argued, offer individuals a life governed by absolutes and inundated with upsetting emotions. They do not enable individuals “to work at the ongoing business of life of maximizing pleasure and minimizing discomfort” (Walen et al., p. 74). Such self-defeating thinking stems from irrational beliefs and leads to psychological disturbance.

Ellis devised a list of 12 irrational beliefs or irrational ideas in 1958 and revised this list in 1962. The resulting 11 irrational ideas or beliefs are as follows:

1. It is a dire necessity for an adult human being to be loved or approved by virtually every significant other person in the community.

2. One should be thoroughly competent, adequate, and achieving in all possible respects if one is to consider oneself worthwhile.

3. Certain people are bad, wicked, or villainous and they should be severely blamed and punished for this villainy.

4. It is awful and catastrophic when things are not the way one would very much like them to be.

5. Human unhappiness is externally caused and people have little or no ability to control their sorrow and disturbances.

6. If something is or may be dangerous or fearsome one should be terribly concerned about it and should keep dwelling on the possibility of its occurring.

7. It is easier to avoid than to face certain life difficulties and self-responsibilities.

8. One should be dependent on others and needs someone stronger than oneself on whom to rely.
9. One’s past history is an all-important determiner of one’s present behavior, and because something once strongly affected one’s life, it should indefinitely have a similar effect.

10. One should become quite upset over other people’s problems and disturbances.

11. There is invariably a right, precise, and perfect solution to human problems and it is catastrophic if this perfect solution is not found (Ellis, 1962).

Irrational beliefs and philosophies are identified as the central focus for change in REBT, and Ellis categorized these eleven irrational beliefs and rigid premises into four irrational conclusions. The four forms of irrational conclusions or self-defeating thinking that lead to disturbance and problems are demandingness, awfulizing, I can’t stand it-itis, and self-or-other damnation (Dryden & DiGiuseppe, 1990; Ellis et al., 1997; Grieger & Woods, 1993; Morris, 1989).

Irrational conclusions. When individuals hold rigid premises and irrational beliefs, they often draw irrational conclusions based on them (Dryden & DiGiuseppe, 1990). Ellis and Bernard (1985) referred to irrational conclusions as forms of self-defeated thinking that stem from irrational beliefs and lead to psychological disturbance. Morris (1989) also felt that irrational conclusions tend to enhance individuals’ emotional disturbances. The four forms of irrational conclusions are demandingness, awfulizing, I can’t stand it-itis, and damnation.

Demandingness and unrealistic overgeneralization comprise the first irrational conclusion. This philosophy is considered to be central to all emotional disturbance

The second irrational conclusion is awfulizing. Awfulizing statements suggest that events are not only bad but worse than bad. In essence, something that is bad usually is blown up to a full-fledged catastrophe. Dryden and DiGiuseppe (1990) described awfulizing as “the belief that a situation is more than 100 percent bad, worse than it absolutely should be” (p. 4). Awfulizing and catastrophizing appear to be at the center of most emotional problems (Grieger & Woods, 1993). The language of awfulizing includes “awful,” “horrible,” and “terrible.”

“I can’t stand-it-itis,” often referred to as low frustration tolerance or discomfort anxiety, is the third irrational conclusion that individuals may draw based on their irrational beliefs. Their irrational beliefs include the thoughts that things should come easily for them, they shouldn’t have to work so hard, or they can’t stand the discomfort. Individuals who exhibit I can’t stand-it-itis, low frustration tolerance, or discomfort anxiety often view themselves as not being able to survive a situation or experience any happiness (Dryden & DiGiuseppe, 1990). The cause of the low frustration tolerances and
discomfort anxiety lies not in the problem, but the idea that a person cannot stand a situation (Grieger & Woods, 1993).

The last core irrational conclusion is damnation, self-rating, or judging. Damnation or worthlessness often interacts with the other three core irrational beliefs (Grieger & Woods, 1993). Individuals project criticism or damnation of self, others, and/or life conditions (Dryden & DiGiuseppe, 1990). Individuals tend to self-rate, judge, and damn themselves, causing a reduction of their self-worth (Grieger & Woods, 1993). Rejection, criticism, and failure are also viewed as a threat to peoples’ self-worth. Common language of damnation may include “I’m a failure,” “He’s a jerk,” “She’s stupid,” or “I’m worthless” (Grieger & Woods, 1993). In damnation, individuals tend to judge the whole person as bad.

**Therapeutic Treatment Techniques of Rational Emotive Behavioral Therapy**

Rational-emotive-behavior therapists are multimodal in their approach to changing individuals’ self-defeating behaviors. Rational Emotive Behavioral Therapy (REBT) utilizes techniques borrowed from other therapeutic systems. This is often referred to as theoretically consistent eclecticism (Ellis & Dryden, 1997). Practitioners of REBT incorporate cognitive, emotive (affective), and behavioral interventions in therapy. In the following section the cognitive, emotive, and behavioral interventions are discussed.

**Cognitive Methods of REBT**

Cognitive interventions are used in REBT to help individuals to evaluate and think about alternative ways to view themselves, others, and the world (Wessler &
Wessler, 1980). Cognitive techniques encourage individuals to understand how they think instead of the practitioner telling them how they think. Some of the cognitive interventions of REBT include disputation of irrational beliefs, cognitive homework, bibliotherapy, changing one’s language, and use of humor (Corey, 1991).

The cognitive method of disputing of individuals’ irrational beliefs is coupled with teaching them how to challenge irrational beliefs on their own in REBT (Corey, 1991). Clients are constantly challenged by the therapist who questions their self-statements and beliefs to help the clients realize their thoughts and beliefs are causing the disturbance. Individuals who refute their irrational beliefs become more self-helping and rational. The intervention of disputation helps individuals to diminish their “musts,” “oughts,” and “shoulds.”

The use of cognitive homework encourages individuals to make lists of their problems and dispute these beliefs (Corey, 1991). Cognitive homework utilizes the psychoeducational methods of rational-emotive-behavioral bibliotherapy (i.e., self-help books and booklets), tapes of clients’ therapy sessions, and self-help forms. Cognitive homework interventions help individuals deal with anxiety, challenge their irrational thinking, and dispute negative, self-fulfilling prophecies of failure.

Bibliotherapy is a cognitive method used by REBT practitioners (Corey, 1991). Clients are given self-help books or materials to read so they may understand their thinking, as well as to help develop a new rational philosophy (Ellis & Becker, 1982; Ellis & Harper, 1975). Bibliotherapy enables individuals to learn about their beliefs and
thinking. It also allows individuals to develop a more constructive way to deal with their beliefs and thinking.

The process of changing individuals' language patterns and the acquisition of new self-statements enables clients to think and behave differently (Corey, 1991). Changing clients' language involves analysis of their language patterns. Since REBT therapists believe that language shapes thinking and thinking shapes language, this intervention changes individuals’ language of “musts,” “oughts,” and “shoulds” to one of preferences. Through the use of new self-statements, individuals empower themselves with nonabsolutistic preferences.

The use of humor helps dispute awfulizing and exaggerated thinking that often gets clients into difficulty. Emotional disturbance is often caused by individuals becoming too serious and losing their sense of humor and perspective of life’s events. Through the use of humor, clients can learn the value of not taking themselves too seriously.

**Emotive Methods of REBT**

Emotive techniques enable individuals to imagine themselves in different situations. In these imagining exercises, individuals are guided by the practitioner in the rehearsal of positive emotions and action goals (Wessler & Wessler, 1980). Four emotive-evocative methods used with clients include rational-emotive imagery, shame-attacking exercises, role-playing, and use of force and vigor. Through these interventions, clients are taught the value of unconditional acceptance of themselves.
(Corey, 1991). These emotive interventions help individuals change their thoughts, emotions, and behavior (Ellis & Yaeger, 1989).

The first emotive intervention, rational-emotive imagery, is utilized to establish new emotional patterns through intense mental practice (Corey, 1991). Maultsby (1984) described rational-emotive imagery as a way individuals can imagine themselves thinking, feeling, and behaving the way they would like to think, feel, and behave in real life situations. Ellis (1979) felt that individuals who practice rational-emotive imagery become desensitized and no longer act and feel inappropriately over anxiety producing events.

Role-playing is the second emotive technique used to help individuals view themselves as worthwhile. Role-playing involves the therapist showing the clients what they are telling themselves to create their disturbances (Corey, 1991). Through role-playing, individuals are able to work through underlying irrational beliefs which are tied to their inappropriate feelings.

The third emotive technique is shame-attacking exercises. These exercises were developed to aid people in the elimination of irrational shame over their behavior in different circumstances. The purpose of shame-attack exercises is to help individuals to feel unashamed even when others disapprove of their actions (Corey, 1991). Through emotive and behavioral components, clients usually are assigned homework which involves taking a risk of doing something they are usually afraid of doing. These exercises are designed to help individuals understand feelings of shame are self-created and behave in less unemotional, unresponsive, and inhibited ways (Corey, 1991).
The last emotive intervention is the use of force and vigor. Individuals use forceful self-dialogues to dispute their irrational beliefs (Corey, 1991). This intervention allows individuals to move from intellectual to emotional insight. Ellis (1996) utilized a forceful two-chair rational and irrational dialogue to help individuals dispute irrational beliefs and strongly hold onto rational beliefs. Ellis and Dryden (1997) endorsed the use of forceful self-statements and self-dialogue as emotive techniques. This is where individuals devise rational statements and argue the appropriateness of their rational/irrational beliefs.

Behavioral Methods of REBT

When therapists use behavioral techniques, they engage individuals in an activity that they fear or avoid (Wessler & Wessler, 1980). The goal of behavioral interventions is to help individuals change the idea of the underlying emotion. This allows individuals to reevaluate the consequences of their behavior (Wessler & Wessler, 1980). Behavioral interventions used by REBT practitioners with individuals include activity homework, reinforcement and penalties, and systematic desensitization (Ellis, 1996; Ellis & Dryden, 1997; Wessler & Wessler, 1980).

Behavioral homework assignments involve individuals acting on their irrational beliefs and taking risks to encourage new attitudes (Wessler & Wessler, 1980). These activity homework assignments may include risk taking, shame-attacking, and antiprocrastination exercises. The risk-taking exercises involve individuals in risking whatever they fear the most in life (Wessler & Wessler, 1980). These risks usually involve some type of rejection or failure. Shame attacking exercises incorporate rejection
or disapproval in their design in order to help individuals master the emotions of disapproval, shame, humiliation, or mortification. Antiprocrastination exercises are designed to confront individuals' procrastination, postponement, or non-completion homework behavior.

Reinforcements and penalties are used by individuals in conjunction with homework activity assignments. Individuals are immediately rewarded for completion of their homework. Penalties are given for not carrying out homework assignments. Ellis (1996) stressed that individuals need to reinforce themselves after the completion of homework assignments and to omit the rewards or to assess a penalty or punishment for non-completion of homework projects.

Systematic desensitization exercises offer individuals chances to overcome their fears through progressive homework assignments involving real life situations (Ellis, 1973). Individuals confront their fears gradually through exercises designed to reduce and eliminate their phobias.

Summary of REBT

Practitioners of Rational Emotive Behavioral Therapy (REBT) utilize the ABCDEF model to examine irrational thinking and emotional disturbance. The ABCDEF model shows the role of thinking and cognitive processes in emotional disturbance. The ABCDEF components in REBT are the activating event (A), the belief system (B), the emotional and behavioral consequences (C), disputation of irrational beliefs (D), the acquisition of the new effect (E), and new feeling (F). This model is the foundation and basis for viewing human disturbance in REBT. Rational Emotive
Behavioral Therapy (REBT) utilizes the ABC of the ABCDEF model in analyzing irrational beliefs and emotions of individuals. The disputation (D) part of the ABCDEF model utilizes interventions and techniques to bring about the new effect (E) plus (a) new feeling(s) (F).

Practitioners of REBT use cognitive, emotive, and behavioral interventions to help individuals change their view of themselves, others, and the environment. Cognitive interventions allow individuals to understand how they think. Emotive techniques help individuals imagine themselves in different situations. Behavior methods help individuals face things and situations they fear and avoid. The behavioral interventions aid individuals in changing the idea of the underlying emotion. These interventions assist individuals in changing their faulty thinking, self-defeating emotions, and inappropriate behavior.

Practitioners of REBT utilize different strategies to explore and examine the irrational beliefs their clients hold and endorse in life. Through cognitive, emotive, and behavioral methods, practitioners not only assess their clients irrational beliefs, they also can design appropriate interventions to help clients change their beliefs. Often times, practitioners of REBT use assessment instruments to garner information on what irrational beliefs clients endorse and the intensity of these beliefs. An empirical researched-based instrument often used to assess irrational beliefs is the Irrational Beliefs Test (IBT; Jones, 1969). Studies utilizing the IBT (Jones, 1969) will be reviewed and discussed in the following section.
Research Studies Utilizing the Irrational Beliefs Test

Empirical research studies utilizing the Irrational Beliefs Test (IBT; Jones, 1969) are numerous. This test (IBT; Jones, 1969) is the most widely used instrument to assess irrationality (Smith, Houston, & Zurawski, 1984). Irrational beliefs are often associated with lower levels of well being on the continuum of emotional disturbance (Smith, 1982). Research studies utilizing both the Irrational Beliefs Test (IBT; Jones, 1969) and Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) are non-existent. The majority of studies utilizing the IBT (Jones, 1969) explored irrational beliefs related to anger, anxiety, anger and anxiety, depression, physical and psychosomatic illness, and stress. Selected studies on these topics are reviewed in this section.

Anger

Two studies were conducted to analyze the relationship between irrational beliefs and anger. These studies were conducted by Hazaleus and Deffenbacher (1985) and Lohr, Hamberger, and Bonge (1988). These researchers found positive correlations between irrational beliefs and anger.

In a study by Hazaleus and Deffenbacher (1985), students in an introductory psychology class completed an anger inventory and the Irrational Beliefs Test (IBT; Jones, 1969). The results indicated that men endorsed more irrational beliefs in the areas of blame proneness and helplessness, whereas females endorsed more irrational beliefs with regard to dependency. There were no significant sex differences on the total irrational belief score or anger measure. The results suggested that the irrational beliefs
of blame proneness and anxious overconcern were more closely associated with and predictive of anger.

Another study examining the relationship between anger and irrational beliefs was done by Lohr et al. (1988). In this study, introductory psychology students were assessed using an anger measure and the IBT (Jones, 1969). The irrational belief factor, anxious overconcern, was significant for all anger subscale scores and anger total score for both genders. The irrational beliefs factor, demand for approval, was significant for males in three out of the six anger subscales; anxious overconcern was significant for females in six of six of the anger subscales. The researchers concluded that anxious overconcern may be a common core belief associated with affective problems.

In the selected anger studies reviewed, the researchers found that anxious overconcern was a significant factor related to anger. Other irrational beliefs of blame proneness, helplessness, and dependency were also related to anger.

Anxiety

Many studies have explored the relationship between irrational beliefs and specific types of anxiety. Six selected studies by Rohsenow and Smith (1982), Gitlin and Tucker (1988), Lohr and Bonge (1981), Lohr and Rea (1981), Smith et al. (1984), and Deffenbacher, Zwemer, Whisman, Hill, and Sloan (1986) examined the relationship between irrational beliefs and anxiety. The results of these studies suggested that individuals who had manifestations of anxiety also tended to utilize irrational thinking. Rohsenow and Smith (1982) examined the concept that individuals who endorse irrational beliefs were more likely to have aversive emotional states. Their study was
designed to validate the relationship between irrational beliefs and negative affect. The subjects completed the IBT (Jones, 1969), an anxiety inventory, a personality assessment, and locus of control scale. Undergraduate male college students were selected from their scores on personality assessment to participate in the study. The type of personality scores was utilized to rule out alcoholism, drug abuse, and major health problems. This study was conducted over a seven-month period of time.

There was a strong correlation with anxiety scores and the IBT (Jones, 1969) total score. The subscales of need for approval and external causes on the IBT (Jones, 1969) showed significant correlation with trait anxiety. The subscale of precise solutions showed a significant negative correlation with trait anxiety. There was no significant relationship between the subscales of blames others, external causes, doomed by the past, and external locus of control. There was a positive correlation between external locus of control, need for approval, and dwells on negatives. The results of the personality measure and IBT (Jones, 1969) indicated no significant relationships. Overall, the study by Rohsenow and Smith (1982) suggested a relationship between specific factors on the IBT (Jones, 1969) and maladaptive emotional states.

Gitlin and Tucker (1988) investigated the use of items on the IBT (Jones, 1969) as a predictor of rationality and trait anxiety. The goal was to explore correlations among irrational beliefs, trait anxiety, and the ability to discriminate rationality. The subjects were from a personal growth and adjustment college class. They were administered the IBT (Jones, 1969), a trait anxiety measure, and a questionnaire for demographic data on the participants. The results of the study indicated a significant correlation between
irrational beliefs and trait anxiety as well as the subjects' ability to discriminate rational responses. According to the results, the relationship between trait anxiety and discriminant ability was not significant. Gitlin and Tucker (1988) further delineated the scores into groups to assess the interrelationships among the three factors. The high irrationality scores and low discrimination scores were utilized to divide the subjects into four groupings. The researchers designated the trait-anxiety score as the dependent variable. The results of this analysis indicated a significant effect for the irrationality variable, no significance for the discrimination variable, and no significant interaction. Race, sex, and religion were non-significant for irrationality, discrimination ability, and trait-anxiety. Sophomores endorsed more anxiety than freshmen and seniors.

Lohr and Bonge (1981) explored the distinction between illogical and irrational beliefs and their relationship to anxiety. Introductory undergraduate students were given a battery of measures including the IBT (Jones, 1969), a dysfunctional attitudinal scale, and two anxiety measures to assess their beliefs and anxiety. There were significant correlations among all of the variables: the IBT (Jones, 1969), dysfunctional attitudinal scale, and state and trait anxiety. Correlations were significant between irrational beliefs and the cognitive dysfunction component, trait anxiety, and overall anxiety. Lohr and Bonge (1981) concluded that the connection between the cognitive dysfunction component and the anxiety component lies with the relationship between irrational beliefs and trait anxiety. They further noted that the use of “irrational” and “illogical” are not interchangeable. Lohr and Bonge (1981) indicated that “irrational” and “illogical
beliefs” “... may represent subsets of a larger set of ‘dysfunctional’ attitudes which are associated with different affective states” (p. 194).

Another study regarding irrational beliefs and anxiety was performed by Lohr and Rea (1981). They examined the fear of public speaking and irrational beliefs. Students in an introductory speech class completed a public speaking anxiety measure and the IBT (Jones, 1969). Results of the study indicated the demand for approval subscale had the only positive relationship with the fear of public speaking. Results were not conclusive in establishing a link between irrational beliefs and fear of public speaking.

Arousal of emotional distress and irrational beliefs was the focus of a study done by Smith et al. (1984). General psychology students took the IBT (Jones, 1969) and an anxiety measure. The researchers found that the demand for approval subscale of the IBT (Jones, 1969) correlated strongly with high self-expectations, helplessness for change, total irrational beliefs, the fear of negative evaluation, and trait anxiety. High self-expectations subscale showed a significant correlation with helplessness for change, total irrational beliefs, fear of negative evaluation, and trait anxiety. The helplessness for change subscale correlated with the total irrational beliefs, fear of negative evaluation, and trait anxiety. Fear of negative evaluation correlated with trait anxiety. The researchers concluded that the results lent empirical support for the validity of the IBT (Jones, 1969) and the rational-emotive model. They suggested an association between the beliefs measured by the IBT (Jones, 1969) and cognitive concomitants of emotional stress.
Deffenbacher et al. (1986) studied irrational beliefs and anxiety. Introductory psychology students completed the IBT (Jones, 1969), several anxiety constructs measuring trait, test, speech, fear of criticism, and social avoidance and distress instruments.

There were moderate correlations among irrational beliefs. Anxieties were intercorrelated, and anxieties correlated with need for approval, personal perfection, catastrophizing, anxious overconcern, problem avoidance, and helplessness. Anxieties also correlated minimally with blame proneness, emotional irresponsibility, dependency, and perfect solutions (Deffenbacher et al., 1986). The researchers concluded that anxious overconcern, personal perfection, catastrophizing, and helplessness were core irrational beliefs and predictive of trait anxiety.

In the selected studies reviewed, the researchers found a positive relationship between irrational beliefs and specific types of anxiety. They concluded that individuals who express high levels of irrational beliefs are more likely to experience adverse emotional states and high anxiety than those who have lower levels of irrational beliefs.

**Anger and Anxiety**

Three studies conducted by Zwemer and Deffenbacher (1984), Woods and Coggin (1985), and Woods (1987) examined the variables of irrational beliefs with both anger and anxiety. These researchers found a significant relationship between irrational beliefs and anger and anxiety.

Zwemer and Deffenbacher (1984) examined the relation of irrational beliefs to anger and anxiety. Undergraduate students in an introductory psychology classes were
administered the IBT (Jones, 1969), an anger measure, and a trait anxiety assessment. The results of this study suggested that the irrational beliefs mean score was higher than those originally reported by Jones (1969). Males tended to score higher on blame proneness and perfect solutions subscales and lower on the dependency subscale than females. No significance was noted on the remaining subscales of the IBT (Jones, 1969). There were significant correlations between anxiety and irrational beliefs, with the exception of dependency and blame proneness subscales. There were also positive correlations between anger and anxiety. Regression results indicated that personal perfection, anxious overconcern, blame proneness, and catastrophizing correlated with anger, whereas, demand for approval, anxious overconcern, blame proneness, and catastrophizing correlated with extreme levels of anxiety.

By examining anxiety and anger in nonclinical groups, Woods and Coggin (1985) researched the REBT concept that irrational beliefs cause emotional disturbance. Subjects from first and second-level psychology classes were administered the IBT (Jones, 1969), an anxiety inventory, and an anger measurement scale. Based on their initial anxiety and anger assessed scores, the subjects were divided into low, medium, and high groups for anxiety and low, medium, and high groups for anger. There were significant differences on several of the subscales of the IBT (Jones, 1969) for the low, medium, and high anxiety groups. The subscales of blame proneness and dependency did not have any significant difference. Higher levels of anxiety equated with higher levels of irrational belief on all subscales of the IBT (Jones, 1969), except the perfectionism subscale. On the irrationality scale for the low, medium, and high anger
groups, the results were significant with the exception of the dependency subscale. The higher level of anger was positively correlated to irrationality, except for the perfectionism subscale.

The largest difference between the high and low anxiety groups was on the subscales of anxious overconcern, demand for approval, high self-expectations, and frustration reactive on the IBT (Jones, 1969). The anxiety groups demonstrated no significant differences on the blame proneness subscale, but the anger groups showed significant differences in the blame proneness subscale. The larger differences were found with the low and high anger groups on the subscales of high self-expectations, anxious overconcern, frustration reactive, and demand for approval. The results of this study supported the concepts of REBT regarding the relationship of irrational beliefs to emotional disturbance. Overall, the results showed the same irrational beliefs reflected the greatest differences for both anxiety and anger. Woods and Coggin (1985) concluded that the four irrational beliefs of anxious overconcern, demand for approval, high self-expectations, and frustrative reactive are significant in both types of emotional arousal.

Woods (1987) studied the reductions of Type A behavior, anxiety, anger, and physical illness by using REBT to change the irrational beliefs of subjects in a large corporation. The subjects were administered the IBT (Jones, 1969), an activity survey, anger and anxiety measures, depression inventory, assertion inventory, and a physical symptoms checklist. All subjects took part in the treatment which consisted of four reading assignments associated with REBT theory and irrational beliefs over four workshops that lasted approximately an hour and a half in length. The workshop
curriculum involved lectures and discussion of basic REBT concepts and their application towards negative affective states of stress, anxiety, guilt, and depression (Woods, 1987). Following the REBT, the evidence indicated changes in the subjects’ irrational beliefs and the dependent measure of Type A behavior, anxiety, anger, depression, assertiveness, and physical illness symptoms.

There were statistically significant changes for the scores on demand for approval, high self-expectations, blame proneness, frustration reactive, emotional irresponsibility, anxious overconcern, helplessness for change, perfectionism subscales and total score of the IBT (Jones, 1969). There were significant correlations between the dependent variables of anxiety, anger, illness, Type A behavior, and physical illness and the IBT (Jones, 1969). Woods (1987) concluded a relationship existed between irrational beliefs and anxiety, anger, Type A behavior, depression, assertiveness, and physical illness. These findings reinforced the basis premise of REBT that irrational beliefs elicit emotional and behavioral difficulties. If irrational beliefs are changed, then emotional and behavioral difficulties will decrease.

In the anger and anxiety studies selected for study, the researchers found a strong relationship between irrational beliefs and anxiety. There also was a strong relationship between irrational beliefs and anger. One set of researchers found a strong link between anger and anxiety. Another set of researchers found a causal relationship between irrational beliefs, anger, and anxiety as well as Type A behavior, depression, assertion, and physical illness.
Depression

In the area of depression and irrational beliefs, two studies by LaPointe and Crandall (1980) and Cash (1984) were reviewed. There was a positive correlational relationship between irrational beliefs and depression.

A study by LaPointe and Crandall (1980) examined three different categories of individuals: normal, depressed-psychologically distressed, and nondepressed but psychologically distressed. Undergraduate students completed self-report measures on depression, neuroticism, and a personality data form. They also completed the IBT (Jones, 1969), an irrational ideas inventory, and a rational behavior measure. There were significant effects for the total irrationality score for the total group. Post hoc analysis indicated that depressed subjects scored higher for irrational beliefs than the nondepressed and normal individuals. Both depressed and nondepressed psychologically distressed individuals reported more irrational beliefs than those individuals classified as normal in the study. LaPointe and Crandall (1980) concluded that depressed individuals tend to believe their unhappiness is caused by events out of their control and it is in their best interest to avoid problems. Depressed individuals also endorsed dependency on others for advice and support.

Cash (1984) also did a study regarding irrational beliefs and depression. He studied the relationship between cognitive-behavioral traits and depression among undergraduate female students enrolled in general psychology classes. The cognitive-behavioral traits examined were locus of control, success and failure, self-expression, and depression. The results of the Cash study indicated significant correlations between the
IBT (Jones, 1969) and each of the other four cognitive-behavioral traits. Individuals with greater irrational beliefs exhibited more external locus of control and acknowledged more depression. The subjects related a less optimistic cognitive set regarding success and failures in the academic world and showed less social assertiveness. The results indicated positive relationships with 9 of the 10 subtests of the IBT (Jones, 1969). In this study, the most predictive beliefs were demand for approval, high self-expectations, frustration reactivity, anxious overconcern, problem avoidance, and helplessness over the past for depressed individuals.

The findings of LaPointe and Crandall (1980) and Cash (1984) were similar with regard to irrational beliefs and depression. They concluded that high self-expectations, frustration reactivity, anxious overconcern, and helplessness correlated significantly with depression. These researchers also found demand for approval to be a factor in depressed individuals. LaPointe and Crandall (1980) were the only researchers to find a significant relationship between the irrational belief of blame proneness and depression.

Physical and Psychosomatic Illness

Five research studies exploring the physical and psychosomatic variables are reviewed in this section. These studies by Johnson and Lichtenberg (1981), Smith and Brehm (1981), Woods (1984), Woods and Lyons (1990), Lichtenberg, Johnson, and Arachtingi (1992) linked irrational beliefs with illness.

Johnson and Lichtenberg (1981) examined a person’s proclivity for illness. Adult volunteers from two Midwestern communities completed the IBT (Jones, 1969) and an illness survey. The results of this study suggested a positive relationship between
irrational beliefs, age, sex, and the measure of physical illness. The researchers concluded that illness scores were predictors of one’s irrational beliefs, age, and sex. Sex was the greatest predictor for demand for approval, perfectionism, perfect solutions, and dependency respectively with age being the second greatest predictor of these subscales. The results suggested that older women had a higher need for approval and perfectionism and a lower need for perfect solutions and dependency. Younger men exhibited a lower need for demand of approval and perfectionism but a higher need for perfect solutions.

Smith and Brehm (1981) investigated the association between coronary prone behaviors (Type A), irrational beliefs, and public self-consciousness. Introductory psychology students filled out an activity survey, activity scale, IBT (Jones, 1969), and a self-consciousness scale. This study showed that Type A individuals endorsed more blame proneness and less problem avoidance than other individuals. The activity scale showed a positive relationship with other Type A measures and lower social anxiety. Relationships were less consistent with Type A behavior and reduced demands for approval, reduced dependency, fatalism, high achievement standards, overactivity to frustration, and private self-consciousness. Analysis of females and males showed there was a negative correlation for males and females between Type A behavior and problem avoidance. Males who exhibited Type A patterns also showed high self-standards of achievement and perfectionism and lower social anxiety. There was a less stable relationship with males for anxious overconcern and reduced fatalism. Females with Type A patterns showed a stable association with frustration reactivity, anxious overconcern, private self-consciousness, and tendency to pay attention to one’s thoughts.
and feelings. Females with Type A behavior tended to have less stable relationships with blame proneness and reduced dependency. Smith and Brehm (1981) concluded that observed sex differences did not show a difference on the levels of Type A patterns or irrational beliefs.

Another study by Woods (1984) examined irrational beliefs as indicators of psychosomatic illness. The subjects included clients in psychotherapy, women college students, and mental health professionals who completed the IBT (Jones, 1969), a psychosomatic checklist, and a headache questionnaire. The researchers grouped the subjects into rational and irrational groups based on their IBT (Jones, 1969) scores. The comparison of the psychosomatic measure and IBT (Jones, 1969) yielded information for the relationship between irrational beliefs and physical (psychosomatic) disorders. The irrational groups endorsed high self-expectations, frustration reactive, anxious overconcern, problem avoidance, helplessness for change, psychosomatic problems, and total scores at higher levels than the rational groups. With regard to tension headaches, the groups with lower irrational belief also had a lower tendency for tension headaches. No significant differences with migraine headaches occurred within the groups. Woods (1984) concluded that irrational beliefs are associated with a person's physical well being.

Woods and Lyons (1990) explored the relationship between irrational beliefs and psychosomatic disorders. The sample was comprised of psychotherapy clients and non-psychotherapy clients. Each participant filled out the IBT (Jones, 1969), a physical
symptoms questionnaire, an anxiety scale, a depression instrument, an anger measure, and an activity construct.

There were no significant sex differences for the client group on the total frequency of symptoms score. In both the client and non-client group, females indicated more illness problems than males.

On the irrational beliefs measure in this study, there were no significant sex differences in the client sample. In the non-client group, females endorsed demand for approval and anxious overconcern at higher levels than males. Females also reported higher scores on the depression inventory and job involvement aspect of the activity survey. Overall, the client group endorsed 7 of the 10 scales significantly higher and 2 of the scales, blame proneness and perfectionism, significantly lower than the non-client group.

The client group with the high frequency of disorders was found to be more irrational on 7 of the 10 IBT (Jones, 1969) subscales and the total score than the client group with low psychosomatic disorders. The IBT (Jones, 1969) profiles of the high and low psychosomatic disorders non-client sample were not similar. The scale of anxious overconcern was the highest for the high psychosomatic disorders group and lowest for the low psychosomatic disorders group in the non-client sample. Anxious overconcern also was the highest for both groups in the client sample. The non-client sample with high frequency of psychosomatic disorders was significant for 7 of the 10 IBT (Jones, 1969) scales as well as the total scale. The client and non-client groups had significant differences for five of the same scales of the IBT (Jones, 1969). High and low disorders
on the total symptom frequency scores indicated significant differences between low and high symptom groups.

The findings of Woods and Lyons (1990) suggested that there is a strong correlation between anxious overconcern and psychosomatic disorders. They concluded that the belief of anxious overconcern is a precursor for anxious arousal and psychosomatic disorders.

Lichtenberg et al. (1992) studied the correlation between propensity for illness and certain psychosocial variables. The subjects were adult volunteers from two Midwestern communities. They completed the IBT (Jones, 1969) and an illness survey. The results of the Lichtenberg et al. study indicated that the subjects reported a lower demand for approval, perfectionism, blame proneness, and anxious overconcern beliefs and higher emotional irresponsibility than those in the norming study done by Jones (1969). The participants were higher in emotional irresponsibility than those in the norming study. The data showed a significant relationship between irrational beliefs, age, sex, and four physical illness factors. The older participants and women reflected a higher need for approval, competency, and achievement, yet a lower need to have perfect solutions. Younger participants and men showed a lower need for approval, competency, and achievement than older individuals and females. Lichtenberg et al. concluded that illness was a better predictor of irrational beliefs than irrational beliefs were for illness.

In the selected studies, the researchers found a significant relationship between irrational beliefs and physical and psychosomatic illness. One researcher concluded the
Type A personalities endorse high levels of irrational beliefs. All of the researchers linked irrational beliefs to physical and psychosomatic illness.

**Stress**

One study by Schill, Adams, and Ramanaiah (1982) examined irrational beliefs and stress. This study found a link between irrational beliefs and how one copes with stress.

Schill et al. (1982) studied the effects of endorsing irrational beliefs and coping with stressful life events. In this study, sophomore college students in an introductory psychology class completed the IBT (Jones, 1969), a depression scale, and a life experience inventory as part of this study.

The subjects were grouped into a poor coping group (high stress-depressed) or an effective coping group (high stress-nondepressed) by their scores on the IBT (Jones, 1969) and the depression scale. Results of the study indicated that the poor coping group endorsed more irrational beliefs than the other group. There was no significant difference between males and females. The poor coping group endorsed frustration reactance, anxious overconcern, and problem avoidance subscales at a significant level. Females also tended to endorse helplessness for change. The researchers concluded that individuals who were effective copers have fewer irrational beliefs than those who were poor copers.

This study indicated that efficient copers endorse fewer irrational beliefs than poor copers do. The researchers also established a link between irrational beliefs and depression.
Limitations of the Irrational Beliefs Studies

The limiting conditions and weaknesses of the reviewed research irrational belief studies included sample size, selection of subjects, and generalizability of results to other populations. In the majority of the studies, the samples were drawn from undergraduate university students in introductory psychology classes. Some of the sample sizes were extremely small. Other research samples included only female or male students. Thus, the generalizability of the results to other populations is not feasible for the majority of the reviewed studies. There also was a lack of follow-up studies and studies conducted over a period of time to affirm the researchers' original findings.

Conclusions

Irrational beliefs have been linked through empirical research with emotional disorders. The studies reviewed suggested a relationship between anger, anxiety, depression, physical and psychosomatic illness, and stress and irrational beliefs—not necessarily between all these things. The findings of the studies supported Ellis's concept that irrational beliefs are at the heart of emotional psychopathology and disturbance (Wicker, Richardson, & Lambert, 1985). These researchers suggested a strong correlation between irrational beliefs and psychological and physical distress. The results of the studies suggested support for the idea that individuals who have irrational beliefs usually experience inappropriate emotions and feelings and have greater inappropriate emotional distress.
Theory of Burnout

The concept of burnout includes several factors. In this section, the writer explores the burnout phenomenon through a review of the definitions of burnout, the historical development of the burnout concept, a multidimensional model of burnout, interventions for burnout, and teacher burnout.

Definitions of Burnout

Freudenberger, Maslach, and Pines were the forerunners in the exploration on the concept of burnout (Farber, 1983). The most frequently quoted definitions of burnout are those of Freudenberger and Richelson (1980), Maslach (1982b), and Pines and Aronson (1988).

Freudenberger (1974) originally coined the term burnout as the "state of physical and emotional depletion resulting from conditions of work" (p. 160). He indicated that, when frustration, tension, and anxiety are continuous and increasing in nature, stress develops into burnout. In an article written in 1975, Freudenberger described burnout as physical and emotional exhaustion resulting from excessive demands on energy, strength, and resources at work. He stated that physical signs of burnout included exhaustion and fatigue, lingering colds, headaches, sleep disturbances, and shortness of breath.

Emotional qualities associated with burnout include quickness to anger, irritation, and frustration.

One of the most quoted definitions in the literature was coined by Freudenberger and Richelson in 1980. It stated that burnout was a "state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce
the expected reward" (p. 13). These experts believed that burnout was the result of high achievement. They concluded, therefore, that individuals who strive for high work achievement and accomplishments, and who are dedicated and committed, have a greater propensity for burnout.

Maslach (1976) defined burnout as that state when individuals “lose all concern, all emotional feelings for persons they work with and treat them in detached and dehumanized ways” (p. 16). She reported that burned out individuals tended to manifest burnout in emotional stress, psychosomatic problems, and increased marital and family conflicts. Maslach’s classic definition of burnout is “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (1982a, p. 3). In this definition, burnout is often associated with chronic emotional strain and stress of dealing with others who are troubled or experiencing problems. Burnout of this nature is usually a result of the social interaction between the helper and recipient in the people work professions (Maslach, 1982a).

Pines and Aronson (1988) defined burnout as “a state of physical, emotional, and mental exhaustion caused by long term involvement in situations that are emotionally demanding” (p. 9). They indicated that physical exhaustion includes symptoms of low energy, chronic fatigue, and weakness. Individuals who suffered emotional exhaustion often exhibited feelings of helplessness, hopelessness, and entrapment. Individuals experiencing mental exhaustion had negative attitudes about themselves, work, and life in general. They also suggested that lofty expectations and prolonged situational stressors
are excessive emotional demands. According to this definition, burnout is often accompanied by symptoms of physical exhaustion, disillusionment, and feelings of helplessness and hopelessness. As a result, individuals develop negative feelings about themselves, work, people, and life itself.

History of Burnout

In the mid-1970s, burnout became a topic of concern (Freudenberger 1974, 1975; Maslach, 1976; Maslach & Jackson, 1984) as a social problem, but not as a scholarly construct (Maslach & Schaufeli, 1993) in the professional literature. Farber (1983) attributed two trends in society as generating scholarly interest in the phenomenon of burnout. First, workers in the United States no longer had connections with their communities. Second, U.S. workers expected more fulfillment on the job, and they had fewer resources to cope with difficulties and frustrations of their work.

During the pioneer stage of conceptual development, clinical descriptions of burnout were the focal point of individuals interested in the burnout phenomenon. Freudenberger (1974, 1975) found that volunteers in his alternative health care agency “experienced a gradual emotional depletion and a loss of motivation and commitment” (Maslach & Schaufeli, 1993, p. 2). He coined the word “burnout” to describe the mental and physical symptoms of exhaustion focusing on the problems of disillusionment in individuals who performed human service work. This included the fields of education, social services, medicine, the criminal justice system, mental health, religion, and other people-focused careers.
Maslach, a social psychology researcher, became interested in the ways individuals cope with emotional arousal, especially the cognitive strategies of "detached concern" and "dehumanization in self-defense" (Maslach & Schaufeli 1993, p. 2). She found that both arousal and cognitive strategies had an impact on an individual's identity and job behavior. Maslach and her colleagues adopted Freudenberger's term "burnout" to describe the phenomenon of individuals wearing out both physically and mentally on the job.

Maslach and Schaufeli (1993) found three common characteristics in the burnout literature during the pioneer stage of the 1970s. First, practitioners talked about the burnout phenomenon, but not necessarily in the same terms or in a congruent theory. Second, there was no universally accepted definition of burnout as many individuals perceived burnout in their own terms or in reference to a certain situation. Third, the literature was nonempirical since it was not research-based. During this time, practitioners were mainly concerned with the phenomenon of burnout through non-standardized observations and case studies. The academic world dismissed burnout as a fad, pop psychology, and pseudoscientific (Maslach & Jackson, 1984), as scholars felt there was no congruent research-based theory of burnout.

The literature on burnout became more focused, constructive, and empirical during the 1980s (Maslach & Schaufeli, 1993). Maslach and Jackson (1984) reported the main precursor for burnout research was the subject of emotional arousal and how people keep such arousal from disrupting their ongoing behavior. Empirical studies targeted systematic research and assessment of burnout. Researchers presented their theories,
ideas, and interventions in working models of burnout. Standardized assessment
instruments were developed to measure factors associated with and to promote systematic
research of burnout. The publication of research articles in research journals gave
credibility to the concept of burnout and a "greater consensual agreement on an
operational definition of burnout" (Maslach & Schaufeli, 1993, p. 8) was achieved.

However, even though there are many descriptions of burnout, Maslach (1982a)
and Paine (1982) felt there was no conclusive definition in existence. Indeed, different
terms are often used to describe similar concepts (Maslach, 1982a). The burnout
definitions stand independent from one another, and most do not take into account
previous research or earlier definitions of burnout. Lauderdale (1982) surmised that
burnout usually is defined in terms of symptoms, characteristics, stages, or role in
conflict.

In the 1990s, there continues to be empirical research into the conceptual
underpinnings of burnout. The theoretical frameworks of several different researchers
now drive the empirical research on burnout. New information and ideas about burnout
continue to evolve as part of this research. There still is a need for further research to
link burnout with concepts of social psychology, personality, clinical psychology, and
organizational psychology (Maslach & Schaufeli, 1993). For example, further
investigation of the relationship of belief factors, personality types, and specific theories
with burnout principles is warranted.
A Multidimensional Model of Burnout

Maslach (1982a, 1993) hypothesized that burnout was a three-dimensional syndrome characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. The first dimension of burnout theorized by Maslach and included the factors of exhaustion, a negative shift in responses to others, and negative responses toward one's accomplishments (Maslach, 1982b; Maslach & Jackson, 1986). Synonyms that are commonly used to describe emotional exhaustion are "wearing out, a loss of energy, depletion, debilitation, and fatigue" (Maslach, 1993, p. 27). During emotional and psychological exhaustion, individuals experience a loss of feeling and concern, trust, interest, and spirit.

The second dimension is a negative shift in responses to others. Depersonalization often includes negative and cynical attitudes and feelings toward clients (Maslach & Jackson, 1981b). This is described as "depersonalization, negative or inappropriate attitudes toward clients, loss of idealism, and irritability" (Maslach, 1993, p. 27). This movement toward negativity happens over time.

The third dimension, a negative response toward oneself and one's accomplishments, is commonly associated with "depression, low morale, withdrawal, reduced productivity or capability, and an inability to cope" (Maslach, 1982b, p. 32). Individuals tend to evaluate negatively their work with clients. Changes in behavior are the result of the psychological state.

Maslach (1982a, 1993) envisioned that burnout needed to take into account not only the stress variable (emotional exhaustion), but also self-evaluation and relationships
with others. Maslach (1993) felt that limiting the concept of burnout only to the factor of
emotional exhaustion confined the definition of burnout to experienced stress and nothing
further. As a social psychologist, she surmised that burnout was "an individual stress
experience embedded in a context of complex social relationships and that it involves the
person's concept of both self and others" (p. 27). Therefore, she incorporated the
dimensions of personal accomplishment and depersonalization into a multidimensional
framework of burnout (Maslach 1982a, 1993). This added a means of self-evaluation and
interpersonal relations into a three dimensional view of burnout. This multifaceted
conception of burnout is the most widely accepted and used operational definition in
burnout research (Maslach & Jackson, 1982a, 1982b, 1984).

Background Factors Related to Burnout

The research literature identified several background variables as factors of
burnout (Farber, 1983; Friedman & Lotan, 1985 cited in Friedman, 1991). Maslach
(1982a) suggested that sex, ethnic background, age, marital and family status, and
education are variables which may affect individuals' vulnerability and susceptibility to
burnout. She (1982a) also suggested that personality and other personal qualities can
affect individuals' proclivity to burnout. The results of her studies using the Maslach
Burnout Inventory (MBI; Maslach & Jackson, 1981a) with human service professionals
revealed some interesting patterns.

Sex. Maslach (1982a) found that men and women vary in the way they
experience burnout. The basic difference is that females tend to experience more
emotional exhaustion while men experience depersonalization. She attributed this
difference to masculine and feminine sex roles. She pointed out that many jobs are sex-segregated and different patterns of burnout may reflect differences in contact with clients and power and status in the organization. Maslach (1982a) concluded from her research that the differences between typical women’s work and men’s work is not the whole reason for the differences between the sexes with regard to emotional exhaustion and depersonalization. She stated there is “something about personal qualities that distinguish the two sexes that makes depersonalization more of a problem for men, and emotional exhaustion more of a problem for women” (1982a, p. 58). In support of some of Maslach’s findings, Friedman (1991) reported that males have a higher vulnerability for burnout than females. The studies by Friedman (1991) and Friedman and Lotan (1985 cited in Friedman, 1991) suggested that a person’s sex often determined those teachers who have a higher propensity toward burnout.

**Ethnic background.** With regard to ethnicity, Maslach (1982a) found that the burnout phenomenon is usually described as a white experience, since Caucasians are the majority of the population. The experience of Asian-Americans is similar to that of Caucasians. However, African Americans in the helping professions tend to experience less emotional exhaustion, less depersonalization, and burn out at a lesser rate than whites (Maslach, 1982a). From her studies, she concluded that African Americans do not become as disillusioned due to life experiences, family and friendship networks, and a balanced and realistic perspective about change.

**Age.** Maslach’s (1982a) burnout studies showed a significant relationship between age and burnout. For example, she found that the evidence of burnout is lower
for older individuals. She determined that individuals who are older tend to be more stable, mature, balanced, and less prone to burnout. Interestingly, her findings showed that burnout tends to occur in the first few years of one’s career. For example, individuals who work in a psychiatric ward tend to last only about one and one-half years, poverty lawyers approximately two years, and social service workers from one to five years. She concluded that burnout usually occurs within the first five years of a job and after a certain period of time older individuals tend to prevail on the job. Findings from Friedman and Lotan (1985 cited in Friedman, 1991) contradicted this. These researchers found that burnout in teachers rose with age and years of job experience.

Marital status. Maslach (1982a) found a stable, consistent relationship between burnout and marital status. She discovered single individuals experience more burnout than married individuals and they have a higher propensity for burnout. Divorced individuals are closer to singles in terms of emotional exhaustion and closer to married in terms of depersonalization and greater sense of accomplishment. She concluded that family members are less vulnerable to burnout since these individuals tend to be older, more stable, and psychologically mature. Family members seem to provide love and support to help individuals cope with emotional demands of the job. The findings also indicated that single individuals often depend on their job for personal reward and gratification.

Education. Maslach’s (1982a) research concluded that individuals who had completed four years of college had the highest level of burnout. Individuals who had completed postgraduate training in graduate school experienced less burnout than those
who had completed undergraduate degrees. Individuals who had just completed undergraduate degrees experienced the most depersonalization, more emotional exhaustion, and the least personal accomplishment than those who had completed graduate degrees. Individuals who had completed postgraduate training also experienced emotional exhaustion but the lowest level of depersonalization and a sense of personal accomplishment. On the basis of these findings, Maslach (1982a) concluded that individuals with high levels of education may be more idealistic and have higher expectations than others. The studies by Friedman (1991) stated that teachers with higher levels of education tended to have greater levels of burnout. Friedman (1991) and Friedman and Lotan (1985 cited in Friedman, 1991) suggested that teachers with undergraduate degrees were more vulnerable for burnout than those who had advanced degrees.

In summary, the background variables of sex, ethnic background, age, marital status, and education often determine those who have a greater propensity for burnout. Teachers who are female, white, middle-aged, and single with an undergraduate degree seemed to be the most susceptible to burnout.

**Personality and Burnout**

Maslach (1982a) defined personality as “essential character of an individual-the mental, emotional, and social qualities or traits that combine into a unique whole” (p. 62). She stated that individuals characterized as weak and unassertive in interpersonal relations, anxious and fearful of involvement with and commitment to others, and persons who have trouble setting boundaries with others are at-risk for burnout. She determined
that individuals who tended to be impatient and intolerant of others, lacked self-confidence, and had no clearly defined goals also were more prone for burnout. From her study, she concluded that individuals’ “interpersonal style, method of handling problems, expression and control of emotions, and conceptions of self are all aspects of personality that have special significance for burnout” (p. 62).

According to the literature, there are four personality traits or individual differences that affect burnout. These are self-concept, personal needs, personal motivations, and emotional control. These four personality characteristics can be associated with Ellis’s irrational beliefs about oneself.

**Self-concept.** Self-concept determines a sense of who people are and provide an evaluation of individuals’ unique qualities, and peoples’ role in their relationships with others (Maslach, 1982a). If individuals have low self-esteem, they tend to be less assertive and strong in dealing with others. Individuals with low self-esteem also view obstacles and situations as much greater or more intense than they are to others who have high self-esteem. Individuals with low self-esteem tend to focus on their failures rather than their successes. They often need reassurance from others to gain insight into their worthiness and validation of self. Individuals also need to know and understand self to know their limits and responsibilities. If they do not know or realize their limitations, ideals, and expectations, they may suffer feelings of failure from the inconsistency between aspirations and actual achievements. Self-concept often is linked to Ellis’ (1962) irrational beliefs of high self-expectations, demand for approval, dependency, and perfectionism.
Personal needs. According to Maslach (1982a), the second personality variable that affects burnout is personal needs. Individuals have personal and basic psychological needs which they strive to fulfill. Personal needs for approval and affection are essential personality components in burnout. Individuals who seek approval and affection tend to be very cautious in what they say to others in order not to hurt them. Maslach (1982a) stated that when individuals who seek constant approval are not appreciated for their efforts, they tend to feel hurt and betrayed by others. Individuals who seek affection from colleagues often have few close relationships with friends or family.

The need to achieve is related to burnout. Individuals who have vague, unclear, or unrealistically high goals tend to set themselves up for failure, and often this affects their sense of competence and self-esteem. The personal needs of independence and self-determination are the landmarks of one’s personal growth and maturity (Maslach, 1982a). People like to be independent and self-determining in their work. If they feel helpless, powerless, and trapped in their job, burnout is the probable outcome. This variable of personal needs may be linked to Ellis’s (1962) irrational beliefs of demand for approval and high self-expectations.

Personal motivations. Personal motivations, Maslach’s (1982a) third personality variable, explain why people choose to help, cure, teach, nurture as their life’s work. Most people assume that caregivers have altruistic and selfless motives for their caregiving. Many caregivers are motivated by more selfish reasons that involve satisfying their own wants, needs, and desires. These factors include approval and affection from others, gaining a sense of self-worth, raising self-esteem, alleviating
feelings of guilt, and satisfying the need for intimacy. Maslach (1982a) stated that some individuals use the helping relationship as a means for personal growth. If individuals choose to use a helping relationship to gain personal gratification, it can result in frustration, hostility, and depression in the helper when clients fail to acknowledge or meet the caregivers' need for approval. The personality variable of personal motivations can be linked to Ellis's (1962) irrational belief of demand for approval.

Pines (1993) stated that teachers who suffer burnout often are individuals who feel they can make a difference and that their teaching will have an impact on others. These individuals sometimes discover the opposite, and they tend not to be able to handle the disappointment. Pines and Aronson (1988) suggested that those individuals who are highly motivated and idealistic and expect their jobs to give their lives meaning also tend to have a higher propensity toward burnout. They indicated that “burnout involves the painful realization that we have failed—to make the world a better place, to help the needy, to have an impact on the organization—that all our efforts were for nothing, that we no longer have the energy it takes to do what we promised ourselves to do, that we have nothing left to give” (Pines & Aronson, 1988, p. 10). According to Freudenberger (1975), the personality characteristics of rigidity, negative attitudes, and workaholism were predictors for propensity of burnout in all professions.

Pines and Aronson (1988) indicated that burned out individuals have little initiative. They tend to worry about how to survive until retirement. These individuals have experienced failure in their quest of some idealistic goal and they are referred to as
deadwood. People who are burned out have the option to remain as deadwood or to grow as an individual.

**Emotional control.** The last personality factor identified by Maslach (1982a) is emotional control. She stated that individuals who provide care for others often experience feelings of anger and irritation. If they are unable to deal with these emotions constructively, they tend to blame others and try to get back at them for whatever they feel the individual did wrong. Another identified issue of emotional control is fear. If individual fail to confront their fears, they tend to deny or avoid them. If this happens, individuals emotional health and effectiveness on the job may suffer. Individuals with a short fuse are impulsive, impatient, and intolerant and as a result experience high levels of emotional exhaustion and negativity. This may result in making mistakes in their work. This fourth trait can be related to Ellis's (1962) irrational beliefs of blame proneness and problem avoidance.

As previously stated, the four personality traits contingent with burnout are self-concept, personal needs, personal motivations, and emotional control. These factors can be linked with irrational beliefs through the demand individuals place upon themselves.

**Causes of Teacher Burnout**

Maslach’s multidimensional conceptualization of burnout has direct implications for burnout in educators. These dimensions of burnout are emotional exhaustion, depersonalization, and reduced personal accomplishment. They are related to changes in teachers’ attitudes toward the job and students.
Maslach and Jackson (1986) explained emotional exhaustion on the part of teachers as a “feeling of being emotionally overextended and exhausted by one’s work” (p. 2). Emotional exhaustion has also been described as “the tired and fatigued feeling that develops as emotions are drained” (Schwab, Jackson, & Schuler, 1986, p. 18). When teachers reach this stage, they no longer have the energy to give of themselves to students. Friedman (1991) supported Maslach and Jackson’s emotional exhaustion premise through his research showing that teachers who are burned out tend to be inadequately prepared for classes and are more likely to be rigid and inflexible toward their students. Cherniss (1980), Farber and Miller (1981), and Maslach (1976) indicated that low expectations and low frustration tolerance for students and little commitment to teaching become problematic when teachers are emotionally and physically exhausted.

According to Maslach and Jackson (1986), the second dimension of burnout, depersonalization, is described as “an unfeeling and impersonal response towards recipients of one’s service, care, treatment, or instruction” (p. 2). Schwab et al. (1986) described teachers who are experiencing depersonalization as teachers who lack positive emotions about their students. These teachers tend to be indifferent and negative toward their students. The last dimension of burnout, personal accomplishment is often described as “feelings of competence and successful achievement in one’s work with people” (Maslach & Jackson, 1986, p. 2). Schwab et al. explained that most teachers enter the education profession to help students learn and grow. When teachers feel that they are not helping students be successful, there are few other ways in which to receive rewards in the teaching profession.
The degree of emotional exhaustion, depersonalization, and reduced personal accomplishment of teacher burnout often is determined by how educators deal with stressors. These stressors may cause teachers to be ineffective in their chosen profession. Farber (1984) cautioned that stress and burnout are not synonymous. For example, not all stressed teachers become burned out. He felt that cognitive evaluation of stressful events, in addition to personality style, coping mechanisms, social support, and life events determined why people react differently to similar stressful situations. Stress has both positive and negative effects, but burnout is a common result of unmediated stress (Farber, 1984).

Burnout can be a trigger for personal growth encouraging individuals to examine their problems and demands placed upon them professionally and personally. Such self-evaluation can trigger a desire to build support systems, learn appropriate coping techniques and strategies, and learn priority reorganization strategies. Individuals can thereby learn new skills and strategies for coping more effectively with burnout. Such strategies can include “becoming aware of the problem, taking responsibility for doing something about it, achieving some degree of cognitive clarity, and developing new tools for coping, improving the range and quality of old tools” (Pines & Aronson, 1988, p. 27). The result of these processes can be “increased self-awareness, enriched human understanding, and a precursor of important life changes, growth, and development” (Pines & Aronson, 1988, p. 32).

Maslach (1993) emphasized that the multidimensional model of burnout has implications for intervention in burnout experienced by teachers. The multidimensional
model explores the different psychological reactions individuals can experience in job related roles. In addition, it allows interventions to be designed that have the potential to reduce emotional exhaustion, prevent depersonalization, and increase personal accomplishment.

**Research Studies Utilizing the Maslach Burnout Inventory**

The most widely used instrument to assess burnout among educators is the Maslach Burnout Inventory-Educator’s Survey (MBI-ES; Maslach et al., 1986). The research studies reviewed for this study utilized the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a) and the Maslach Burnout Inventory-Educator’s Survey (MBI-ES; Maslach et al.). The only modification from the original instrument, the MBI (Maslach & Jackson, 1981a), was the changing of the word “recipient” to “student” for the new instrument, the MBI-ES (Maslach et al.). The majority of the studies utilizing the MBI (Maslach & Jackson, 1981a) and the MBI-ES (Maslach et al.) explored burnout related to physical illness and somatic complaints, stress, demographics, and job conditions. Selected studies are reviewed in this section.

**Physical Illness and Somatic Complaints**

Five studies were conducted to analyze the relationship between physical and psychosomatic illness and burnout. These studies were conducted by Belacastro (1982), Belacastro et al. (1982), Belacastro and Gold (1983), Belacastro and Hays (1984), and Burke and Greenglass (1988). All of the researchers found a relationship between somatic complaints and physiological and psychological illness and burnout.
Belacastro (1982) studied the relationship between somatic complaints and illnesses of teachers and self-reported job stressors. Teachers from secondary Catholic schools completed the MBI (Maslach & Jackson, 1981a) and a somatic complaints/illness questionnaire. The findings of this study showed that teacher-reported burnout comprised 15% of the population, whereas teacher-reported non-burnout included 85% of the sample. The researchers found a positive association between burnout and initial onset of gall bladder and cardiovascular disorders after becoming a teacher. Belacastro (1982) concluded there was a relationship between somatic complaints and illnesses and burnout in teachers. He suggested the possibility of burnout having clinical stages, signs, and symptoms as well as individuals producing physiological manifestations of burnout in both specific and nonspecific manners. He also suggested that burned-out teachers may experience somatic complaints with greater frequency and intensity than nonburned-out teachers.

Belacastro et al. (1982) studied the somatic complaints of public school teachers who taught in a correctional facility. The teachers responded to the MBI (Maslach & Jackson, 1981a) and a somatic complaint and illness questionnaire. The presence of somatic complaints discriminated between the burned-out group and the nonburned-out group. The researchers concluded that burnout has far-reaching influence and ultimately bears consequences for teachers' physiological and psychological well being.

In a study by Belacastro and Gold (1983), teachers were assessed for burnout and physical illness and somatic complaints. The teachers were divided into two groups depending upon their burnout level as measured by the MBI (Maslach & Jackson,
There were no significant statistical differences between the two burn-out groups in the patterns of illness. Some depression was noted for the burned-out group. The somatic complaints were at a greater frequency or with greater intensity in the group of teachers who were classified as burned-out. Belacastro and Gold (1983) found that teachers who are burned-out also had a greater proclivity for potential health risks.

Belacastro and Hays (1984) studied the link between burnout and physiological and psychological illness and disorders. Teachers who completed the MBI (Maslach & Jackson, 1981a) and a somatic complaint and illness measure specifically designed for teachers were divided into two groups: nonburned-out and burned-out. The results of this study indicated that race and desire to continue teaching were discriminant variables. The results of the study also suggested that white secondary teachers had a greater propensity for burnout than black secondary teachers. Burned-out teachers predicted that they were more likely to leave teaching in the next five years than those teachers classified as nonburned-out. Burned-out teachers also had a greater frequency of physical illness and experienced a greater number of somatic complaints than nonburned-out teachers. The researchers concluded that burnout is comprised of clinical stages, signs, and symptoms as well as physiological manifestations of burnout among individuals in specific and nonspecific ways, just as Belacastro found in his original study in 1982.

Burke and Greenglass (1988) explored teacher orientation and burnout. Teachers from one single board of education in a large Canadian city completed a career orientations measure and a psychological burnout instrument that included work-setting
characteristics, demographic characteristics, sources of stress, psychological burnout as measured by the MBI (Maslach & Jackson, 1981a). The results of this study suggested that social activists and careerists experienced greater burnout on the MBI (Maslach & Jackson, 1981a) than artisans. Social activists appeared to have poorer physical health, and careerists seemed to have poorer life-style habits. Results of the Burke and Greenglass (1988) study indicated no significant findings among groups for psychosomatic symptoms, usage of medication, social support, marital satisfaction, or role conflict. Careerists included more men who had more education than self-investors and careerists and tended to be in administrative positions such as department heads and principals. The researchers concluded that when individuals' values and aspirations and the stresses and rewards from the job do not fit career orientation, burnout usually occurs.

These studies (Belacastro 1982; Belacastro et al., 1982; Belacastro & Gold 1983; Belacastro & Hays 1984) established significant relationships between burnout and physiological and psychological illnesses. A strong relationship between somatic complaints and burnout has also been established. The authors concluded that individuals with burnout were at risk for health problems. Factors of burnout were found to be potential stress of the job, decrease in the quality and capacity of individuals' job performance which can result in somatic complaints, physical illnesses, and mental or emotional problems. Studies which explored negative physiological factors among teachers have suggested that physiological factors are predictors of burnout among teachers.
Personality

Three studies conducted by Mazur and Lynch (1989), Byrne (1992), and Friedman and Farber (1992) examined personality variables related to burnout. The researchers found links between burnout and personality traits.

Mazur and Lynch (1989) studied the relationship between teachers' personality characteristics and burnout. Teachers from nine public secondary schools filled out a demographic data sheet, four personality tests, and a modified MBI (Maslach & Jackson, 1981a). There were positive correlations between personality type (A/B) and the depersonalization dimension of burnout. Self-esteem correlated negatively with depersonalization. Personality type (A/B) correlated negatively with personal accomplishment. Personality type (A/B) indicated positive significance with the emotional exhaustion and depersonalization dimensions of burnout.

Byrne (1992) investigated the organizational and personality factors as causal links to burnout among elementary, intermediate, and secondary teachers. The final sample of teachers in Byrne's study responded to the Maslach Burnout Inventory, Educators Survey (MBI-ES; Maslach et al., 1986), stress measure specific to teachers, classroom environment construct, locus of control measure, and self-esteem inventory. Byrne (1992) found that role conflict produced feeling of emotional exhaustion for elementary and intermediate teachers. The variable work overload was a cause of exhaustion for secondary teachers. Increased role conflict caused emotional exhaustion in elementary and intermediate teachers and depersonalization in secondary teachers. As emotional exhaustion increased for elementary and intermediate teachers, their
perceptions of personal accomplishment decreased. The perceptions of personal accomplishment were influenced by the effect of external locus of control in secondary teachers. The results of this study by Byrne suggested that self-esteem is critical in the predisposition to burnout among teachers, and that it has a direct effect on a teacher’s perceived levels of personal accomplishment. Locus of control was a variable for perceived personal accomplishment with secondary teachers. Byrne (1992) concluded that emotional exhaustion was a crucial factor in the burnout structure. The organizational variables of role conflict, work overload, classroom climate, and decision making determined different dimensions of burnout for all grade levels taught by teachers.

Friedman and Farber (1992) addressed the issue of professional self-concept and burnout in their study. Subjects filled out the Maslach Burnout Inventory, Educators Survey (Maslach et al., 1986), a self-concept scale, an opinionnaire, and an organizational and demographic questionnaire. The findings also suggested that professional satisfaction with one’s work had a negative correlation with burnout. The strongest correlation for teachers was the relationship of burnout to the view of themselves as professionally competent and satisfied. Teachers’ perceptions of how others viewed them showed students were more influential than parents and administrators in determining a teachers vulnerability to burnout. Teachers felt that principals and parents had unrealistic views of teachers’ professional satisfaction, and these factors significantly correlated with burnout. Friedman and Farber concluded that teachers who are satisfied in their profession tend not to experience burnout.
All of the researchers, Mazur and Lynch (1989), Byrne (1992), and Friedman and Farber (1992), found different personality traits to be linked to burnout. Mazur and Lynch (1989) connected personality type A/B with high levels of emotional exhaustion and depersonalization. Byrne (1992) indicated that self-esteem and locus of control were important connections to burnout. Friedman and Farber (1992) indicated individuals with high self-esteem and satisfaction with their jobs seemed to have lower levels of burnout.

Job Conditions

Two studies conducted by Schwab and Iwanicki (1982a) and Friedman (1991) examined job conditions and compared them with levels of burnout. The researchers found strong relationships between burnout, role conflict, and role ambiguity.

Schwab and Iwanicki (1982a) studied the relationship between role conflict and role ambiguity and teacher burnout. Teachers selected from the Massachusetts Teacher Association list filled out a demographic data sheet, a stress survey, MBI (Maslach & Jackson, 1981a), and a role questionnaire. The researchers found that role conflict and role ambiguity were statistically significant with regard to emotional exhaustion and depersonalization dimensions of burnout. Role ambiguity showed a significant amount of variance in regard to the personal accomplishment aspect of burnout. The conclusion by the researchers was that there was an identified need for an established systematic foundation of research regarding teacher burnout. They expressed concern that many organizations have burnout prevention programs without fully understanding the components of burnout.
Friedman (1991) conducted a study to identify school factors related to teacher burnout. Subjects responded to MBI-ES (Maslach et al., 1986) and a demographic sheet. The teachers were then divided into high- and low-burnout schools. In Friedman’s study, differences between high- and low-burnout schools existed with teachers’ sex, age, level of education, total teaching experience, and years of experience in the current school. Teachers were older in the high-burnout schools with an average age of 35-45 years. In the low-burnout schools, one-third of the teachers fell between 26-30 years of age. Friedman found that from the perspective of sex, high-burnout schools had fewer female students than low-burnout schools. The level of education for teachers was lower in the high-burnout schools. With regard to years of experience in teaching, high-burnout schools had the most veteran teachers.

In summary, Schwab and Iwanicki (1982a) concluded that role conflict and role ambiguity were related to high levels of emotional exhaustion and depersonalization. On the other hand, Friedman (1991) concluded that school factors including sex, age, level of education, total years of teaching, and years in current school were related to teacher burnout.

Stress

There have been multiple studies done on burnout and stress. Seven selected studies reviewed included those of Farber (1984), Russell, Altmaier, and VanVelzen (1987), Hughes, McNelis, and Hoggard (1987), Burke and Greenglass (1989), Friesen,
Prokop, and Sarros (1988), Friesen and Sarros (1989) and Byrne (1991a). All of these studies have found stress to be a strong predictor of burnout.

Farber (1984) looked at stress and burnout in teachers. Subjects filled out an attitude survey, demographic sheet, and the MBI (Maslach & Jackson, 1981a). Respondents indicated that being involved with students, feeling competent, important, and committed to their job, and having time with their colleagues, friends, family, and outside activities gave them satisfaction on the job (Farber, 1984). Excessive paperwork, unsuccessful and useless administrative meetings, and a dead-end job with no advancement opportunities were sources of stress for suburban teachers. The attitude survey results correlated highly with items reflecting general feelings of burnout, commitment to teaching, and gratification of working closely and effectively with students. The demographics reported significant results with age of the teacher and grade level taught. The teachers in the age group of 21-33 and 34-44 year-old age group reported more burnout than those in the 45-65 year-old age division. The results of this study also suggested that the middle or junior high school teachers reported more burnout than elementary and high school teachers. Farber (1984) concluded that feelings of burnout by teachers were highly correlated with the lack of commitment to the education profession and a lack of satisfaction in working with students. Farber also concluded that the age group of 34-44 and junior high teachers were most susceptible to burnout.

Russell et al. (1987) explored job-related stressful events and social support relationships with burnout among teachers in the state of Iowa. Elementary teachers and secondary teachers completed the MBI (Maslach & Jackson, 1981a), social support
measures, and a survey of stressful events. The research topics of this study were twofold. First, teacher characteristics, stress and burnout were examined. In this case, a significant correlation was noted between stressful events and stress ratings of teachers. Age was the only socio-demographic variable related to the number of stressful life events. The burnout findings also suggested that emotional exhaustion was strongly correlated with age and average class size. Younger teachers reported more emotional exhaustion than did older teachers who instructed large class sizes. Sex and grade level appeared to be a significant variable for depersonalization dimension of burnout. Male teachers and teachers who taught at the secondary level showed higher levels of the depersonalization than did females and teachers who taught at lower grade levels.

Personal accomplishment was most affected by marital status and grade level. Married teachers at the elementary level reported a greater sense of personal accomplishment.

Second, Russell et al. (1987) examined the factors of stress, social support, and burnout. These findings of their research suggested that the number of stressful events experienced by teachers was significantly correlated with emotional exhaustion and depersonalization. No significance was attached to job-related stress and personal accomplishment. Teachers with supportive supervisors experienced greater personal accomplishment, more positive attitudes toward students and less emotional exhaustion. Teachers’ job-related stress and feelings of depersonalization decreased with supervisors who offered more support. Teachers who experienced feelings of self-worth as assessed by colleagues who respected their skills and abilities demonstrated less emotional exhaustion, a positive attitude toward students, and a sense of greater personal
accomplishment. When the teachers’ level of worth increased, job-related stress and feelings of depersonalization decreased. The researchers concluded that support from a supervisor and reassurance of self worth were predictors of burnout. The results of this study implied that there needs to be a focus on intervention for burnout and forms of support provided to teachers in the workplace.

Burke and Greenglass (1989) explored factors which contributed to burnout among men and women teachers. Teachers from a single school board in a Canadian city completed the MBI-ES (Maslach et al., 1986), Cherniss’s (1980) five sources of stress, a stress profile, and a scale with regards to role conflict. The respondents also completed measures of job satisfaction, absenteeism, social support, marital satisfaction, and demographic data. The results of the Burke and Greenglass study suggested that women teachers had more psychosomatic symptoms and depression than men. Women appeared to be more satisfied with their work, yet they experienced more role conflict than their male counterparts in the field of teaching. Teacher stress, the sources of stress derived from the Cherniss model, lack of participation, boss support, total role conflict, and marital satisfaction correlated significantly with burnout. Burke and Greenglass (1989) concluded that men and women have different predictors for burnout. It seems predictors of burnout for men have to do exclusively with work. Women’s predictors of burnout appeared to be both in the workplace and with the family. Women also tended to experience more role conflict than did men.

Hughes et al. (1987) examined burnout among graduate students who were or had been teachers. The MBI (Maslach & Jackson, 1981a), a demographic questionnaire, a
personality measure, and a self-concept measures were measurements utilized to assess
the relationship with burnout and personality type, self-perceptions, and critical thinking
ability. They found that individuals who resisted stress and continued to have personal
accomplishment had higher self-concepts and sensing and extroverted personalities.
Individuals with feeling and perceptual type personalities appeared to experience higher
levels of stress than other personality types. The results of this study also suggested that
teachers tended to be sensing types rather than intuitive types. The researchers concluded
that teachers who were the sensing type held a propensity for fixed ideas, and they tended
to experience less emotional exhaustion and more feelings of personal accomplishment.
The length of time on the job was the only demographic variable to predict burnout.

Friesen et al. (1988) studied teachers’ perceptions of why they burn out. The
subjects completed a demographic data sheet, MBI (Maslach & Jackson, 1981a), a job
satisfaction questionnaire, and a job characteristic construct. The results of this study
indicated that overall work stress was the most predictive of emotional exhaustion.
According to Freisen et al. workload, status, and recognition were the major factors
impacting work stress. Satisfaction with status recognition was the second most viable
indicator of the emotional exhaustion dimension of burnout. This included lack of
positive feedback, lower self-concept, and parental and community attitudes. Satisfaction
with status recognition and job challenge was the most significant predictors of
depersonalization. The findings suggested that satisfaction with status and recognition
and job challenge most greatly impacted reduced personal accomplishment. The
researchers concluded that teachers may experience burnout in each of the three dimensions of burnout.

Friesen and Sarros (1989) examined work stress, role clarity, and job challenge as predictors of burnout among teachers and school-based administrators. Subjects completed a demographic data sheet, a job satisfaction and a job characteristic instrument, the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a), and a personal comment section. Results of this study indicated that overall work stress and satisfaction of work load were predictors of emotional exhaustion for teachers. The results suggested that depersonalization happened when teachers felt a lack of recognition and job challenge. The greatest predictor of personal accomplishment for teachers was satisfaction with status, recognition, and job challenge. The researchers concluded that overall work stress and satisfaction with work load were the most significant predictors of emotional exhaustion among teachers. They also found that emotional exhaustion, depersonalization, and personal accomplishment were three independent factors of burnout.

Byrne (1991a) investigated background variables for elementary, intermediate, and secondary teachers and university professors. The subjects filled out a stress survey, the MBI-ES (Maslach et al., 1986), and an open ended questionnaire assessing their perceived stressors. The results of the Byrne (1991a) study indicated that emotional exhaustion and personal accomplishment were influenced by background variables for elementary teachers. Overall, males showed lower levels of emotional exhaustion than females. Male and female individuals in the 40-49 age group exhibited higher personal
accomplishment than those in the 30-39 age range. No background variables were significant at the intermediate level for effecting dimensions of burnout. For secondary school teachers, the type of student taught had an impact on emotional exhaustion and personal accomplishment. Teachers who taught vocational students rather than regular academic and special education students experienced lower levels of emotional exhaustion in comparison to the higher level reported by combination class teachers. Teachers with combination grade classrooms also exhibited lower levels of personal accomplishment than the other groups. Male teachers at the secondary level reported higher levels of depersonalization. University male educators showed lower levels of emotional exhaustion and higher levels of personal accomplishment. University teachers in the over-50 age group had lower levels of emotional exhaustion and higher levels of professional accomplishment. Professors who taught undergraduate students showed lower levels of personal accomplishment than did colleagues who taught graduate students. The results of this study suggested that all educators experience "imposed time constraints, large class sizes, excessive administrative demands, and the need to wear many different hats" (Byrne, 1991a, p. 205). Teachers at the elementary and intermediate levels felt they had to meet the expectations of many masters. Too, university professors tended not to list the stressor, student-related problems, as high as intermediate and secondary teachers. University professors ranked the need to publish and do research higher on their stress list than other levels of teachers. The researcher concluded that burnout is a multifaceted construct affected by certain background variables (Byrne,
Salient variables of gender, age, grade level taught, and organizational factors affected the dimensions of burnout.

The reviewed researchers concluded that burnout was linked with lack of commitment by the teacher, lack of satisfaction of working with students, class size, teacher's attitudes, number of personal accomplishments, status recognition, and level of student taught. They also concluded that burnout is multifaceted, and affected by a variety of factors and background variables.

**Demographic Factors Related to Burnout**

The research studies of Maslach and Jackson (1981b), Schwab and Iwanicki (1982b), Malanowski and Wood (1984), Anderson and Iwanicki (1984), Gold (1985), Nagy and Davis (1985), Connolly and Sanders (1986) and Burke and Greenglass (1989) exploring demographic data related to burnout are discussed in this section. These researchers found a relationship with demographic differences of age, grade level taught, sex, and certain dimensions of burnout and those individuals who have the greatest proclivity for burnout.

Maslach and Jackson (1981b) studied the relationship between demographic factors to feelings and experience of burnout in a large sample of individuals who completed the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a). The results of this study suggested that sex differences were significant, since females showed more emotional exhaustion than males. The results indicated that males tended to reflect more depersonalization and personal accomplishment than females. With regard to age, older individuals appeared to have higher personal accomplishment than younger
individuals. The intensity of emotional exhaustion was higher for younger people than older people. Emotional exhaustion was significant for single and divorced individuals with regard to marital status. The intensity and frequency of emotional exhaustion increased and depersonalization decreased relative to higher levels of education. Those individuals who had completed college scored higher on personal accomplishment than those who had not completed college.

Schwab and Iwanicki (1982b) explored the relationship of teacher background factors and facets of burnout. Teachers completed the MBI (Maslach & Jackson, 1981a) and a stress survey. Predictor variables included age, sex, grade level taught, number of years in teaching, marital status, type of community, and level of education. The factors of marital status, number of years in teaching experience, level of education, and type of community were not significant factors with regard to emotional exhaustion, depersonalization, and personal accomplishment. Age, level of grade taught, and sex were significant variables in this study. Individuals in the age group of 20-39 year-old category experienced more intense feelings of emotional exhaustion than did individuals in the 50-and-over category. With regard to depersonalization, males showed more intensity and frequency of feelings than females in this dimension. High school and intermediate teachers demonstrated greater feelings of depersonalization than elementary teachers.

Malanowski and Wood (1984) investigated self-actualization and burnout among teachers who completed the MBI (Maslach & Jackson, 1981a), a personal orientation questionnaire, and a biographic data sheet. The results of this study suggested that
teachers who had higher scores on personal orientation also scored higher on personal accomplishment and lower on emotional exhaustion and depersonalization aspects of burnout. The data showed a strong correlation with emotional exhaustion and depersonalization and a modest correlation with personal accomplishment. The teachers’ age, marital status, and years of teaching experience were not significant variables related to the dimensions of burnout. On the dimension of depersonalization, male teachers had higher scores than females, teachers with more students (larger class sizes) experienced more depersonalization than those with smaller class size, and junior high and senior high teachers had higher scores than elementary teachers. With regard to personal accomplishment, elementary teachers tended to have a greater sense of personal accomplishment than teachers in the higher grade levels.

Anderson and Iwanicki (1984) utilized age, sex, level of teaching, and years of teaching experience in the exploration of teacher motivation and burnout. The subjects filled out a satisfaction questionnaire and the MBI (Maslach & Jackson, 1981a). The results indicated that emotional exhaustion is a greater predictor of burnout than depersonalization. Younger teachers in the age category of 20-34 years of age demonstrated higher levels of emotional exhaustion than teachers in the 45 and over year-old category. Teachers with 13-24 years of experience showed greater levels of personal accomplishment than those teachers with 5-12 years of experience. Male teachers indicated higher levels of burnout than female teachers. Junior and senior high teachers indicated more depersonalization than elementary teachers. These findings
coincide with the findings of Schwab and Iwanicki (1982b), suggesting that burnout is greater in male secondary teacher than in female elementary teachers.

Gold (1985) examined the effect of sex, age, marital status, total number of years in the same school, grade level taught, and perceived problems with student control and burnout. Teachers from elementary and junior high school from six different school districts completed a modified MBI (Maslach & Jackson, 1981a) and a personal and life history questionnaire. The results of this study suggested that males had higher levels of depersonalization and lower degrees of personal accomplishment. Younger teachers (23-34 years-old and 35-40 years old) tended to have more emotional exhaustion and depersonalization than older teachers (41-49 years old and 51-66 years old). Younger teachers also had a stronger sense of personal accomplishment. No significant data supported a relationship between marital status and burnout. Unmarried teachers showed a higher risk of burnout than those who were married, living together, widowed, or divorced groups.

Gold’s (1985) study demonstrated no significance in the data with regard to number of years in the same school and burnout. Teachers in the higher grades (7-9) showed a greater propensity for burnout than teachers in the lower grades (K-6). Depersonalization scores were statistically significant for teachers who teach above the 4th grade level than for those who teach below the fourth grade. Teachers with perceived student control difficulties tended to have higher depersonalization and lower feelings of personal accomplishment.
Nagy and Davis (1985) explored the burnout rates with junior high and elementary school teachers in a metropolitan school district who completed the MBI (Maslach & Jackson, 1981a), an activity scale, school climate inventory, and a work-orientation assessment. With regard to burnout findings, the Nagy and Davis data supported that junior high teachers experienced more burnout than elementary teachers. Junior high teachers also demonstrated higher scores on depersonalization and personal accomplishment and had more personal accomplishment and depersonalization intensity than elementary teachers. Type A junior high teachers showed more emotional exhaustion and less workaholism. Junior high teachers with Type A personalities and workaholism characteristics also had more depersonalization and fewer personal accomplishments. Both elementary and junior high teachers who had more workaholism characteristics had less depersonalization and emotional exhaustion. Personal accomplishment was related to emotional exhaustion and depersonalization only for elementary teachers. Nagy and Davis (1985) concluded that more personality research needs to be done with burnout factors.

A study by Connolly and Sanders (1986) explored burnout in elementary and secondary teachers in a metropolitan area. The subjects responded to the MBI (Maslach & Jackson, 1981a). The teachers perceived themselves to have a low level of emotional exhaustion but high level of burnout on the dimensions of depersonalization and personal accomplishment. Males, years of teaching, and years at present position showed positive correlations with emotional exhaustion. There was a significant positive correlation between education level and depersonalization. Gender, years of experience, and years at
present position correlated positively with personal accomplishment. Overall, they concluded that teachers who had the greatest number of years at the present job showed a greater propensity of emotional exhaustion, depersonalization, and personal accomplishment.

Burke and Greenglass (1989) conducted a study to explore psychological burnout among teachers who filled out the MBI (Maslach & Jackson, 1981a) and a burnout measure designed by the researchers. The results of the demographic data provided information about burnout characteristics of teachers. The individual differences of teachers noted greater burnout in high school teachers as opposed to elementary and junior high school teachers. Those teachers with greater number of years in their present position and their present school indicated greater burnout. Teachers with less education and males reflected higher burnout. The researchers concluded that the MBI (Maslach & Jackson, 1981a) and their measure of burnout indicated an association between an individual’s well-being and health indicators.

Overall, these researchers concluded that females had the greatest risk for emotional exhaustion. Males tended to experience more depersonalization. Teachers in the middle school/junior high experienced the highest level of burnout with high school teachers being second and elementary teachers being third. Individuals with 5 to 25 years of experience had higher levels of burnout than their peers with less or more experience. Burnout occurred at the greatest level between individuals from the age of 25 to 45 years of age.
Limitations of the Burnout Studies

One limitation for some of the burnout studies was the relatively small sample sizes. Such a small sample size was indicative of a lack of generalizability to a larger group. In many of the studies, demographic factors were not reported. The lack of specific demographic data broken down into categories limited the generalizability to others of similar characteristics. This also limited the generalizability of the findings to other populations of teachers since grade levels, sex of participants, or size and location of the school setting were not indicated.

The predominance of suburban teachers is a limitation since the findings are not always comparable to other school districts of different student bodies, diversity of settings, or community sizes. The low survey rate return in some of the studies subtracts from the validity of these studies. The lack of follow-up or longitudinal studies regarding teacher stress and burnout was also a matter of concern for the validity of the findings over time.

Summary of Burnout

The term burnout was coined during the 1970s when the phenomenon of burnout was beginning to be viewed as a social concern. During the 1980s, the literature on burnout became more empirical and focused as theories, interventions, and assessment techniques pertaining to burnout were explored. Empirical research of the 1990s linked burnout to concepts in established scholarly fields such as social psychology, personality, clinical psychology, and organizational psychology. As a result, the concept of burnout has been established as a topic of scholarly work.
Definitions of burnout evolved from descriptions of symptoms, characteristics, and role conflict into a multidimensional syndrome of burnout. This included dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishment. The definition of burnout included analysis of stress variables, self-evaluation, and relations to others.

Maslach's research demonstrated that the different demographic factors of sex, level of education, age, years of experience, ethnicity, and marital status played a large part in one's propensity for burnout. The personality traits of self-concept, personal needs, personal motivations, and emotional control also partly determined one's proclivity for burnout. These factors gave insight into the reasons why, under similar conditions, one person experiences burnout and another does not experience burnout. These variables can be linked to Ellis's (1962) irrational beliefs of demand for approval, high self-expectations, blame proneness, problem avoidance, and perfectionism.

Summary of Irrational Beliefs and Burnout

Rational Emotive Behavior Therapy (REBT) and a multidimensional model of burnout were reviewed. These concepts are at the heart of some individuals' emotional disturbance, as well as emotional exhaustion, depersonalization, and reduced personal accomplishment.

The ABCDEF theory is the cornerstone and foundation of Rational Emotive Behavior Therapy (REBT). This theory gives practitioners insight into individuals' irrational beliefs. Since irrational beliefs are the underlying cause of emotional disturbance and emotional maladjustment in individuals, it is important for REBT
practitioners to dispute these with clients. Through cognitive, emotive, and behavioral interventions clients may change their faulty thinking.

Empirical research studies suggested positive correlations between irrational beliefs and anger, anger and anxiety, depression, physical and psychosomatic illness, and stress. These empirical studies linked irrational beliefs with emotional disorders. The results of these studies supported Ellis’s premise that irrational beliefs are central to emotional psychopathology, inappropriate emotions, and emotional distress.

The most widely accepted definition and conceptualization of burnout is multidimensional. This multifaceted conception of burnout incorporated the dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishment.

The background factors of sex, ethnicity, age, marital status, and education often impacted the level of burnout in individuals. Personality traits of self-concept, personal needs, personal motivations, and emotional control affected peoples propensity for burnout.

The literature indicated that burnout and stress are not synonymous terms. Burnout is considered verification and proof of stress. How individuals deal with stressors impacted their propensity for burnout.

The concepts of REBT and burnout both suggested that these factors cause psychological, and physical disturbance in individuals. The researchers expressed the need for further studies that examine the relationship between individual differences and burnout.
The multidimensional model of burnout allows interventions and strategies to be developed to reduce emotional exhaustion, to prevent depersonalization, and to enhance personal accomplishment in individuals. These interventions can help teachers be more efficient in their classrooms.
CHAPTER III
DESIGN OF THE STUDY

Since there were no documented empirical research studies in the professional literature with the correlates of irrational beliefs and burnout, a preliminary study was conducted to ascertain the feasibility of examining the constructs of irrational beliefs and burnout. The results of the preliminary study suggested that it was possible to examine these constructs in an evaluative study. Therefore, the current study examined the use of a Rational Emotive Behavior Therapy on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa.

Preliminary Study

A preliminary study was conducted in November of 1996 to investigate the relationship between the factors of irrational beliefs as measured by the Irrational Beliefs Test (IBT; Jones, 1969) and dimensions of burnout as measured by the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986). This was a necessary first step to warrant additional study of the two constructs, irrational beliefs and burnout.

Subjects in the Preliminary Study

Subjects were selected from the Iowa Department of Education’s Basic Educational Data Survey (BEDS) through a stratified random sampling process using a Statistical Analysis System (SAS) program. The sample included equal numbers of male and female teachers from the middle school (6-8) and junior high school (7-9) grade levels drawn from the population of slightly over 32,000 teachers within the State of Iowa. The targeted population included teachers who taught 6th, 7th, and 8th grade in a
middle school or junior high setting. Participants had between 5 to 25 years of teaching experience.

Procedures of the Preliminary Study

The data collection consisted of information from two instruments and a participation form. The participants were mailed a cover letter, the Irrational Beliefs Test (IBT; Jones, 1969), the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) and a return postage paid envelope in November, 1996. The cover letter identified the researcher, explained the purpose of the study, and stated how the information would be treated. Ethical considerations, privacy, and anonymity were addressed in the cover letter. The subjects were given information on how to contact the dissertation chair and the researcher. According to the guidelines established by the Human Subjects Review System at the University of Northern Iowa, the subjects were requested to return their acceptance form to participate in the study.

The subjects completed the IBT (Jones, 1969) and the MBI-ES (Maslach et al., 1986) measures. They returned their acceptance form and the two instruments to the researcher in a pre-addressed, postage paid return envelope. Following the return of the two instrument protocols, the measures were analyzed for statistical purposes.

Research Instruments

The two research instruments, the Irrational Beliefs Test (IBT; Jones, 1969) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) are discussed in this section. The individual factors for each scale are also reviewed in this section.
The first instrument, the Irrational Beliefs Test (IBT; Jones, 1969), measures irrational beliefs which are absolutistic beliefs that lead to inappropriate emotions that sabotage a person’s life goals (Crawford & Ellis, 1989; Ellis, 1984a). The scale consists of 100 statements, ten for each of the irrational-belief factors. A 5-point Likert scale is used to assess agreement or disagreement with each statement. The ten core irrational ideas which are the root of most disturbance are Demand for Approval, High Self-Expectations, Blame Proneness, Frustration Reactive, Emotional Irresponsibility, Anxious Overconcern, Problem Avoidance, Dependency, Helplessness for Change, and Perfectionism (Jones, 1969). The irrational belief subscale factors explore the following beliefs:

Demand for Approval (DA). Individuals believe that they must have love and approval from everyone (Woods, 1990).

High Self-Expectations (HSE). Individuals assume they must be successful, achieving, and competent in all tasks. They judge their worthiness on their successes and accomplishments (Woods, 1990).

Blame Proneness (BP). People believe they should be blamed and punished for their mistakes or wrongdoing (Woods, 1990).

Frustration Reactive (FR). Individuals believe that it is awful, terrible, or catastrophic when things are not as they should be or when people behave in a way they do not like (Woods, 1990).

Emotional Irresponsibility (EI). Individuals believe they have little control over their unhappiness or emotional disturbance since it is caused by other people
or events in this world. These individuals believe that if others would change, everything would be all right (Woods, 1990).

**Anxious Overconcern (AO).** People believe that if something bad or dangerous might happen, they should worry and dwell upon it constantly (Woods, 1990).

**Problem Avoidance (PA).** Individuals believe it is much easier to avoid problems and difficulties than to face them (Woods, 1990).

**Dependency (D).** Persons believe that they must have someone stronger than themselves to depend on and take care of them (Woods, 1990).

**Helplessness for Change (HC).** Individuals believe that the influence of past events can never be changed or removed. They are helpless to change (Woods, 1990).

**Perfectionism (P).** People believe that there is always a perfect solution for every problem. Failure to find that perfect solution will be catastrophic (Woods, 1990).

The internal consistency of the IBT (Jones, 1969) was .68 to .87 for the subscales and .92 for the full scale. Trexler and Karst (1972, 1973) reported subscale stabilities of .48 to .95 and full-scale stability of .88.

Several studies on the Irrational Beliefs Test (IBT; Jones, 1969) established construct validity for the IBT (Jones, 1969). In a study of state hospital patients and non-hospitalized adults, the results suggested the full scale and subscales of the IBT (Jones, 1969) discriminated between the two groups at the .01 significance, except for Scales 1 (Demand for Approval), 4 (Overreaction to Frustration, and 8 (Dependency) (Stake, 1985). Trexler and Karst (1972) found predicted changes in the IBT (Jones, 1969) significantly favored rational-emotive therapy over no treatment or placebo for anxiety.
Further validation of the Irrational Beliefs Test (IBT; Jones, 1969) was supported by a factor analysis of items on the IBT (Jones, 1969) and correlation of the IBT (Jones, 1969) with 16 PF clinical scales and self-reports of maladjustment symptoms. Concurrent validity suggested a correlation of .61 with the self-report of maladjustment symptoms and a .42 correlation with factors on clinical scales of the 16 PF (Trexler & Karst, 1973). A study by Smith and Zurawski (1983) indicated a high correlation ($r = .71$) between the IBT (Jones, 1969) and the Rational Behavior Inventory (RBI; Shorkey & Whiteman, 1977). Ray and Bak (1980) found the IBT (Jones, 1969) and RBI (Shorkey & Whiteman, 1977) were significantly and negatively correlated as subjects demonstrated many irrational beliefs on one test also exhibited little rational behavior on the other.

The second instrument, the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986), consists of three dimensions. These dimensions are Emotional Exhaustion, Depersonalization, and Personal Accomplishment. The MBI-ES (Maslach et al.) utilizes a 0 to 6 point scale to assess frequency of teachers' feelings and attitudes about their job and the people with whom they work closely. The Emotional Exhaustion subscale consists of nine items which describe feelings of being emotionally overextended and exhausted by one's work. The five items of the Depersonalization subscale reflect unfeeling and impersonal response toward recipients of one's care or service. The remaining subscale, Personal Accomplishment, consists of eight items which assess one's feelings of competence and successful achievement in one's work with people.
Maslach and Jackson (1986) conceptualized burnout as a "continuous variable ranging from low to moderate to high degrees of experienced feeling" (p. 2). They also felt burnout was not a separate variable, which is either present or absent. High scores on Emotional Exhaustion and Depersonalization subscales and low scores on the Personal Accomplishment subscale reflect a high degree of burnout. A low degree of burnout is indicated in low scores on Emotional Exhaustion and Depersonalization and in high scores on the Personal Accomplishment scale. Scores on the Personal Accomplishment subscale are scored in the opposite direction from Emotional Exhaustion and Depersonalization. High scores on this subscale fall in the low level of reduced personal accomplishment and low level of burnout, whereas low scores on this subscale indicated high levels of reduced personal accomplishment. There is not a total score for this instrument. Each of the subscales was scored separately.

For purposes of this study, the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) was used to assess the level of burnout in the sample of teachers. This form is basically the same as the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a). The only modification between the original MBI (Maslach & Jackson, 1981a) for human health professionals and the MBI-ES (Maslach et al.) for educators is the word change of "recipient" to "student."

The reliability coefficients for the subscales are as follows: .90 for Emotional Exhaustion; .79 for Depersonalization; and .71 for Personal Accomplishment for the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986). The standard error of measurement for each subscale is as follows: 3.80 for Emotional
Exhaustion; 3.16 for Depersonalization; and 3.73 for Personal Accomplishment. The test-retest reliability coefficients of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981a) were reported as follows: .82 for Emotional Exhaustion; .60 for Depersonalization; and .80 for Personal Accomplishment (Maslach & Jackson, 1986). These coefficient ranges were all significant at the .001 level. The MBI-ES (Maslach et al.) test-retest reliabilities are as follows: .60 for Emotional Exhaustion; .54 for Depersonalization; and .57 for Personal Accomplishment (Jackson, Schwab, & Schuler, 1986). Iwanicki and Schwab (1981) reported Cronbach alpha estimates of .90 for Emotional Exhaustion, .76 for Depersonalization, and .76 for Personal Accomplishment, respectively. Belacastro, Gold, and Hays (1983) reported Cronbach alphas of .89 for Emotional Exhaustion, .81 for Depersonalization, and .78 for Personal Accomplishment.

Powers and Gose’s (1986) study assessed the three aspects of burnout syndrome. Their findings gave empirical support for the presence of the three hypothesized factors of Emotional Exhaustion, Depersonalization, and Personal Accomplishment. In a study by Pierce and Malloy (1989), the results identified the three dimensions, emotional exhaustion, depersonalization, and personal accomplishment, of the MBI-ES (Maslach et al., 1986) were consistent with other studies which examined construct validity. Overall, the MBI-ES (Maslach et al.) has evidenced high internal consistency and test-retest reliability, and the concurrent and predictive validity show promise (Green & Walkey, 1988; Maslach & Jackson, 1986).

The factorial validity study of the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) by Gold, Roth, Wright, and Michael (1992) suggested
potential validity in identifying those beginning teachers who may have a substantial risk and potential for burnout. Byrne's (1991b) study demonstrated strong evidence of factorial validity for intermediate and secondary teachers but lacked valid evidence of factorial validity for university teachers. Evidence of convergent validity was reported on studies between the MBI-ES (Maslach et al.) and job experience and personal outcomes. The study by Byrne (1993) found the three-factor structure underlies the MBI-ES (Maslach et al.). “All item measurements were invariant across elementary and intermediate teachers, and across intermediate and secondary teachers” (Byrne, 1993, p. 208). Byrne (1994) concluded that the MBI-ES (Maslach et al.) is remarkably sound in its measurement of burnout for elementary and secondary teachers.

Data Analysis of the Preliminary Study

In the preliminary study, the statistical analysis of data from the Irrational Beliefs Test (Jones, 1969) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) consisted of a Pearson product-moment correlation. The correlation procedure was utilized to identify possible significant relationship between the two measures, using .05 as the level of significance. The variables consisted of the ten subscale scores on the IBT (Jones, 1969), and the Depersonalization, Emotional Exhaustion, and Personal Accomplishment dimensions of the MBI-ES (Maslach et al.).

Results and Discussion of the Preliminary Study

The analysis of the data from the preliminary study produced some significant results. There were positive correlations between specific subscales of the IBT (Jones,
1969) and certain dimensions of the MBI-ES (Maslach et al., 1986). These results are shown in Table 1.

Table 1

Preliminary Study-Correlation Coefficients of the IBT and MBI-ES Maslach Burnout Inventory-Educators Survey

<table>
<thead>
<tr>
<th>Irrational Beliefs Test</th>
<th>Emotional Exhaustion MBIEE</th>
<th>Depersonalization MBIDP</th>
<th>Personal Accomplishment MBIPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand for approval (DA)</td>
<td>.171*</td>
<td>.071</td>
<td>-.166*</td>
</tr>
<tr>
<td>High self-expectations (HSE)</td>
<td>.257**</td>
<td>.172*</td>
<td>-.088</td>
</tr>
<tr>
<td>Blame proneness (BP)</td>
<td>.103</td>
<td>.265**</td>
<td>-.143</td>
</tr>
<tr>
<td>Frustration reactance (FR)</td>
<td>.372**</td>
<td>.233**</td>
<td>-.103</td>
</tr>
<tr>
<td>Emotional irresponsibility (EI)</td>
<td>.200**</td>
<td>.115</td>
<td>-.120</td>
</tr>
<tr>
<td>Anxious overconcern (AO)</td>
<td>.233**</td>
<td>.169*</td>
<td>-.277**</td>
</tr>
<tr>
<td>Problem avoidance (PA)</td>
<td>.069</td>
<td>.128</td>
<td>-.191*</td>
</tr>
<tr>
<td>Dependency (D)</td>
<td>.064</td>
<td>-.065</td>
<td>-.040</td>
</tr>
<tr>
<td>Helplessness for change (HC)</td>
<td>.073</td>
<td>.184*</td>
<td>-.096</td>
</tr>
<tr>
<td>Perfectionism (P)</td>
<td>-.083</td>
<td>-.028</td>
<td>-.021</td>
</tr>
</tbody>
</table>

Note. *Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

The Demand for Approval (DA) subscale of the IBT (Jones, 1969) showed a significant correlation at the .05 level with the Emotional Exhaustion dimension of the MBI-ES (Maslach et al., 1986). This score indicated that teachers who felt the necessity to be loved and approved correlated with feelings of fatigue and tiredness due to their
work. The High Self-Expectations, Frustration Reactance, Emotional Irresponsibility, and Anxious Overconcern subscales of the IBT (Jones, 1969) reflected significant correlation at the 0.01 level with the Emotional Exhaustion component of the MBI-ES (Maslach et al.). These findings suggested that people who believe they should be competent, that everything is awful and catastrophic when things are not the way they would like them to be, that they have no control over their disturbances, and they should be overconcerned about an event occurring tend to have feelings of being emotionally extended and exhausted by their employment (Maslach et al.). These five subscales of the IBT (Jones, 1969) were highly associated with teachers who were emotionally drained and probably could no longer overextend themselves or expend their emotional energies toward their teaching of their students (Maslach, 1976).

The Depersonalization dimension of the MBI-ES (Maslach et al., 1986) correlated with High Self-Expectations, Anxious Overconcern, and Helplessness for Change of the IBT (Jones, 1969) at the 0.05 significance level. These results suggested that individuals who have high demands on themselves, dwell on the possibility of an event happening, and feel that their past controls their future tend to exhibit a high degree of depersonalization. The subscales of Blame Proneness and Frustration Reactance showed significant correlation with the factor of Depersonalization at the 0.01 level. These scores established that individuals who believed they are bad and wicked and who also exhibited a low tolerance to frustration tend to demonstrate negative feelings toward students. Overall, these five subscales of the IBT (Jones, 1969) were significantly related
to teachers who tend to depersonalize and distance themselves from their students and exhibit negativity towards their students.

The subscales of Demand for Approval and Problem Avoidance of the IBT (Jones, 1969) showed a negative correlation at the 0.05 level of significance with the Personal Accomplishment dimension of the MBI-ES (Maslach et al., 1986). The scores for Demand for Approval and Problem Avoidance showed that individuals who feel others should love and approve of them, as well as individuals who tend to avoid responsibilities, showed high scores on Personal Accomplishment which indicated a low degree of burnout and a low level of reduced personal accomplishment. The subscale of Overanxious Concern reflected a significant relationship with Personal Accomplishment at the 0.01 level. Overall, this score suggested individuals who have excessive concern about events will tend to have a low level of burnout and a low level of reduced Personal Accomplishment.

In conclusion, the preliminary study results yielded correlations among most subscales of irrational beliefs and the dimensions of burnout. The preliminary study also showed significant correlations between certain irrational beliefs and the dimensions of burnout. These results indicated there was a relationship between certain irrational beliefs and the emotional exhaustion and depersonalization dimensions of burnout. The study also suggested that teachers with a high level of irrational beliefs did not manifest high levels of reduced personal accomplishment. The preliminary study established a foundation for the major investigation by supporting a connection between the constructs of irrational beliefs and burnout. Based on this connection, the researcher designed the
current study to investigate the efficacy of a REBT bibliotherapy intervention and to further investigate these constructs.

The Rational Emotive Behavior Therapy Bibliotherapy Intervention Study

The purpose of this study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers' irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment.

Subjects of the Intervention Study

Subjects of this study were selected from the Iowa Department of Education's Basic Educational Data Survey (BEDS) through a stratified random sampling process using a Statistical Analysis System (SAS) program from a total population of 6,463 middle school (6-8) teachers in the State of Iowa. Teachers who participated in the preliminary study were not included in the experimental or control groups. The sample included equal numbers of male and female teachers from the middle school (6-8) who had not previously been a part of the preliminary study. The targeted population included teachers who taught 6th, 7th, and 8th grade in a middle school. Participants had between 5 and 25 years of teaching experience.

Procedures for the Intervention Study

As a first step in the intervention study, a cover letter (Appendix A) and acceptance form (Appendix B) were sent to 400 middle school educators in the State of Iowa asking them to participate in the intervention study. The cover letter included the
identity of the investigator, the purpose of the study, how participants were selected, and ethical considerations in the treatment of information. A pre-addressed, postage paid envelope was enclosed with the acceptance form for return to the researcher.

Those individuals who indicated that they were willing to be part of the investigation on the acceptance form were the subjects for the study of a REBT bibliotherapy intervention on irrational beliefs and burnout. Once the researcher received the acceptance form from a subject, a cover letter (Appendix C) was sent to the participants explaining the process for completing and returning the pretest measures, the IBT (Jones, 1969; Appendix D), the MBI-ES (Maslach et al., 1986; Appendix E), and a demographic form (Appendix F).

Upon receipt of the subjects’ IBT (Jones, 1969) and the MBI-ES (Maslach et al., 1986) pretest measures and scoring of the instruments, subjects were placed into either the treatment or control group. The subjects were rank ordered by their pretest score on the IBT (Jones, 1969) from highest to lowest. Subjects were then assigned to the treatment and control group by selecting every other participant who achieved the highest to lowest score on the IBT (Jones, 1969). After this process, the treatment group had 83 participants and the control group had 84 participants.

After the participants returned the surveys, an individual analysis also was completed on their IBT (Jones, 1969) measure and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986). The 10 subscales of the IBT (Jones, 1969) and the 3 subscales of the MBI-ES (Maslach et al.) were scored, and an analysis was conducted for individuals on their scores for the 10 subscales (irrational beliefs) and
the dimensions of burnout for the participants. Members of the experimental group were given a treatment consisting of a REBT bibliotherapy intervention, Beliefs that Disturb (Woods, 1990; Appendix G).

A cover letter (Appendix H) accompanied the intervention for the experimental group as well as a packet entitled Information About the Study--Experimental Group (Appendix I). Participants in the experimental group were instructed to read the Information About the Study--Experimental Group prior to reading the REBT bibliotherapy intervention, a modified form of Beliefs that Disturb (Woods, 1990) (Appendix J) and the burnout analysis form (Appendix K) containing individual analysis of their scores on the MBI-ES (Maslach et. al, 1986) measure. The experimental group was also given instructions to read the individual analysis of their irrational beliefs in the REBT bibliotherapy intervention, a modified form of Beliefs that Disturb (Woods, 1990; Appendix J) and their level of feelings of energy, attitude toward working with others, and perception of accomplishment and achievement found in the burnout analysis form. The individual analysis included an explanation of the 10 beliefs, individuals' adherence to each belief, reasons pertaining why it can be disturbing to hold the belief, and alternatives to the belief, as well as descriptors of the three dimensions of the MBI-ES (Maslach et al.).

The control group received no REBT bibliotherapy intervention in the study. They did receive an Information about the Study--Control Group (Appendix L) and an analysis of their scores on the MBI-ES (Maslach et al., 1986) using the burnout analysis form (Appendix K) after the pretest analyses. Their individual analysis included a
description of the three dimensions of burnout, feelings of energy, attitudes toward working with others, and perception of accomplishments and achievement.

Approximately 12 weeks later, both the experimental group and control group received a cover letter (Appendix M) explaining the re-administration of the two measures. In December of 1999, the subjects were asked once more to complete the IBT (Jones, 1969) and the MBI-ES (Maslach et al., 1986), as well as an opinion of the study (Appendix N). These materials were returned to the writer in pre-addressed, postage paid envelopes.

Following the readministration of the two measures, the IBT (Jones, 1969) and the MBI-ES (Maslach et al., 1986), all participants received analyses of both their pretest and posttest scores. A cover letter (Appendix O) was sent to participants explaining the study. The experimental group received a modified form (Appendix P) giving their scores on the IBT (Jones, 1969) and their scores on the MBI-ES (Maslach et al.; Appendix K) as well as a list of articles pertaining to the constructs in the study, irrational beliefs and burnout (Appendix Q).

The control group acquired an Information about the Study – Experimental Group (Appendix I), an analysis of their individual beliefs in the booklet, a modified form of Beliefs that Disturb (Woods, 1990; Appendix J), and a burnout analysis form (Appendix K) at the end of the study following the return of the re-administration of the two research instruments, the IBT (Jones, 1969) and the MBI-ES (Maslach et al., 1986). These analyses included both their pretest and posttest scores on the two instruments as well as a list of articles pertaining to irrational beliefs and burnout (Appendix P).
Independent and Dependent Variables of the Intervention Study

The independent variables consisted of the treatment/no treatment interventions for the study. The dependent variables for the study were comprised of the total score of the IBT (Jones, 1969), and Depersonalization, Emotional Exhaustion, and Personal Accomplishment dimensions of the MBI-ES (Maslach et al., 1986). A pretest-posttest control group design was used for this study.

The REBT Bibliotherapy Intervention

The researcher used a bibliotherapy booklet, a modified form of Beliefs that Disturb (Woods, 1990; Appendix J), as a REBT bibliotherapy intervention. This booklet was based on REBT theory. Woods (1984) described the booklet as an important aid in therapy. The booklet (a) provided a description and explanation of the ten irrational beliefs, (b) denoted the level or degree to which a person accepts each belief, (c) argued why or how each belief causes problems, and (d) provided alternative rational beliefs for each (Woods, 1984).

A packet titled Information about the Study – Experimental Group (Appendix I) was given to each participant in the experimental group to read prior to reading their individual analysis of their IBT (Jones, 1969) and their MBI-ES (Maslach et al., 1986) scores received. The booklet contained a section of introductory remarks about the teaching profession, the focus of the study, the theory used in the study, and the ABCDEFs. A section also included information about how to interpret their individual analysis and about the author of the report, Dr. Paul Woods. These introductory remarks also explained what beliefs are known to be associated with emotional disturbance.
The self-help intervention, a modified form of **Beliefs that Disturb** (Woods, 1990), provided an analysis of each belief associated with emotional disturbance. The analysis included a description of each belief, why it may cause problems and why it is disturbing to hold, how to change the belief, and alternatives to the belief. This booklet uses the ABCDEF method by identifying the belief (B) and how one reacts to situation (A), illustrating the consequences of holding this belief (C), disputing the belief (D), and providing an individual alternatives to beliefs and a new way of viewing and feeling about himself or herself (E). The (F) component was not included in the REBT bibliotherapy intervention, a modified form of **Beliefs that Disturb** (Woods, 1990). The ABCDEF method, therefore is the method of change for REBT bibliotherapy interventions. In addition, directions in the synopsis of the irrational belief encouraged subjects to look at new ways of viewing the world, themselves, and others. In the description, suggestions were given on how individuals can achieve the goal of being less disturbed by their beliefs.

The researcher believed this intervention would help the subjects reduce irrational beliefs and burnout because, by reading the modified form of the **Beliefs that Disturb** (Woods, 1990) booklet, and learning to understand better and dispute their irrational
beliefs, subjects would begin to change the way they think about themselves and their lives. In other words, change in clients' cognitive beliefs would happen when they challenged, explored, and examined the reality of certain beliefs that are causing emotional disturbance. Thus positive changes in individuals came from philosophic restructuring of irrational beliefs (Ellis & Dryden, 1997).

This Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention is based on the premise that teachers who develop more rational thinking and alternatives to irrational thinking and beliefs will reduce their burnout risk and increase their psychoeducational skills. The recognition of individuals' beliefs was the first step toward changing the way they think. By changing their thinking, people will have less disturbance and they will be able to enjoy life more (Woods, 1990). The purpose of this study was to see whether a REBT bibliotherapy intervention would reduce the subjects' level of burnout by changing their level of irrational beliefs. In other words, being presented with alternative paradigms or beliefs, the subjects might experience less emotional exhaustion and depersonalization and more personal accomplishment.

With the treatment intervention, the researcher hoped to lend empirical support to the concept that changing the level of irrational beliefs will lower the level of burnout in individuals. The researcher believed the level of irrational beliefs for the experimental group should decrease, thus causing a decrease in the level of burnout. If this happened, a REBT bibliotherapy intervention of this type would be considered a viable tool in reducing the level of burnout among educators.
Data Analysis

The statistical analysis of data gathered on the Irrational Beliefs Test (IBT; Jones, 1969) and the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) consisted of two parts. A t-test procedure was utilized to identify possible significant differences between the pretest and posttest data for both the experimental group and the control group.

The analysis of the data consisted of (a) examining the differences between the subjects’ total IBT (Jones, 1969) pre- and posttest scores and (b) examining the differences between each of the subjects’ three MBI-ES (Maslach et al., 1986) subscales pre- and posttest scores. The t-test was used to determine statistically significant differences (at the .05 level) between pre- and posttest scores.
CHAPTER IV
RESULTS AND INTERPRETATION

The purpose of this study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers' irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment.

The first section of this chapter includes a description of the study population. In the second section, a review of the results for the differences between the control and experimental group for IBT (Jones, 1969) total score and the dimensions of burnout, emotional exhaustion, depersonalization, and personal accomplishment is included. A summary of the findings of the study is included as well.

Study Population

The study population consisted of 6,463 middle school teachers in the State of Iowa. Subjects were randomly drawn from the middle school population and four hundred subjects with 5 to 26 years of experience were invited to participate in the dissertation study. As the reader will recall, the original Phase I (pretest) study participants (n = 167) were randomly assigned to the two test groups, the control and the experimental. Approximately 71% (n = 119) of these subjects were females, while approximately 28% (n = 47) were males. In that random assignment, 84 teachers were assigned to the control group, while 83 were assigned to the experimental group. The distribution of these randomly assigned subjects by sex is shown in Table 2. As these
data indicate, proportionately more of the females were in the control group, while proportionately more of the males were in the experimental group.

Table 2

Number of Subjects by Control and Experimental Groups by Sex (Phase I)

<table>
<thead>
<tr>
<th>Group</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>f</td>
<td>f</td>
</tr>
<tr>
<td>Control</td>
<td>64</td>
<td>20</td>
<td>84</td>
</tr>
<tr>
<td>Experimental</td>
<td>55</td>
<td>28</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>48</td>
<td>167</td>
</tr>
</tbody>
</table>

In Phase II (posttest) of the study, 103 of the 167 subjects (61.7%) returned their survey questionnaires. The number of Phase II (posttest) study participants by control and experimental groups by sex is shown in Table 3. As these data indicate, among the 103 teachers who participated in Phase II (posttest), 77 (74.8%) were females and 26 (25.2%) were males. When compared with Phase I (pretest) data, 64.7% (n = 77) of the females participated in both phases of the study, while only 55.3% (n = 26) of the males participated in both pretest and posttest phases of the study.

Proportionately more (n = 55; 65.5%) of the control group subjects returned their survey materials than did the experimental group (n = 48; 57.8%). This experimental mortality on the part of the experimental group may be attributed to the fact that they
received intervention materials (i.e., results to their pretest performance) that the control group did not, and these additional materials, coupled with the request for participation in the posttest survey, may have dissuaded them from continuing with the study.

Table 3

Number of Subjects by Control and Experimental Groups by Sex (Phase II)

<table>
<thead>
<tr>
<th>Group</th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
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<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>58.4</td>
<td>10</td>
<td>38.5</td>
<td>55</td>
<td>53.4</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>41.6</td>
<td>16</td>
<td>61.5</td>
<td>48</td>
<td>46.6</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
<td>26</td>
<td>100.0</td>
<td>103</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Regarding the 103 teachers who participated in both the pretest and posttest phases of the study, their ages ranged from 28 to 50, with the mean being 40.07. The number of years teaching ranged from one to 26 years with a mean of 14.99. Table 4 provides additional data for mean age and years teaching by sex by control and experimental groups.
Table 4

Control and Experimental Groups by Sex by Mean Age and Years Teaching

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control (n = 45)</td>
<td>Experimental (n = 32)</td>
<td>Control (n = 10)</td>
<td>Experimental (n = 16)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>39.89</td>
<td>40.25</td>
<td>40.30</td>
<td>40.06</td>
<td>40.07</td>
</tr>
<tr>
<td>Years Teaching</td>
<td>13.53</td>
<td>16.53</td>
<td>15.44</td>
<td>15.75</td>
<td>14.99</td>
</tr>
</tbody>
</table>

The grades taught by Phase II (posttest) study participants are shown in Table 5. As these data indicate, slightly less than one-third (31.3%) taught grades 6, 7, and 8. Slightly more than one-fifth (21.4%) taught grade 7 only, while 19.4% said they taught grade 6 only.

Table 5

Grades Taught by Study Participants by Sex

<table>
<thead>
<tr>
<th>Grade</th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>6</td>
<td>19</td>
<td>24.7</td>
<td>1</td>
<td>3.8</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>22.1</td>
<td>5</td>
<td>19.2</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>11.7</td>
<td>5</td>
<td>19.2</td>
<td>14</td>
</tr>
<tr>
<td>6 and 7</td>
<td>4</td>
<td>5.2</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
</tr>
<tr>
<td>6 and 8</td>
<td>1</td>
<td>1.3</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>7 and 8</td>
<td>7</td>
<td>9.1</td>
<td>3</td>
<td>11.5</td>
<td>10</td>
</tr>
<tr>
<td>6, 7, and 8</td>
<td>20</td>
<td>26.0</td>
<td>12</td>
<td>46.2</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
<td>26</td>
<td>99.9</td>
<td>103</td>
</tr>
</tbody>
</table>
Four research hypotheses were identified. These were based on the factors of irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment. These results are discussed in this section.

The first hypothesis was concerned with the factor of irrational beliefs. The research hypothesis addressed the impact of a REBT bibliotherapy intervention on the level of teachers’ irrational beliefs.

**Hypothesis 1.** There will be a statistically significant difference between the Irrational Belief Test (Jones, 1969) total score for the experimental group and control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a lower IBT (Jones, 1969) total score than the control group on the posttest measure.)

Data pertinent to this hypothesis were derived from the teachers’ total scores on the IBT (Jones, 1969). The mean scores for the control and experimental groups for both the pretest and posttest IBT (Jones, 1969) measure are reported in Table 6. For the pretest, the mean for the total score on the IBT (Jones, 1969) was 276.78 for the control group and 275.02 for the experimental group. Results of the posttest yielded a mean for the control group of 275.91 and for the experimental group of 274.13.

The differences noted between the control and experimental groups for the factor of total irrational beliefs were not statistically significant at the .05 level, as reported in Table 7. Therefore, Hypothesis 1 was rejected, as there was no statistically significant difference between the two groups on the posttest measure.
Table 6
Mean and Standard Deviation of Irrational Beliefs Total Score for the Control and Experimental Group

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Control</td>
<td>55</td>
<td>276.78</td>
<td>29.88</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>48</td>
<td>275.02</td>
<td>25.72</td>
</tr>
<tr>
<td>Posttest</td>
<td>Control</td>
<td>55</td>
<td>275.91</td>
<td>29.44</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>48</td>
<td>274.13</td>
<td>26.40</td>
</tr>
</tbody>
</table>

Table 7
Independents Samples Test: t-test for Equality of Means for Total Score of Irrational Beliefs

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>.318</td>
<td>101</td>
<td>.751</td>
</tr>
<tr>
<td>Posttest</td>
<td>.322</td>
<td>101</td>
<td>.748</td>
</tr>
</tbody>
</table>

Note. *p < .05
The second hypothesis was concerned with the factor of emotional exhaustion. The research hypothesis addressed the effect of a REBT bibliotherapy intervention on teachers' level of emotional exhaustion, one of the dimensions of burnout.

**Hypothesis 2.** There will be a statistically significant difference between the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) emotional exhaustion total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have lower emotional exhaustion total score than the control group on the posttest measure.)

Data pertinent to this hypothesis were derived from the teachers' total scores on the emotional exhaustion dimension of the MBI-ES (Maslach et al., 1986). The mean scores for the control and experimental groups for both the pretest and posttest dimension of emotional exhaustion on the burnout measure are reported in Table 8. For the pretest, the mean for the total score on the dimension of emotional exhaustion was 20.82 for the control group and 20.92 for the experimental group. Results of the posttest yielded a mean for the control group of 20.00 and for the experimental group of 20.15.

The differences noted between the control and experimental group on the dimension of emotional exhaustion were not statistically significant at the .05 level, as reported in Table 9. Therefore, Hypothesis 2 was rejected, as there was no statistically significant difference between the two groups on the posttest measure.
Table 8

Mean and Standard Deviation of Emotional Exhaustion Score for the Control and Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>55</td>
<td>20.82</td>
<td>11.84</td>
</tr>
<tr>
<td>Exp.</td>
<td>48</td>
<td>20.92</td>
<td>10.18</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>55</td>
<td>20.00</td>
<td>11.55</td>
</tr>
<tr>
<td>Exp.</td>
<td>48</td>
<td>20.15</td>
<td>10.15</td>
</tr>
</tbody>
</table>

Table 9

Independents Samples Test: t-test for Equality of Means for Emotional Exhaustion

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>-.045</td>
<td>101</td>
<td>.964</td>
</tr>
<tr>
<td>Posttest</td>
<td>-.068</td>
<td>101</td>
<td>.946</td>
</tr>
</tbody>
</table>

The third hypothesis was concerned with the burnout dimension of depersonalization. The research hypothesis addressed the impact of an REBT bibliotherapy intervention of the level of teachers’ depersonalization.
Hypothesis 3. There will be a statistically significant difference between Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) depersonalization total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a lower depersonalization total score than the control group on the posttest measure.)

Data pertinent to this hypothesis were derived from the teachers’ total scores on the depersonalization dimension of the MBI-ES (Maslach et al., 1986). The mean scores for the control and experimental groups for both the pretest and posttest dimension of depersonalization on the burnout measure are reported in Table 10. For the pretest, the mean for the total score on the dimension of depersonalization was 7.75 for the control group and 6.79 for the experimental group. Results of the posttest yielded a mean for the control group of 7.15 and for the experimental group of 6.90.

Table 10
Mean and Standard Deviation of Depersonalization for the Control and Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>55</td>
<td>7.75</td>
<td>5.99</td>
</tr>
<tr>
<td>Experimental</td>
<td>48</td>
<td>6.79</td>
<td>4.74</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>55</td>
<td>7.15</td>
<td>6.33</td>
</tr>
<tr>
<td>Experimental</td>
<td>48</td>
<td>6.90</td>
<td>4.94</td>
</tr>
</tbody>
</table>
The differences noted between the control and experimental groups on the dimension of depersonalization were not statistically significant at the .05 level, as reported in Table 11. Therefore, Hypothesis 3 was rejected, as there was no statistically significant difference between the two groups on the posttest measure.

Table 11

Independents Samples Test: t-test for Equality of Means for Depersonalization

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>.887</td>
<td>101</td>
<td>.377</td>
</tr>
<tr>
<td>Posttest</td>
<td>.221</td>
<td>101</td>
<td>.826</td>
</tr>
</tbody>
</table>

The fourth hypothesis was concerned with the factor of reduced personal accomplishment. The research hypothesis addressed the impact of a REBT bibliotherapy intervention on the level of teachers’ sense of personal accomplishment.

**Hypothesis 4.** There will be a statistically significant difference between Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1986) personal accomplishment total score for the experimental group and the control group following a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention. (That is, the experimental group will have a higher personal accomplishment total score than the control group on the posttest measure.)
Data pertinent to this hypothesis were derived from the teachers' total scores on the personal accomplishment dimension of the MBI-ES (Maslach et al., 1986). The mean scores for the control and experimental groups for both the pretest and posttest dimension of personal accomplishment on the burnout measure are reported in Table 12. For the pretest, the mean for the total score on the dimension of personal accomplishment was 39.45 for the control group and 39.48 for the experimental group. Results of the posttest yielded a mean for the control group of 39.47 and for the experimental group of 38.46.

The differences noted between the control and experimental groups on the dimension of personal accomplishment were not statistically significant at the .05 level, as reported in Table 13. Therefore, Hypothesis 4 was rejected, as there was no statistically significant difference between the two groups on the posttest measure.

Table 12

Mean and Standard Deviation of Personal Accomplishment for the Control and Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Control</td>
<td>55</td>
<td>39.45</td>
<td>5.62</td>
</tr>
<tr>
<td>Experimental</td>
<td>48</td>
<td>39.48</td>
<td>5.07</td>
</tr>
<tr>
<td>Posttest Control</td>
<td>55</td>
<td>39.47</td>
<td>5.52</td>
</tr>
<tr>
<td>Experimental</td>
<td>48</td>
<td>38.46</td>
<td>6.47</td>
</tr>
</tbody>
</table>
Table 13

Independents Samples Test: t-test for Equality of Means for Total Score of Personal Accomplishment

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>-.023</td>
<td>101</td>
<td>.982</td>
</tr>
<tr>
<td>Posttest</td>
<td>.859</td>
<td>101</td>
<td>.392</td>
</tr>
</tbody>
</table>

An overview of the research findings is presented in Table 14. Findings in Table 14 indicate there were no statistically significant differences between the experimental and control groups with regard to irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment. The Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention appeared not to have made a statistically significant impact on the subjects' level of irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment. Therefore, the four research hypotheses were rejected, as no statistically significant differences were noted for the control and experimental groups following the implementation of a REBT bibliotherapy intervention.
Table 14

t values for Group Differences of Irrational Beliefs, Emotional Exhaustion, Depersonalization, and Personal Accomplishment

<table>
<thead>
<tr>
<th>Scales</th>
<th>Ss</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrational Beliefs</td>
<td>Pretest</td>
<td>101</td>
<td>.318</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>101</td>
<td>.322</td>
<td>NS</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>Pretest</td>
<td>101</td>
<td>-.045</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>101</td>
<td>-.068</td>
<td>NS</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>Pretest</td>
<td>101</td>
<td>.877</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>101</td>
<td>.221</td>
<td>NS</td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>Pretest</td>
<td>101</td>
<td>-.023</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>101</td>
<td>.859</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note. *p < .05

Summary

Four research hypotheses were tested in this study. The first hypothesis dealt with the concept of irrational beliefs as defined in REBT bibliotherapy theory. The data did not support a change in teachers' irrational beliefs following REBT bibliotherapy intervention.

The second, third, and fourth hypotheses tested dealt with the concept of burnout. The data did not support a change in teachers' levels of emotional exhaustion, depersonalization, or sense of personal accomplishment following a REBT bibliotherapy intervention.
CHAPTER V

SUMMARY AND DISCUSSION OF RESULTS

The purpose of this study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers' irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment.

A summary of the results will be given in the first section of this chapter. The second part of the chapter is a discussion of the results of the study. Finally, recommendations for future research will be made.

Summary of the Results

In this section of the chapter, a summary of the preliminary study is presented. The second part of this section contains a listing of the research questions. Last, an overview of the research procedures and findings of current study are described.

The review of the literature for this study revealed that there were no documented research studies in the professional literature with the correlates of irrational beliefs and burnout. Therefore, the first procedure in this study was the development of a preliminary study to ascertain the feasibility of examining these two constructs. Out of the results of that study evolved the research questions which became the basis for the current study.
Preliminary Study

A preliminary study was conducted in November 1996 to establish a relationship between the factors of irrational beliefs as measured by the IBT (Jones, 1969) and the dimensions of burnout as measured by the MBI-ES (Maslach et al., 1986). This was a necessary first step to warrant additional study of the two constructs, irrational beliefs and burnout.

The results of the preliminary study showed some statistically significant results. There were positive correlations between specific subscales of the IBT (Jones, 1969) and certain dimensions of the MBI-ES (Maslach et al., 1986). The subscales of Demand for Approval (DA), High Self-Expectations (HSE), Frustration Reactance (FR), Emotional Irresponsibility (PA), and Anxious Overconcern (OA) reflected a significant correlation with the Emotional Exhaustion subscale of the MBI-ES (Maslach et al.). The Depersonalization subscale of the MBI-ES (Maslach et al.) correlated with Blame Proneness (BP), Frustration Reactance (FR), High Self-Expectations (HSE), Anxious Overconcern (OA), and Helplessness for Change (HC). The subscales of Demand for Approval (DA) and Problem Avoidance (PA) showed a negative correlation with the Personal Accomplishment subscale of the MBI-ES (Maslach et al.).

The results of the preliminary study thus suggested a relationship between certain irrational beliefs and the dimensions of burnout. It established a foundation for the major investigation by supporting a connection between the constructs of irrational beliefs and burnout. Based on this connection, the researcher designed a research study to
investigate further the constructs of irrational beliefs and burnout and the impact of a REBT bibliotherapy intervention on these constructs.

Research Questions

The four research questions addressing the research problem were:

1. Is there a significant difference between the control group and the experimental group level of irrational beliefs following a REBT bibliotherapy intervention?

2. Is there a significant difference between the control group and experimental group level of emotional exhaustion following a REBT bibliotherapy intervention?

3. Is there a significant difference between the control group and experimental group level of depersonalization following a REBT bibliotherapy intervention?

4. Is there a significant difference between the control group and experimental group level of personal accomplishment following a REBT bibliotherapy intervention?

Procedures and Findings of the Current Study

A random sample of 400 middle school teachers from across the State of Iowa was invited to participate in the study in the spring of 1999. Two hundred teachers gave preliminary acceptance. Of those who gave preliminary acceptance to participate in the study, 167 responded to the questionnaires designed by Jones (1969) and Maslach et al. (1986) in Phase I (pretest) of the study. Overall, the return rate was 83.5%. Following the pretest, 103 participants chose to participate in the posttest part of the study. This return rate was 61.7%. Of these 103 participants in Phase II (posttest), 47% were assigned to the experimental group and received the REBT bibliotherapy intervention.
The study used a pretest-posttest control group design. A $t$-test analysis was used to identify possible significant differences between the pretest and posttest data for the experimental group and control group following the implementation of a REBT bibliotherapy intervention for the experimental group. Statistical differences were evaluated at an alpha value no greater than the $p = .05$ level of significance. Descriptive statistics included mean, standard deviation, percent data and $t$ scores gathered in the study.

The findings of the study did not yield any significant differences between the members of the control group and the members of the experimental group on irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment as measured by their scores on the IBT (Jones, 1969) and the three dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment) as measured by the MBI-ES (Maslach et al., 1986). The differences noted were not statistically significant for the four research hypotheses tested in the study. The data suggested that the REBT bibliotherapy intervention did not have a significant impact on the factors examined in this study.

Even though the study indicated that the REBT bibliotherapy intervention did not have a statistically significant impact on the factors examined in the study, the results of the Opinions Regarding the Study Form-Experimental Group (Appendix R) revealed positive results from the individual participants in the dissertation study. Fifty-one percent of the experimental group reported that they felt that other educators in the State of Iowa would benefit from participating in a similar study and receiving a report about
their beliefs and attitudes. Approximately 75% of the participants in the experimental group felt the study was beneficial. Sixty percent of the experimental group expressed interest in receiving a list of articles and books about the topics covered in the study.

The results of the Opinions Regarding the Study Form-Control Group (Appendix S) also revealed positive results from the participants in the dissertation study. Approximately 56% of the control group reported that they felt that other educators in the State of Iowa would benefit from participating in a similar study and receiving a report about their beliefs and attitudes. Those participants in the control group who felt the study was beneficial were 75.5%. Approximately 67% of the control group expressed interest in receiving a list of articles and books about the topics covered in the study.

Some of the comments from participants in the experimental group included the following: “I really enjoyed participating in this study. It made me take a look at myself after 26 years in education and I basically liked what I saw.” and “Surveys help me put my beliefs into perspective. They’re like reflecting---I think about the issues, my responses, and how I can make my life better. Focus. I like it.”

Comments from the control group were positive regarding the dissertation study. Several of these were as follows: “I think other educators could benefit from this study but I am not sure if the ones that needed improvement would take the time to answer the questions. Maybe it could be part of a school wide inservice.” and “Doing the surveys makes you reflect on your own attitudes. This is something we need to do to make self-improvements.”
Overall, the majority of the participants in the dissertation study felt positively about what they learned from participating in the study. The majority of the participants thought others could benefit from the study, felt the study was beneficial to them, and wanted additional information to continue learning about the constructs, irrational beliefs and burnout.

**Discussion of the Results**

The major purpose of the study was to investigate the effect of a Rational Emotive Behavior Therapy (REBT) bibliotherapy intervention on the level of burnout and irrational beliefs of middle school teachers in the State of Iowa. This study specifically examined the impact of a REBT bibliotherapy intervention on teachers’ irrational beliefs and level of emotional exhaustion, depersonalization, and personal accomplishment. The differences noted between the control and experimental groups for irrational beliefs, emotional exhaustion, depersonalization, and personal accomplishment were not statistically significant at the .05 level.

Individual subjects' scores did change but when taken as a group, the change was not enough to be statistically significant as a whole. This part of the chapter contains a discussion of reasons that may have contributed to non-significant findings of the experimental group. In research, there are many variables that can prevent a study from having significant results. Upon examination and analysis of the results of the study, the writer concluded that there were several factors that may have contributed to the lack of statistically significant change between the control and experimental groups. These are (a) commitment by participants to changing their attitudes and beliefs, (b) subjects’
relative intensity of irrational beliefs and level of burnout, (c) the Hawthorne effect, (d) the relative accuracy of self-report responses, and (e) internalization of intervention.

**Commitment to the Change**

First of all, some of the individuals in the sample selected for the study may not have had a vested interest in or a commitment to the goal of change. Even though they volunteered for the study, these individuals may have been curious about their attitudes and beliefs, but not committed to making changes in their lives. Change is an important factor in counseling. If individuals were not really interested in changing, they may not have thoroughly read the materials provided by the researcher. They may only have glanced at the materials or read the certain parts that interested them. The information about the study, the modified from of Beliefs that Disturb, (Woods, 1990), and their individual analysis were important components for the change process. The basic tenets of REBT and the analysis of their irrational beliefs were important factors to change their irrational beliefs and levels of burnout. The lack of commitment may be one area of consideration for non-significant change in the experimental group.

**Relative Intensity of Irrational Beliefs and Level of Burnout**

Second, it is possible that some of the subjects who volunteered for the study did not have high enough scores on the two dependent measures to manifest any significant change. In other words, some of the subjects may not have had the intensity of irrational beliefs and high levels of burnout needed to measure statistically significant change. Scores of the subjects of this study did not show intense irrational beliefs or high levels of burnout as compared to the norms of the dependent measures. This means they appeared
relatively rational and healthy in regards to levels of burnout. The means on the pretest for the experimental group on the subscales of Emotional Exhaustion, Depersonalization, and Personal Accomplishment were as follows: 20.92, 6.79, and 39.45. The means on the posttest for the experimental group on the subscales of Emotional Exhaustion, Depersonalization, and Personal Accomplishment were as follows: 20.15, 6.890, and 38.46. The means on the posttest for the control group were 20.00 for the subscales of Emotional Exhaustion, 7.15 for Depersonalization and 39.47 for Personal Accomplishment. The norming average scores for K-12 educators for the subscales of Emotional Exhaustion, Depersonalization, and Personal Accomplishment were 17-26, 9-13, and 36-31. Scores above 27 for the subscales of Emotional Exhaustion and 14 for Depersonalization and below 30 for Personal Accomplishment are considered in the high range of experienced burnout. The mean on the pretest for total irrational beliefs was 275.02 for the experimental group and 276.78 for the control group. The mean for total irrational beliefs on the posttest for the experimental group and the control group was 275.91 and 274.13, respectively. The mean score for the adult norming group for irrational beliefs was 283.29, whereas the mean for individuals in a mental health setting was 305.97. On the basis of this statistics, the sampling group appears to have been in the average range for both the constructs of irrational beliefs and the dimensions of burnout. Thus, there may not have been enough room to manifest measurable change. As individuals, change may have occurred, but it was not enough to be statistically significant for the group as a whole.
The Hawthorne Effect

Third, as stated in the limitations, some of the participants may have experienced the Hawthorne effect (Gay, 1996) in the study. Their knowledge of being participants in the study, coupled with their image of what teachers should be, may have resulted in individuals giving answers that placed them in a more favorable light. Participants could have given answers that were favorable to them on both the pretest and posttest. Some subjects may have misrepresented their beliefs. They may have also responded to the attention (their individual analysis) given to them in the study. In essence, the participants may not have been affected by the treatment but rather by the knowledge of participation in the study.

Relative Accuracy of Self-Report Responses

Fourth, as noted in the limitations, the use of self-report instruments could have been a reason for a lack of significant results. One difficulty with self-report instruments can be the lack of accurate responses, since subjects tend to give socially acceptable responses (Gay, 1996). Gay reported that conscious and unconscious motivations can “distort an appraisal of an individual’s personality structure” (1996, p. 155). The scores on the irrational beliefs and burnout measures are affected by the honesty of responses that truly reflect or characterize an individual.

One possible example of this process would be that some individuals in the study indicated high levels of irrational beliefs, emotional exhaustion, and depersonalization, yet they reported high levels of personal accomplishment. This contradicts Maslach’s (1993) multidimensional theory of burnout. According to the multidimensional theory of
burnout, individuals who are burned out not only experience emotional exhaustion and depersonalization, they also tend to have reduced levels of personal accomplishment (Maslach, 1993). It is possible those individuals in the study did not perceive their level of personal accomplishment to be reduced, even though they might have been experiencing emotional exhaustion and depersonalization. However, it is also possible that those individuals perceived it was socially acceptable to experience emotional exhaustion and depersonalization, but that it was not socially acceptable to fail to achieve as a teacher.

Another possible effect of the use of self-report instruments may have affected the degree of change in irrational beliefs because some of the subjects may not have been aware of their irrational beliefs. Such a lack of awareness could have resulted in low scores on this type of instrument. Since some individuals do not have conscious awareness of their irrational beliefs (Kendall et al., 1995), some of the participants in the experimental group may not have accurately reported their irrational beliefs. Also problematic in the assessment of irrational beliefs is that “awareness and accessibility of irrational beliefs could vary with current mood” (Kendall et al., p. 179). If the postulates about honest reporting and awareness of irrational beliefs are true, then the results of the study could have been affected by inaccurate reporting of irrational beliefs.

Internalization of a REBT Bibliotherapy Intervention

Last, some of the subjects may not have internalized the intervention. In other words, some of the subjects could have continued to manifest irrational beliefs despite a cognitive understanding of the disputation. There could be several reasons for the lack of
internalization, including the possibility that individuals in the experimental group may not have thoroughly read the information about the study, their interpretative report, the intervention, or fully comprehended the concepts within the information about the study and the intervention.

Another factor that might have affected internalization was the attitudes of the participants toward REBT change process. The individuals could have disagreed with the basic concepts of REBT. They may not have accepted the premise of REBT that their beliefs cause their feelings, not the situation or person.

Recommendations for Further Research

The findings and inferences from this study strongly suggest that further investigation be done in the areas of irrational beliefs and burnout. The following recommendations for future research are based on the results of this study.

Maslach (1993) stated that the dimension of “emotional exhaustion is the closest to an orthodox stress variable” (p. 27). As previously stated, burnout is not stress but only an affirmation of stress. If these statements are true, future research could focus on the effectiveness of a REBT only using factors of the IBT (Jones, 1969) that correlated with burnout at a 0.05 and 0.01 level with the burnout dimension of emotional exhaustion. Based on the information gleaned in the preliminary study, the variables of Approval from Others (DA), High Self Expectations (HSE), Reaction to Frustration (FA), Emotional Control (El), and Concern about Future Problems (OA) and the subscale of Emotional Exhaustion appear to have promise for future research.
Another suggestion for additional study supported by Schaufeli et al. (1993) is the need for more theory-driven research on burnout with personality variables and individual differences. Schaufeli et al. reported the need for further investigation of interpersonal and individual etiological factors. The preliminary study established a significant correlation with specific subscales of the IBT (Jones, 1969) and with the subscales of the MBI-ES (Maslach et al., 1986). Individual differences, such as irrational beliefs, are a factor that warrants further research. More specifically, additional research could be done with the correlates irrational beliefs and the dimensions of burnout to investigate the individual etiological factors and the effect on a person's level of burnout. Subsequent research could explore the veracity of the correlation between irrational beliefs and burnout. It also could give information that would help individuals to examine their propensity for burnout. Employers could provide ongoing staff development, preventative mental health programs, and education regarding the correlates, irrational beliefs and burnout. This could lower the burnout rate and promote positive affective states for individuals in the workplace. Ultimately, this additional research could provide information for "the theoretical integration of the burnout construct into larger, overarching psychological framework" and "on the process of burnout rather than on the end state" (Schaufeli et al., p. 256).

Another recommendation is to conduct further investigations utilizing personal interactions as a component of the REBT intervention. Face-to-face disputation of irrational beliefs, explanation of the intervention, additional bibliotherapy, and other strategies may be needed to strengthen the initial REBT bibliotherapy intervention, a
modified form of Beliefs that Disturb (Woods, 1990). Vernon (1995) stated that "behavioral change often is ineffective until the underlying beliefs that promote dysfunctional behavior are addressed" (p. 7). In essence, until the irrational thinking is challenged, there will not be long lasting change (Ellis & Dryden, 1987 cited in Vernon, 1995). Grieger and Woods (1993) reported that challenge and confrontation of individuals' beliefs could help individuals reach rational conclusions. This change, in turn, could help lower the adherence individuals have to their irrational beliefs and the intensity of their burnout. An additional bibliotherapy book that may also add strength to the original intervention Beliefs that Disturb is the self-help book, The Rational-Emotive Therapy Companion: A Clear, Concise, and Complete Guide To Being An RET Client, written by Grieger and Woods in 1993. This companion text could help individuals better understand the concepts of REBT, how irrational beliefs affect their lives, and add additional information about how to have more rational thinking. Kendall et al. (1995) suggested that additional research into the mechanisms of change in REBT is needed. He further hypothesized that research into the interaction in therapy and REBT education would add additional information to enhance individuals' well being.

Future studies could involve groups of teachers who want to learn more about themselves, their beliefs, and burnout. Being specific about these qualities being studied could elicit more commitment and investment to learning about REBT concepts and to the change process of becoming a more rational human being by the subjects. By providing the subjects with this information beforehand, subjects could have expressed a desire to change, read the bibliotherapy/self-help materials, and integrated the knowledge
gained about REBT into their lives. Practitioners of REBT stress the importance in their therapy that awareness of irrational beliefs is necessary for individuals to dispute their irrational thinking and to become more rational. This could help the participants be more cognizant of the concepts of REBT and their irrational belief and how these affect their well being and level of burnout.

These recommendations for additional research could lead to new insights into the role of irrational beliefs and the three dimensions of burnout—emotional exhaustion, depersonalization, and personal accomplishment. Further research also could provide additional information regarding REBT and burnout change process.

Conclusion

Vernon (1995) reported that there is a need for individuals to recognize the warning signs of burnout and challenge their irrational beliefs in order to reduce personal and professional distress. Additional research into the correlates of irrational beliefs and burnout could provide information to promote positive affective states for individuals within educational institutions and lower the burnout rate among educators. Future research into irrational beliefs and the dimensions of burnout could provide information to guide the designing of staff development programs in education to reduce burnout among educators. Reducing burnout among educators could lead to more positive classroom interaction between student and teachers, as well as more positive relations among staff, students, parents, and administration.

In an article written by Weinrach et al. (1995), nine members of the Institute for Rational-Emotive Therapy’s International Training Standards and Review Committee
made suggestions about the importance of REBT in the future. These REBT practitioners concluded that REBT would be a forerunner in preventative mental health education and the psychoeducational method of the future. They indicated that REBT, self-help materials, and books would be a major component of preventative mental health education and psychoeducational methods not therapy, as many individuals choose to read materials rather than participate in therapy sessions. In another article written by Kendall et al. (1995), practitioners of REBT suggested there is a need for treatment research of REBT in order to “enhance professional practice and patients’ well-being” (p. 182). Additional research could provide information for REBT practitioners to use in preventative mental health education and psychoeducational programs.

The leading theorists of burnout have also made suggestions for additional burnout research. Schaufeli et al. (1993) reported that there is a need for theory-driven research that focuses not only on the interpersonal etiology factor of burnout, but also on the process of burnout. Schaufeli et al. stated there also continues to be a need for empirical research to determine effective interventions for dealing with burnout.

The issue of burnout remains an immediate concern for both the educational community and educational process because of its negative impact on the quality of educational instruction and on the interpersonal relationships in the classroom and learning community (Webber & Coleman, 1988). The excellence and quality of educational instruction and interpersonal relationships in education and in the learning community continues to be an area of interest to and a topic of research for educators.
Practitioners of REBT and theorists of burnout have indicated the need for future research on interventions. This study has laid groundwork for additional studies of the correlates irrational beliefs and burnout. Its design also has been a first step at exploring possible interventions to change individuals’ irrational beliefs and level of burnout.
REFERENCES


APPENDIX A

Cover Letter -- Invitation to Participate in the Study

April 5, 1999

«First» «Last»
«Address1»
«Address2»
«City», «State» «Zip»

Dear Fellow Teacher:

I am a doctoral student at the University of Northern Iowa, and I have been a teacher in Iowa since 1973. For my dissertation I am studying the attitudes of Iowa middle school teachers and how these attitudes may affect their perception of their role as an educator.

Your name was selected at random from a list of full-time Iowa middle school teachers. I would like to invite you to participate in my study. The study will consist of my mailing you survey materials that you can complete and return at your convenience. Once you have returned the materials to me, they will be analyzed and an interpretive report, based on your answers, will be sent to you.

Your participation in this project is voluntary and you may withdraw from the study at any time. All responses to the survey will be kept confidential. Data reported in the dissertation will be group summary data for all teachers participating in the study. Your name will never appear in any report, and the list of study participants will be destroyed upon completion of the project.

By your participating in this study you will be providing valuable information that can be used by educators and others in developing a fuller understanding of the attitudes and beliefs of middle school teachers. If you have any questions regarding the study, please call me collect at 319-277-1103. Please complete the enclosed form and return it in the postage paid envelope. I appreciate any assistance you can provide in helping me complete this study. Thank you.

Sincerely,

Shirley Anderson
1418 Rainbow Drive
Cedar Falls, IA 50613

Enclosures (2)
APPENDIX B

Acceptance Form to Participate in Study

Survey of Iowa Middle School Teachers

Thank you for volunteering to participate in this study. Once I have received this form I will mail you the survey materials.

Below is a mailing label that I would appreciate your reviewing for possible misspellings, name changes and/or address changes. Please make any corrections to this label using the lines below the label. If you would like the survey materials mailed to a different address, please specify that address on the lines below the label.

Please return this form in the enclosed postage paid envelope. Thank you.

Name: ________________________________

School: ________________________________

Street Address: _______________________

City: _________________________________

Zip Code: ____________________________
Thank you for volunteering to participate in our study of Iowa Middle School Teachers. Enclosed are two survey forms, and a short demographic information sheet that we would appreciate you completing and returning in the enclosed envelope. The demographic information sheet as well as the survey forms have a record number. This number will enable us to return your personalized interpretive report.

As we indicated in our last letter, all responses to the survey will be kept confidential. Data reported in the dissertation will be group summary data for all teachers participating in the study. Your name will never appear in any report, and the list of study participants will be destroyed upon completion of the project.

If you have any questions regarding the survey materials, please call me collect at 319-277-1103. Thank you.

Sincerely,

Shirley Anderson
APPENDIX D

Irrational Beliefs Test
Jones, 1969

The Irrational Beliefs Test can be purchased through Scholars Press, Ltd.

Dr. Paul J. Woods, Ph.D.
The Scholars’ Press, Ltd.
PO Box 7231
Roanoke, VA 24020
APPENDIX E

Maslach Burnout Inventory--Educators Survey
Maslach, Jackson, & Schwab, 1986

Consulting Psychologists Press, Inc. does not permit the inclusion of whole or partial instruments in dissertations or theses. This practice protects the reliability and validity of the instrument.

Aria Bishop
Permissions Department of Consulting Psychologists Press
APPENDIX F

Demographic Form

*Demographic Information*

What is your sex?  ____ Female  ____ Male

What was your age on your last birthday?  ____

For approximately how many years have you been teaching?  ____ Years

What grade levels do you teach? (Circle all that apply)  6  7  8

Other (Please specify)

Please Return This Sheet With Your Survey Materials

Thank You
APPENDIX G

Beliefs that Disturb
Woods, 1990

Beliefs That Disturb can be purchased through the Scholars’ Press Ltd.

Dr. Paul J. Woods, Ph.D.
The Scholars’ Press, Ltd.
PO Box 7231
Roanoke, VA 24020
Dear Study Participant:

Thank you for returning your survey materials for our study of Iowa Middle School teachers. Enclosed is an "Individualized Report" using the answers you gave to the questionnaires that we sent you. Also enclosed is a document titled "Information About the Study" that will assist you in understanding the report. It is recommended that you read the "Information About the Study" material before reviewing the report.

The "Individualized Report" shows how you scored on several dimensions of the concepts we are studying. These results are a suggestion of how you adhered to certain beliefs at the time you completed the questionnaires. These findings are not necessarily "static." It is a well know fact that attitudes and belief can be modified and change over time and that a person's sense of well-being tends to fluctuate and change from one period of time to another.

We would appreciate your reviewing the report and supplementary material. At a later date this fall, we will be contacting you to ask for your opinion of the report and to inquire about the extent to which you found the report beneficial. In addition, we will be asking if you think such a report, or modification thereof, would be beneficial to other educators in Iowa.

Again, we appreciate all of the assistance you have provided in this study. If you have any questions regarding the report, please call me collect at 910-937-6907. Thank you.

Sincerely,

Shirley Anderson
523 University Drive
Jacksonville, NC 28546

Enclosures (2)
APPENDIX I

Information About the Study-Experimental Group

Information About the Study

Purpose of the Study

Today the teaching profession has been “subject to increased pressure by society to correct social problems for example, (drug, alcohol, and sexual abuse), educate students in academic and skills areas, provide enrichment activities, meet the individual needs of all students with a wide range of abilities, and encourage moral and ethical development,” (Maslach & Jackson, 1986, p. 18). Other demands on teachers may be self-imposed. When beliefs take the form of excessive demands, they may interfere with teacher’ short and long term goals, their level of stress, and sense of well-being. Teachers may have negative emotional and behavioral reactions to some of these interactions and demands, yet there are limited preventative mental and emotional health education programs for teachers in the schools. Administrative personnel often offer teachers staff development programs about classroom management, standards and benchmarks, interventions and strategies for academic and behavioral difficulties, organizational matters, and principal and district mission and goals. It appears there is a need for staff development programs for teachers to enhance their learning about themselves, to discover how their beliefs may affect them, and to learn effective ways to deal with emotional and behavioral reactions.

The focus of this study is (1) to gather information about teachers’ beliefs and how these beliefs can affect their feelings of energy, attitudes toward others, and perceptions of accomplishments and achievements, and (2) look at ways for teachers to understand how their beliefs may affect their emotional and behavioral reactions to different situations using Rational Emotive Behavioral Therapy principles.

Rational Emotive Behavior Therapy (REBT) was developed by Albert Ellis and has a psychoeducational emphasis. It teaches ideas that individuals can use to overcome emotional and behavioral upsets. REBT is often used as preventative education for children and adults in an educational setting. The preventative education program enables individuals to learn how they can sometimes needlessly upset themselves and how they can manage not to do this (Ellis, 1991, 1995).

Ellis (1991) believed that peoples’ emotions come mainly from their beliefs about life situations. Grieber and Woods (1993) supported the belief that emotional and behavioral reactions are determined by the way individuals think. REBT practitioners use an “ABCDE,” theory to explain individuals’ emotional and behavioral reactions to situations. In this theory, the “A,” stands for the activating event, the “B,” for beliefs, and the “C,” for emotional and behavioral consequences to a person’s beliefs about the activating event.
The "ABC" of the Theory

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activating Event</td>
<td>Belief</td>
<td>Consequences</td>
</tr>
</tbody>
</table>

Many times, individuals feel that the activating event, rather than their own beliefs, causes their emotional and behavioral consequences. However, practitioners hold that it is not the life event, situation, person, activity, or experience (A) that cause a person to become upset; rather, it is the way a person views (B) the event, person, situation, or experience that causes the individual to have an emotional or behavioral consequence/reaction (C). For example, a teacher who believes that all students must love and approve of her/him, may react negatively if a student criticizes her/him.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student criticizes teacher</td>
<td>All students must love and approve of me</td>
<td>Teacher feels angry</td>
</tr>
</tbody>
</table>

In essence, "AA" equals our perceptions of the activating event; "B," our thinking processes and belief system, triggered by the events at point A; and "C," our emotional and behavioral consequences or reactions.

The disputation of beliefs and the development of a new philosophy or effect are the main goals of REBT interventions. In the "ABCDE," theory, the "D," stands for the disputation process and the "E," stands for the new effect. The (D) or the disputation process of a belief could help a person look at why a belief may be upsetting or disturbing to hold and provide alternatives to the belief.

The D and E of the Theory

<table>
<thead>
<tr>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging of beliefs through questioning</td>
<td>New way of viewing situations can lead to more moderate emotion</td>
</tr>
</tbody>
</table>

Individuals can learn skills to identify and dispute demanding beliefs, and they can change their beliefs into wishes or preferences if they wish to do so. Through disputation, teachers who believe everyone must love and approve of them realize that not all students are going to always love and approve of them. The new effect (E) may cause a change in psychosomatic reactions and/or allow individuals to view themselves in a new light. Through the disputation and new effect process, individuals can develop a new philosophy that can enhance their lives and help
them get what they want. Webber and Coleman (1988) reported that “when teachers learned to use REBT intervention techniques, their emotional reactions to stressful situations were less extreme, resulting in more effective classroom interaction,” (p. 34).

<table>
<thead>
<tr>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher identifies and challenges demanding beliefs</td>
<td>Teacher does not get upset and realizes that not everyone is going to love or approve of her/him; may feel annoyance but not extreme anger</td>
</tr>
</tbody>
</table>

Teachers can use the ABCDE theory process of REBT to help them deal with situations in their work and personal lives. REBT principles and interventions offer teachers preventative affective education and can help teachers to develop an understanding of emotions that eventually could allow them to prevent personal and professional pressures. The use of REBT strategies and interventions may also help individuals avoid the negative consequences of loss of energy, interpersonal conflicts, and reduced sense of personal accomplishment.

**Your Individualized Report**

As was stated in the cover letter, the enclosed “Interpretive Report,” shows how you scored on several dimensions of the concepts we are studying. The analysis consists of two parts. In the first part you are provided with a one page summary of your “feelings of energy,” “attitudes toward working with others, and “perceptions of accomplishment and achievement. The second part of the analysis provides an estimate of your adherence to ten common belief systems that we all share. In addition, the second part of the report provides information on how the belief may or may not affect your overall sense of well-being. These findings are not necessarily “static.” It is a well know fact that attitudes and belief can be modified and change over time and that a person’s sense of well-being tends to fluctuate and change from one period of time to another.

The survey and analysis are based on REBT. As was noted earlier, REBT provides one way of looking at an individual’s beliefs. The surveys and analysis are tools for examining personal beliefs, and they are not meant to be the solution to all areas of concern. The analysis reflects your personal beliefs at the time you completed the survey questionnaires. Your beliefs are not necessarily static or absolute. An individual’s beliefs may change as he or she grows older or when there are changes in life situations, relationships, and other factors.

The analysis of the ten belief systems provides definitions for each belief, and provides information on how each belief “may be disturbing to hold” and “alternatives to the belief.” Your score for each belief is reported on the bottom of each page. That score suggests how deeply you held the belief at the time you completed the questionnaires.
The "disturbing" factors of the belief and the "alternatives" that are suggested were developed by Dr. Paul Woods based on the writings of Dr. Albert Ellis and from Dr. Woods' years of research on this subject. These individual narratives provide reasons why or how a belief can create challenges for individuals. Suggestions are provided to help individuals recognize and challenge beliefs that can be related to problems that have not arisen. In addition, suggested alternative, non-demanding beliefs are provided for individuals to use to replace some of their old beliefs that might be self-defeating or discouraging.

The purpose of the study and the analysis is to provide a way for teachers to learn about their beliefs and how these beliefs can affect their interactions with others, as well as demands and frustrations of their job. It may help teachers to recognize the myth of some of their beliefs so they can choose (if they wish to do so) to behave in self-enhancing ways and avoid possible loss of energy, relationships, and achievement on the job.

References


APPENDIX J

“Rational Emotive Behavior Therapy (REBT) Bibliotherapy Intervention”

A modified form of Beliefs that Disturb, (Woods, 1990, edited by Shirley Anderson) is available at 523 University Drive, Jacksonville, North Carolina, 28546 or from Dr. Paul J. Woods, Ph.D., The Scholars Press Ltd., PO 7231, Roanoke, VA 24020.

Interpretive Report

For Case Number: _______

-- Please read the “Information About the Study” before using this report. --
Approval from Others

Individuals believe they need to have the support and approval of everyone they know or care about.

Why this Belief May Be Disturbing to Hold
This belief can create problems for many reasons. Demanding approval may cause individuals to worry and upset themselves about whether or not they will receive the approval of others. If they do receive approval, then they may worry about losing it. Being overly concerned with the approval of others may interfere with individuals doing what they really want to do with their lives. Demanding approval from virtually everyone may set up an unrealizable goal. No matter what individuals do, some people will approve; some people will disapprove; however the great majority probably won’t care.

Alternatives to the Belief
Individuals can decide to live and run their own lives according to their best interests and wishes and desires. They will probably find people who will support them, approve of them, and like them, although those who provide support may not be the same people whose approval they are now demanding. Basically for individuals’ happiness and best interest, they may be best advised to regard the approval of others as nice but not necessary. It is important to know that self-respect does not come from the approval of others but from individuals’ own satisfaction and pride with the way they are running their lives. Individuals can stop demanding respect from others, and even stop demanding that they must have self-respect. Instead of self-respect they can focus on self-acceptance. Self-acceptance is non-judgmental so that even if individuals don’t do well they still do not have to negatively evaluate or reject SELF. With self-acceptance, individuals are more likely to work on improvement of their behavior--with self-rejection, they are less likely to do so.

Your Score on this Belief

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
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</tbody>
</table>
APPENDIX K

Burnout Analysis Form

Individualized Report

Case Number: __________

Feelings of Energy
The higher the score on this dimension suggests that an individual may experience more tired and fatigued feelings that develop as emotional energies are drained. Individuals may also experience a loss of interest, spirit, and concern about themselves. Teachers may feel that they no longer have the energy of themselves to give to students and others as they once could.

Your Score: High
Moderate
Low

Attitudes Toward Working With Others
The higher the score on this dimension suggests that individuals may tend to depersonalize their feelings toward others. Teachers may experience negative shifts in their responses toward students, and may develop and display negative and indifferent attitudes toward students. They may also experience a loss of idealism about their work with others.

Your Score: High
Moderate
Low

Perception of Accomplishments and Achievement
The higher the score on this dimension suggests that individuals evaluate themselves positively with regard to their work. Teachers often feel satisfied with their job, happy with themselves, feel productive in their work and successful in helping their students learn and grow.

Your Score: High
Moderate
Low
APPENDIX L

Information About the Study-Control Group

Information About the Study

Purpose of the Study

Today the teaching profession has been "subject to increased pressure by society to correct social problems for example, (drug, alcohol, and sexual abuse), educate students in academic and skills areas, provide enrichment activities, meet the individual needs of all students with a wide range of abilities, and encourage moral and ethical development" (Maslach, C., and Jackson, S. E., Maslach Burnout Inventory Manual (2nd edition), 1986, Palo Alto, CA: Consulting Psychologist Press, p. 18). Other demands on teachers may be self-imposed. When beliefs take the form of excessive demands, they may interfere with teachers' short and long term goals, their level of stress, and sense of well-being. Teachers may have negative emotional and behavioral reactions to some of these interactions and demands, yet there are limited preventative mental and emotional health education programs for teachers in the schools. Administrative personnel often offer teachers staff development programs about classroom management, standards and benchmarks, interventions and strategies for academic and behavioral difficulties, organizational matters, and principal and district mission and goals. It appears there is a need for staff development programs for teachers to enhance their learning about themselves, to discover how their beliefs may affect them, and to learn effective ways to deal with emotional and behavioral reactions.

The focus of this study is to gather information about teachers' beliefs and how these beliefs can affect their feelings of energy, attitudes toward working with others, and perceptions of accomplishments and achievements. These three belief systems are important concerns in the field of education. Today many teachers are leaving the field of education while fewer individuals are choosing the teaching profession as a career. The creation of staff development programs emphasizing strategies and interventions to reduce emotional exhaustion, to prevent the tendency to depersonalize and to enhance teachers' sense of accomplishment may also help retain veteran teachers and encourage more individuals to enter the field of teaching.

Your Individualized Report

Enclosed is a report of how you scored on these three belief systems at the time you completed the survey materials earlier this year. The purpose of the Report is to enable teachers to recognize the affect their beliefs and job may have on their individual well-being. Through such "self-report analysis," teachers may learn about their perceptions of their level of energy, attitude toward others, and sense of personal accomplishment and achievement. By examining these perceptions, teachers may (if they so choose) look for counseling strategies and interventions to facilitate change in their beliefs, feelings, and attitudes if they feel such change is necessary and/or desirable.
Dear Study Participant,

Thank you for your continued support in our study on the attitudes and beliefs of Iowa Middle School Teachers. We are now entering the final phase of the study. Enclosed are two survey forms and a short questionnaire that we would appreciate your completing and returning in the enclosed envelope at your earliest convenience.

As with the previous study, these materials have an identification number that is used in order for us to send you your personalized report. Again, all responses to the surveys will be kept confidential. Data reported will be group summary data for all teachers participating in the study. Your name will never appear in any report, and the list of the study participants will be destroyed upon completion of the project.

Once we have received your survey materials, we will send you a final interpretative report based on your previous and current data. Again, we appreciate all of the assistance you have provided in this study. If you have any questions, regarding the survey materials, please call me collect at 910-937-6907.

Sincerely,

Shirley Anderson
523 University Drive
Jacksonville, NC 28546

Enclosures
APPENDIX N

Opinions Regarding the Study Form

Study of Iowa Middle School Teachers

Opinions Regarding the Study

Do you think that other educators in the State of Iowa would benefit from participating in a similar study and receiving a report about their beliefs and attitudes?

☐ Yes
☐ No
☐ Not Sure

How beneficial has this study been in providing you with a better understanding of your attitudes and beliefs?

☐ Not Very Beneficial  ☐ Somewhat Beneficial  ☐ Very Beneficial

Would you like us to send you a list of articles and books about the topics covered in this study when we send you your final personalized report?

☐ Yes
☐ No

Please use the space below (and on the back of this page) for any criticisms, suggestions, and/or other comments you would like to make about this study.

— Thank You for Participating in Our Study —
Dear Study Participant,

Thank you for your continued support of my study of Iowa Middle School teachers. The study is now completed and I would also like to personally thank you for your involvement and continued participation in this study. The information gathered from this study gave insights into people’s belief system and their level of burnout.

Enclosed is an “Interpretive Report” using the answers you gave to both of the questionnaires sent to you in April and in December. The April survey results will now be referred to as Pretest results and the December survey results will now be referred to as Posttest results. Please note that Pretest results are designated in blue pen whereas the Posttest results are designated in red pen. Some of you will now receive a packet entitled “Information about the Study” that previously one-half of the participants received with their pretest results. It is recommended that you read or reread the “Information about the Study” material before reviewing your final report of your answers to the surveys. Also enclosed is a reading list of articles and books pertinent to this study.

The “Interpretive Report” shows how you scored on several dimensions of the concept we studied. The results are a suggestion of how you adhered to certain beliefs at the time that you completed the questionnaires. The analysis consists of two parts. In the first part you are provided a one page summary of your “feelings of energy,” “attitudes toward working with others,” and “perceptions of accomplishment and achievement.” The second part of the analysis provides an estimate of your adherence to ten common belief systems that we all share. In addition, the second part of the report provides information on how the beliefs may or may not affect your overall sense of well being. These findings are not necessarily “static.” It is a well known fact that attitudes and beliefs can be modified and change over time and that a person’s sense of well-being tends to fluctuate and change from one period of time to another. We would appreciate your reviewing the report and supplementary materials.

I appreciate all of the assistance you have provided in this study. If you have any questions regarding the report, please call me collect at 910-937-6907. Thank you.

Sincerely,

Shirley Anderson
523 University Drive
Jacksonville, NC 28546

Enclosures (3)
# APPENDIX P

Modified Irrational Beliefs Report Form

## Pre and Posttest Results

(Blue Circle = PreTest -- Red Circle = Posttest)

<table>
<thead>
<tr>
<th>High</th>
<th>Approval From Others</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self Expectations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blaming</td>
<td></td>
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<td>Reactions To Frustrations</td>
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<td>Emotional Control</td>
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<td>Concern About Future Problems</td>
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<td>Avoiding Problems</td>
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<td>Relying On Others</td>
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<td>Helplessness About Changing</td>
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<td>Perfectionism</td>
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APPENDIX Q

Readings Pertaining to the Study

Readings on Rational Emotive Behavior Therapy and Burnout


APPENDIX R

Experimental Group—Results of the Opinion Form

Reported in Percentages

*Study of Iowa Middle School Teachers*
*Opinions Regarding the Study*

Do you think that other educators in the State of Iowa would benefit from participating in a similar study and receiving a report about their beliefs and attitudes?

- Yes 51.1%
- No 11.1%
- Not Sure 37.8%

How beneficial has this study been in providing you with a better understanding of your attitudes and beliefs?

- Not Very Beneficial 20%
- Somewhat Beneficial 75.6%
- Very Beneficial 4.4%

Would you like us to send you a list of articles and books about the topics covered in this study when we send you your final personalized report?

- Yes 60%
- No 40%

Please use the space below (and on the back of this page) for any criticisms, suggestions, and/or other comments you would like to make about this study.

As a group how do middle school teachers score?

What recommendations to college and universities will be created to guide future teachers?

I really enjoyed participating in this study. It made me take a look at myself after 26 years in education and I basically liked what I saw . . . .

Surveys help me put my beliefs into perspective. They're like reflecting—-I think about the issues, my responses, and how I can make my life better. Focus. I like it.
APPENDIX S

Control Group—Results of the Opinion Form

Reported in Percentages

Study of Iowa Middle School Teachers
Opinions Regarding the Study

Do you think that other educators in the State of Iowa would benefit from participating in a similar study and receiving a report about their beliefs and attitudes?

☐ Yes 56.6%
☐ No 5.7%
☐ Not Sure 37.7%

How beneficial has this study been in providing you with a better understanding of your attitudes and beliefs?

☐ Not Very Beneficial 15.1%
☐ Somewhat Beneficial 75.5%
☐ Very Beneficial 9.4%

Would you like us to send you a list of articles and books about the topics covered in this study when we send you your final personalized report?

☐ Yes 67.9%
☐ No 32.1%

Please use the space below (and on the back of this page) for any criticisms, suggestions, and/or other comments you would like to make about this study.

I think other educators could benefit from this study but I am not sure if the ones that needed improvement would take time to answer the questions. Maybe it could be part of a school wide inservice.

I would like to know how we could use this study to improve ourselves and how to avoid negative attitudes/burnout? What strategies do teachers use to assist them in this area?

When I went over the questions this time, I realized how my state of mind was at the time of last year's survey.

I am glad we get the results. Thanks!

I was not surprised by the results. The reason that I marked that this study is not beneficial is because I would like some direction for teachers to take if they are feeling burned out or apathy.

I did not get the same written report feedback as another teacher in my building did.

Doing the surveys makes you reflect on your own attitudes. This is something we need to do to make self-improvements.