

A STUDY OF
THE RELATIONSHIP BETWEEN
ANGER AND PERSONALITY TYPE

LARRY CHING-WAH NG

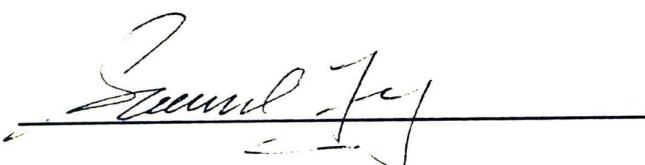
To the Graduate and Research Council:

I am submitting herewith a thesis written by Larry Ching-wah Ng entitled "A study of the relationship between anger and personality type." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in psychology.



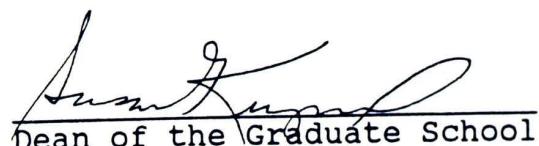
Jean Lewis, Ed.D., Major Professor

We have read this thesis
and recommend its
acceptance:





Accepted for the Graduate
and Research Council:



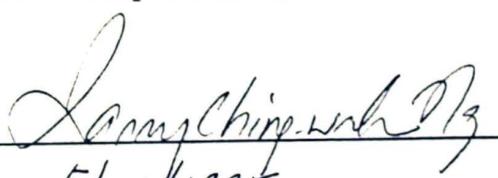
Susan Kupisch
Dean of the Graduate School

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a Master's degree at Austin Peay State University, I agree that the Library shall make it available to borrowers under the rules of the Library. Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgment of the source is made.

Permission for extensive quotation from or reproduction of this thesis may be granted by my major professor, or in her absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this thesis for financial gain shall not be allowed without my written permission.

Signature

A handwritten signature in black ink, appearing to read "James Ching-wah Ng".

Date

5/10/1995

A STUDY OF
THE RELATIONSHIP BETWEEN
ANGER AND PERSONALITY TYPE

A Thesis
Presented for the
Master of Arts
Degree
Austin Peay State University

Larry Ching-wah Ng

May 1995

ACKNOWLEDGMENTS

The author wishes to express sincere appreciation to Dr. Jean Lewis, Associate Professor of Psychology, Dr. Samuel Fung, Associate Professor of Psychology and Dr. Susan Kupisch, Professor of Psychology for their guidance, aid, and time given during the entire study.

Appreciation is extended to Dr. Sylvia Nassar-McMillan, Dr. LuAnnette Butler, Ms. Caroline Shaffer, and Ms. Alyce Eason for their valuable assistance in making this study possible.

Additionally, the author wishes to thank his family and friends for their support and understanding during the study.

ABSTRACT

This study examined the relationship between anger and personality type. It was hypothesized that subjects with an Apollonian (NF) personality type would have the lowest scores on the Trait-Anger (T-Anger) scale and the Anger Expression (AX/EX) scale in the State-Trait Anger Expression Inventory (STAXI) when compared to subjects with Promethean (NT), Epimethean (SJ), or Dionysian (SP) personality types. It was also hypothesized that subjects with an SP personality type would have the highest scores on the T-Anger scale and the AX/EX scale on the STAXI. One hundred and fifteen female college students from Austin Peay State University, Clarksville, Tennessee, voluntarily participated in the study. No significant differences were found among the four groups on their T-Anger scale and AX/EX scale scores. The results were discussed from the aspect of sample size, the complex nature of the anger trait, and the use of self-reports in studying anger.

TABLE OF CONTENTS

CHAPTER	PAGE
1. Literature Review	1
2. Methods	13
Subjects	13
Materials	13
Procedure	15
3. Results	16
4. Discussion	20
REFERENCES	22
APPENDIX	28
A. Informed Consent Statement	29

LIST OF TABLES

TABLE	PAGE
1. Mean and Standard Deviation of the STAXI Trait Anger scores by Personality Type	16
2. Mean and Standard Deviation of the STAXI Anger Expression scores by Personality Type	17
3. Mean and Standard Deviation of the STAXI State Anger scores by Personality Type	18
4. Correlations between the MBTI subscales and the STAXI subscales	19

CHAPTER 1

Literature Review

Throughout all ages or period of development, people confront almost daily their feeling of anger and that of other people whom they encounter (Ellis, 1977). People everywhere experience anger, but their cultural values and norms determine when they may be allowed to express their anger. These values and norms attempt to establish rules for the proper experience and expression of anger (Travis, 1982). Averill (1982) reported that there are two sets of norms in American culture, both of which are deeply ingrained in Western intellectual and moral traditions. One set condemns the expression of intense emotion like anger, while the other set calls for the forceful retribution of injustice. Yet, American history indicates that anger values can change rapidly, at least under pressure from some massive changes in the environment as those brought by industrialization or social movements (Stearns and Stearns, 1986). In the 1960s and 1970s, the free expression of anger was encouraged. Collective protest and widespread individual violence during the 1960s and 1970s were reminders that the United States had been peppered with angry acts of force (Travis, 1982). The desire to recognize and control anger began in the mid-1980s (Stearns and Stearns, 1986).

Modern America still fails to find a single approach in dealing with anger. Potter-Efron and Potter-Efron (1991) reported that there are three main approaches to anger that have emerged over the last several years in contemporary America. One of them

postulates that we should work to reduce the total amount of anger we experience through varied techniques. Another approach argues that anger needs to be expressed vividly, sometimes by shouting, yelling, and physical exertion. The third approach suggests that people learn how to express their anger in moderate and socially acceptable ways. Different approaches use different ways in handling anger. Thus, it is not difficult to understand why Americans today worry about their anger (Stearns and Stearns, 1986). Most people do not know when their anger will become uncontrolled anger that results in problem behaviors (Potter-Efron and Potter-Efron, 1991). In addition, they do not know whether they should express it or repress it, or how to control it.

Anger

Anger, hostility, and aggression are often used interchangeably and this creates conceptual confusion in the research literature. In this study, anger is defined as "an emotional state which comprises feelings that can vary in intensity from mild annoyance or aggravation to fury and rage" (Speilberger, 1991, p.6). It is different from hostility. Hostility is "an attitude toward specific individuals or the world that includes readiness to see others as enemies and to be angry with them" (Potter-Efron and Potter-Efron, 1991, p.5). Speilberger (1991) mentioned that hostility may motivate aggression and vindictive behavior. While anger and hostility both involve feelings and/or attitudes, aggression is generally

described as the actual destructive and punitive behavior that is intended to harm someone (Potter-Efron and Potter-Efron, 1991).

Gender and Anger

As a result of socialization patterns in the American society, anger is perceived to be a more acceptable emotion for men to express outwardly (Averill, 1982). Biaggio (1989) did find that men reported more anger-arousing incidents and responded with more behavior, physically and verbally, than women did. Speilberger, Johnson, Russell, Crane, Jacobs, and Worden (1985) administered a preliminary version of the Anger Expression Scale to more than 1000 high school students. They reported that boys scored higher on suppressed anger than did girls, but there were no gender differences for outwardly expressed anger. However, Stoner and Spencer (1986) reported that there were no age or sex differences in the intensity or frequency of anger or the disposition to experience anger. Sharkin (1993) reviewed the research literature on the experience and expression of anger as a function of gender. He also concluded in the same article that, based on the existing research to date, few conclusion can be drawn about anger as a function of gender.

Based on the literature review, it is difficult to draw a clear cut conclusion whether there are gender differences in the experience and expression of anger. In order to avoid further confusion, the present study will only employ female subjects.

The experience and expression of anger

In psychological and counseling literature, a considerable

amount of attention has been devoted to individual differences in the experience and expression of anger. As early as 1910, researchers found that there were vast individual differences in the physiological and psychological experience and expression of anger (Averill, 1982). Surprisingly, most studies found that some people can be angry and not feel it, some feel it and do not express it, and some both feel it and express it (Rohre and Sutherland, 1981). In a study of the experience of anger, Averill (1982) reported that most people become angry at least once a week and nearly everyone at least once a month. In other words, some people experience more anger than others. Furthermore, recent research has demonstrated a strong relationship between anger and coronary heart disease (Diamond, 1982), essential hypertension (Boutelle et al., 1987) and headaches (Hazaleus and Deffenbacher, 1986). Besides the health problems, anger has also been found to be related to psychological problems such as addiction and alcoholism (Potter-Efron and Potter-Efron, 1991). These studies all suggest that there are individual differences in the experience and expression of anger that, in turn, affect the possibility of having a particular health problem or a psychological problem.

If we believe that different people vary in terms of experiencing and expressing anger, the question of "what makes the difference?" becomes important. Some researchers suggest that anger is an emotion with a genetic or biological component (e.g., Averill, 1982; Travis, 1982), as evidenced by different

types of physiological responses that people experience when they are angry. However, most persons feel tense or aroused when angry, but whether they experience that arousal in terms of cardiovascular, respiratory, gastrointestinal, or muscular involvement seems to be dependent upon a host of individual and situational factors (Averill, 1982). Individual factors may include the angry person's own reactivity and their cognitive interpretation of the situation while the target of anger and the influence of socialization can be examples for situational factors. The present study seeks to explore the effect of one of the individual factors, personality types, on the experience and expression of anger.

In this study, the experience and expression of anger will be measured by the State-Trait Anger Expression Inventory (STAXI). In the STAXI, anger experience is represented by two 10-item scales: State Anger (S-Anger) and Trait Anger (T-Anger). State Anger is defined as a temporary state invoked by characteristics of the immediate situation. In contrast, Trait Anger refers to a more stable, preposition to respond to a wide range of stimuli with an anger response. Trait Anger includes two four-item subscales : Angry Temperament and Angry Reaction. The Angry Temperament dimension represents "a general propensity to experience and express anger without provocation" (Speilberger, 1991, p.1) while the Angry Reaction dimension represents "the disposition to express anger when criticized or treated unfairly by other individuals" (Speilberger, 1991, p.1). Anger Expression

is measured by three eight-item scales: Anger-in (AX/IN), Anger-out (AX/OUT) and Anger Control (AX/Con). A total Anger Expression (AX/EX) score can be computed from the latter three scales.

Since the aim of this study is to examine individual differences and general propensity to experience anger across different situations, the Trait Anger (T-Anger) scale is more relevant than the State Anger Scale. In addition, the frequency that anger is expressed is another major concern in this study. As a result, the Anger Expression (AX/EX) scale is employed.

Personality Types

Carl Gustav Jung in his classic book, Psychological Types, tried to answer the question, i.e. whether or not there were differences among individuals across cultures or times which could be understood or grouped as typical (Spoto, 1989). Based on his observations of himself, his patients, and other persons, Jung identified several dimensions that combine variously to create what he called personality types (Mattoon, 1981).

In Jung's typology, human behavior is viewed through patterns determined by the structure of an individual's psyche interacting with itself and the world (Spoto, 1981). Jung's theory first distinguishes between two very basic typology categories: attitude type and functional type. Jung described the two attitude types in terms of the direction or orientation of interest (psychic energy) in relating to the outside world (Mattoon, 1981). The two attitudes Jung posited are Extroverted Attitude and Introverted Attitude. The second typological

category, which Jung called functional type, refers to the specific manner or means of adaptation that yields an observable or consciously differentiated psychological functional type or way of being. Jung posited four possible functions: sensation, intuition, thinking and feeling (Myers and McCaulley, 1985).

Jungian typology draws on habitual or naturally preferred behaviors (McCaulley, 1990). In other words, being extraverted does not prevent an individual from introverted behavior, nor vice versa, though one attitude is very often characteristic of a specific personality in the sense that the person seems best able to agree with it - i.e. the person is more comfortable and feels truer to him or herself in one attitude rather than another (Spoto, 1989).

Katherine Briggs and Isabel Myers did not believe that the information Jung provided on the introversion-extraversion attitude types sufficiently explained the typological adaptation that both introverts and extroverts must make to the outside world (Spoto, 1989). As a result, they extended the importance of judgment (J) and perception (P) which was implicit in Jung's work and made explicit in the development of the Myers-Briggs Type Indicator (MBTI), as the main criteria to how one relates to the outside world (Murray, 1990). The recognition and development of the JP functions are regarded as a main contribution of Myers and Briggs to the theory of psychological types (Myers and McCaulley, 1985).

By adding the JP function to the original Jungian theory,

Myers and Briggs developed the MBTI with four bipolar scales. The Extraversion-Introversion scale (EI) measures preference for the outer world of people as opposed to the inner world of people. The Thinking-Feeling scale (TF) measures preference for logic rather than need for affiliation and feeling. The Sensing-Intuition scale (SI) measures a preference for the observable and the practical as opposed to the abstract and theoretical. The fourth scale, represents Judgement-Perception (JP), a preference for order and rules as opposed to a preference for flexibility and spontaneity. The combination of two preference directions from each of four bipolar scales (E or I, S or N, T or F, and J or P) yields 16 possible rational categories or types (Lorr, 1990).

After reviewed the Jung's type theory and the MBTI, Keirsey and Bates (1984) postulated that the sixteen MBTI personality types could fall neatly into four temperaments types. The four temperament types are: Dionysian (SP), Epimethean (SJ), Promethean (NT), and Apollonian (NF).

According to Keirsey and Bates (1984), the key word for the SP person is "impulsive". They act out their impulses and enjoy feeling them well up within. They like to discharge their impulses like setting off an explosion. SP is likely to become restless and perhaps experience the urge to take off for somewhere or something else. S/he must do whatever her/his impulse dictates and continue the action as long as the urge compels. They do not require their actions to be governed by

established policy, rules, or natural laws, as do other styles.

Unlike the SP, the SJ person must be the giver, not the receiver. They like to be the caretaker, not the one being cared for. There is an unfulfilled desire for them to serve, as if they are impatient to be useful. To belong to a social units is central to this type. They are also compelled to be bound and obligated. Sometimes, they will find that their help or effort have not been appreciated. This feeling of not being appreciated is not something that SJ can express freely. Because of insufficient appreciation for her/his enthusiastic discharge of duty, s/he will become exhausted, worried , sad and even ill. Under certain conditions, it will take the form of depression, a condition to which the SJ is particularly vulnerable.

The NT person has a strong desire for power. They must be competent. They are the most self-critical of all types. "The more extreme the NT type, the more exacting and stringent the demand placed by the NT on himself in the acquisition of skill and knowledge" (Keirsey and Bates, 1984, p.49). NT believes that s/he should know or be able to do a lot of things. Since they are making unyielding demands on themselves, they have a lot of self-doubts. Their friends usually report that they sometimes feel that they do not exist when they are with their NT friends. They may react to this by hostile or attacking comments, directed to the personality of NT. However, NT usually seldom fight back to these comments.

According to Keirsey and Bates (1984), the purpose of life

for the NF people probably is the search for self. They would like to figure out the answer to the question, "who am I?". NF people have an urge to become unique, self-actualized persons. Becoming and integrity are the key words for this type. They are very sensitive to other's feelings. They can also see the potential strength or virtue of other people. NF often devote their time or even their lives to cultivating other's potential. In addition, the NF type person enjoys being with people and interacting with people. They usually continue to seek the chance to have a good relationship with different people.

In the present study, the Myers-Briggs Type Indicator (MBTI) (Myers and McCaulley, 1985) is employed as an instrument to measure personality types and the Keirsey and Bates' four temperaments are used as the classification for the personality types. There are several reasons why Keirsey and Bates' four temperaments are used. First, it helps to narrow the personality variables into four types rather than sixteen types. Second, the four temperaments provide sufficient and precise behavioral descriptions.

Anger and Personality Types

Research studies on anger management have shown a relationship between anger and empathy. Samuel (1983) conducted a study on anger management. He recommended that people could reduce their anger by acquiring empathy. Grogan (1991) discussed some basic principles of anger management. He also postulated that developing empathy skills could be one of the essential

principles in handling anger. These studies suggest that one can manage his/her anger better if one can develop or acquire empathy and may experience or express less anger.

Jenkins, Stephens Jr., Chew, and Downs (1990) found that the MBTI Thinking-Feeling dimension correlated significantly with empathic responding. In their study, higher empathic responses were related more with the feeling component than thinking component. Thus, it is probably that people who are characterized as exhibiting a feeling preference may have more empathetic skills than others. Keirsey and Bates (1984) did report that NF type people are more empathetic than people with the other three personality types.

Besides empathy, impulse control is another factor found to be related to the experience and expression of anger. Averill (1984) indicated that the experience and expression of anger might involve other factors like impulsiveness. Lehnert and his colleagues (1994) conducted a study on anger in adolescent suicide attempters. They found that subjects who had poor impulse control were more likely to experience and express anger.

Slipps and DiCaudo (1988) examined the nature of the MBTI Judging and Perceiving (JP) subscale. The result of the study revealed that the MBTI JP subscale could be a measure of impulsivity. The result also indicated that those people who were high on perceiving were also impulsive. According to Keirsey and Bates (1984), SP type people are also the most impulsive when compared to other types. They like to act spontaneously on their

impulses.

In this paper, it is hypothesized that:

1. Subjects with an NF personality type will have the lowest scores on the STAXI Trait Anger (T-Anger) scale and Anger Expression (AX/EX) scale when compared to subjects with an SP, SJ, or NT personality types.
2. Subjects with an SP personality type will have the highest scores on the STAXI Trait Anger (T-Anger) scale and Anger Expression (AX/EX) scale when compared to subjects with an SJ, NT, or NF personality types.

CHAPTER 2

Methods

Subjects

One hundred and fifteen undergraduate female students enrolled in General Psychology classes at Austin Peay State University in Clarksville, Tennessee, voluntarily participated in this study.

Materials

Two sets of questionnaires, the State-Trait Anger Expression Inventory (STAXI) and the Myers-Briggs Type Indicator (MBTI), were used in this study.

The experience and expression of anger were measured by the State-Trait Anger Expression Inventory (STAXI). The STAXI was the product of several years of research by Speilberger and his associates and was published in 1979. It was developed as a part of a long-term study of anxiety, anger and curiosity. It purported to measure the inward and outward expression of anger, as well as anger control and the total experience of anger.

The STAXI (Spielberger, 1991), consists of 44 items and is divided into three parts. Items in Part one and two are purported to measure the experience of anger. Part three is believed to provide a general index of the frequency that anger is expressed. Subjects are asked to respond to each statement that best describes them on a 1 to 4 point scale ("1" for Not at All or for Almost Never to "4" for Very Much or Almost Always).

Retzlaff's (1989) reviews indicated that the internal consistencies were generally good for the main scales. However,

he reported that there were relatively few validity studies that had been made at the time when he published the test review. Recently, Fuqua et al. (1991) conducted a study to examine the factor structure of the STAXI. The study provided evidence of the structural validity of the STAXI. In addition, they reported that the relative independence of the State-Anger and Trait-Anger scales was promising. There was no significant correlations between the Anger-In scale, Anger-Out scale, and Anger-Control scale. In other words, the three scales measure different dimensions of anger as purported.

The Myers-Briggs Type Indicator (MBTI) was employed as an instrument to measure personality types. The MBTI was originally designed to classify individuals on the basis of the psychological functions originally proposed by Carl Jung (McCaulley, 1990). Jung's system was basically a typology taking into account introversion vs. extroversion and preferences for two ways of perceiving (i.e. sensing vs intuition) and two ways of reaching conclusions or judging (i.e. thinking vs feeling) (Spoto, 1989). Myers and Briggs added a fourth dimension to the MBTI, a scale measuring one's overall preference for judging or perceiving functions when first taking in new information (Beyler and Schmeck, 1992). The MBTI has been regarded as one of the most popular of all personality assessment inventories (Lorr, 1990).

A considerable amount of research has indicated the MBTI to be a reliable and valid inventory. Murray (1990) reported that the reliability of the MBTI has been improved in recent years.

Devito (1985) reviewed the test-retest reliability studies of the MBTI and concluded that the test-retest reliability coefficients are good, ranging from .48 (14 months) to .87 (7 weeks). Thompson and Borrello (1986) conducted a study on the MBTI and provided evidence supporting the construct validity of the instrument. Other studies (Slipps and DiCudo, 1988; Shiflett, 1989) also showed positive evidence supporting the validity of the MBTI.

The MBTI consists of 126 items and is divided into three parts in which most, but not all, cases are based on a two-fold forced choice scale. Subjects are requested to respond to each question.

Procedure

The study was conducted in one 50-minute session. At the beginning of each session, the participants were asked to read and sign the Informed Consent form (see Appendix A). A questionnaire booklet, which consisted of two sets of questionnaires, the State-Trait Anger Expression Inventory (STAXI) and the Myers-Briggs Type Indicator (MBTI), was then administered to them. Except for their gender, subjects were not required to provide any other demographic information in the booklet. Instructions were given on each part of the questionnaire. After the completion of the questionnaires, a debriefing was given to the participants.

CHAPTER 3

Results

Based on their scores on the MBTI, the participants were divided into four groups, namely Dionysian (SP) group, Epimethean (SJ) group, Promethean (NT) group, and Apollonian (NF) group.

The results of an analysis of variance were presented in Table 1 and indicated that there was no significant difference among the four groups on their mean scores of the Trait-Anger scale ($F = 0.210$, $p < 0.895$). In addition, these four personality types also did not significantly differ from each other on their AXEX scores ($F = 0.561$, $p < 0.642$) (see Table 2).

Table 1

Mean and Standard Deviation of the STAXI Trait Anger scores by Personality Type.

Personality Types	Mean	SD	n	F	p
NF	18.920	5.307	25	0.201	0.895
NT	20.300	6.075	10		
SJ	19.327	4.972	49		
SP	19.032	4.673	31		

Table 2

Mean and Standard Deviation of the STAXI Anger Expression scores by Personality Type.

Personality Types	Mean	SD	n	F	p
NF	24.720	8.488	25	0.561	0.642
NT	24.600	8.934	10		
SJ	24.531	9.872	49		
SP	27.032	7.722	31		

It was not hypothesized, but further analysis indicated that these four personality types had significant differences with the STAXI State-Anger scores ($F = 4.305$, $p < 0.007$) (see Table 3). Subjects with an NT personality type had the highest STAXI State-Anger scores ($M = 13.800$, $SD = 5.978$) while subjects with an SJ personality type had the lowest scores ($M = 10.735$, $SD = 1.668$), when they were compared to other personality types.

Table 3

Mean and Standard Deviation of the STAXI State-Anger scores by Personality Type.

Personality Types	Mean	SD	n	F	p
NF	10.840	1.375	25	4.305	0.007
NT	13.800	5.978	10		
SJ	10.735	1.668	49		
SP	11.161	2.556	31		

A supplementary analysis was done to further explore the relationship between the Myers-Briggs Type Indicator (MBTI) subscales and the State-Trait Anger Expression Inventory subscales. Table 4 highlights those significant relationships that were found in this study. As indicated in this table, both the Thinking (T) and Intuition (N) subscales were found to correlate positively and significantly ($r = 0.386$, $p < .01$ and $r = 0.185$, $p < .05$ respectively) with the State-Anger (SA) subscale. On the contrary, a negative but significant ($p < .05$) relation was found between the SA subscale and the feeling subscale (F).

In addition, the Introversion (I) subscale in the MTBI was found to be positively and significantly ($p < .05$) correlated with the Anger-In (AXIN) and the Anger-Control (AXCON) subscales while having a negative but significant ($p < .05$) relationship

with the AXOUT subscale. Similarly, there is a positive and significant ($p < .05$) relationship between the Extraversion (E) subscale of the MBTI and the Anger-Out (AXOUT) subscale and a negative but significant relationship ($p < .05$) with the Anger-In subscale.

Table 4

Correlations between the MBTI subscales and the STAXI subscales.

Subscales	r
Intuition - State Anger	0.185*
Thinking - State Anger	0.386**
Feeling - State Anger	- 0.291*
Extraversion - Anger-In	- 0.280*
Introversion - Anger-In	0.244*
Extraversion - Anger-Out	0.203*
Introversion - Anger-Out	- 0.190*
Introversion - Anger-Control	0.218*

*Significant at .05 level

**Significant at .01 level

CHAPTER 4

Discussion

This study tested two hypotheses. The first hypothesis was that the subjects with an NF personality type would have the lowest scores on the STAXI Trait Anger (T-Anger) scale and the Anger Expression (AX/EX) scale when compared to the subjects with an SJ, NT, or SP personality types. Results of this study did not support this hypothesis. The second hypothesis posited that subjects with an SP personality type would have the highest scores on the STAXI Trait Anger (T-Anger) scale and the Anger Expression (AX/EX) scale when compared to the subjects with an NF, SJ, or NT personality types. The findings of this study, however, did not support this hypothesis.

One of the limitations of this study was the unequal sample size of the four groups. The number of subjects with NF, SP, SJ, and NT personality types in this study were twenty-five, thirty-one, forty-nine, and ten respectively. A further analysis in this study with equal sample size ($N = 40$, ten subjects in each group) did show an improved F-value even though it still failed to reach significance. Thus, it might be possible for significant differences among these four groups in their mean scores on the T-Anger scale and the AX/EX scale if there were a larger and equal sample size in each group.

The results of this study might also be related to the complex nature of trait anger. Personality traits have been believed to be relatively stable across situations (Moskowitz, 1994). However, some psychological literature (Golding, 1975;

Murphy and Davidshofer, 1991) pointed out that traits may not be as enduring as many people thought. Cohen, Swerdlik, and Smith (1992) also suggested that it was important to be aware of the context or situation in which a particular behavior was displayed when studying traits. In addition to the social context in which anger occurred, Averill (1982) reported that other factors like the target of anger might determine how much anger a person would experience and whether or not a person would express anger.

Averill (1983) also suggested that researchers should be cautious when using self-reports for studying the expression and experience of anger. He said that anger was a negative and highly interpersonal emotion. People might attempt to present a positive self-image because of social desirability and expectation. Despite his acknowledgment of the limitation of the self-report format for the investigation of anger, Averill (1983) admitted that self-reports had been widely accepted and used in the psychological studies.

Thus, in the future, it would be beneficial for researchers to continue developing instruments and methodologies to be used in studying anger. Furthermore, it may also be valuable for researchers to investigate differences in the expression and experience of anger among different cultural groups or within a population outside a university setting.

REFERENCES

References

- Averill, J.R. (1982). Anger and aggression: an essay on emotion. New York: Springer-Verlag.
- Averill, J.R. (1983). Studies on anger and aggression: implications for theories of emotion. American Psychologist, 38, 1145-1160.
- Baggio, M.K. (1989). Sex differences in behavioral reactions to provocation of anger. Psychological Reports, 64, 23-26.
- Beyler, J. and Schmeck, R.R. (1992). Assessment of individual differences in preferences for holistic-analytic strategies: evaluation of some commonly available instruments. Educational and Psychological Measurement, 52(3), 709-719.
- Boutelle, R.C., Epstein, S., and Ruddy, M.C. (1987). The relationship of essential hypertension to feelings of anxiety, depression, and anger. Psychiatry, 50(3), 206-217.
- Cohen, R.J., Swerdlik, M.E., and Smith, D.K. (1992). Psychological testing and assessment: an introduction to tests and measurement (2nd ed.). Mountain View, CA: Mayfield Publishing Company.
- Devito, A.J. (1985). Review of Myers-Briggs Type Indicator. In Mitchell JR., J.V. (Ed), The Ninth Mental Measurement Yearbooks Volume II, p.1030-1032.
- Diamond, E.L. (1982). The role of anger and hostility in essential hypertension and coronary heart disease. Psychological Bulletin, 92(2), 410-433.

Fuqua, D.R., Leonard, E., Masters, M.A., Smith, R.J., Campbell, J.L., and Fischer, P.C. (1991). A structural analysis of the state-trait anger expression inventory. Educational and Psychological Measurement, 51, 439-446

Golding, S. L. (1975). Files in the ointment: methodological problems in the analysis of the percentage of variance due to persons and situations. Psychological Bulletin, 82(2), 278-288.

Grogan, G. (1991). Anger management: clinical applications for occupational therapy: II. Occupational Therapy in Mental Health, 11(2-3), 149-171.

Hazaleus, S.L. and Deffenbacher, J.L. (1986). Relaxation and cognitive treatment of anger. Journal of Consulting and Clinical Psychology, 54, 222-226.

Jenkins, S.J., Stephens, Jr., J.C., Chew, A.L. and Downs, E. (1992). Examination of the relationship between the Myers-Briggs Type Indicator and empathic response. Perceptual and Motor Skills, 74, 1003-1009.

Keirsey, D. & Bates, M. (1984). Please understand me: character & temperament types. Del Mar: Prometheus Nemesis Book Company.

Lehnert, K.L., Overholser, J.C., and Spirito, A. (1994). Internalized and externalized anger in adolescent suicide attempters. Special issue: affective expression and emotions during adolescence. Journal of Adolescent Research, 9(1), 105-119.

- Lorr, M. (1991). An empirical evaluation of the MBTI typology. Personnel Individual Difference, 12(11), 1141-1145.
- Mattoon, M.A. (1981). Jungian Psychology in perspective. New York: The Free Press.
- McCaulley, M.H. (1990). The Myers-Briggs Type Indicator: A measure for individuals and groups. Measurement and Evaluation in Counseling and Development, 22(4), 181-195.
- Moskowitz, D.S. (1994). Cross-situational generality and the interpersonal circumplex. Journal of Personality and Social Psychology, 66(5), 921-933.
- Murphy, K.R. and Davidshofer, C.O. (1991). Psychological testing: principles and applications (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Murray, J.B. (1990). Review of research on the Myers-Briggs Type Indicator. Perceptual and Motor Skills, 70, 1187-1202.
- Myers, I.B. and McCaulley, M.H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. California: Consulting Psychologists Press, Inc..
- Potter-Efron, R.T. & Potter-Efron, P.S. (1991). Anger, alcoholism and addiction: treating individuals, couples, and families. New York: W.W. Norton & Company.
- Retzlaff, P. (1992). Review of the State-Trait Anger Expression Inventory, Research Edition. In Kramer, J.J. and Conoley, J.C. (Eds), The Eleventh Mental Measurement Yearbook, p.869-870.

Rohrer, N. and Sutherland, S.P. (1981). Facing anger. Minneapolis: Augsburg Publishing House.

Samuel, R. (1983). ABC of anger management. Canada's Mental Health, 31(1), 21.

Sharkin, B.S. (1993). Anger and gender: theory, research, and implications. Journal of Counseling and Development, 71, 386-389.

Shiflett, S.C. (1989). Validity evidence for the Myers-Briggs Type Indicator as a measure of hemisphere dominance. Educational and Psychological Measurement, 49, 741-745.

Slipps, G.J. and DiCudo, J. (1988). Convergent and discriminant validity of the Myers-Briggs Type Indicator as a measure of sociability and impulsivity. Educational and Psychological Measurement, 48, 445-451.

Spielberger, C.D. (1991). State-Trait Anger Expression Inventory. Florida: Psychological Assessment Resources, Inc.

Speilberger, C.D., Johnson, E.H. , Russell, S.F., Crane, R.S., Jacobs, G.A., and Worden, T.J. (1985). The experience and expression of anger: Construction and validation of an anger expression scale. In M.A. Chesney and R.H. Rosenman (Eds.), Anger and hostility in cardiovascular and behavioral disorders (pp. 5-30). New York: Hemisphere/ McGraw-Hill.

Spoto, A. (1989). Jung's typology in perspective. Massachusetts: Sigo Press.

Stearns, C.Z. and Stearns, P.N. (1986). Anger: the struggle for emotional control in America's history. Chicago:

The University of Chicago Press.

Stoner, S.B. and Spencer, W.B. (1986). Age and sex differences on the State-Trait Personality Inventory.
Psychological Reports, 59, 1315-1319.

Thompson, B. and Borrello, G.M. (1986). Second-order factor structure of MBTI: A construct validity assessment.
Measurement and Evaluation in Counseling and Development, 18(4), 148-153.

Travis, C. (1982). Anger: the misunderstood emotion. New York: Simon and Schuster.

APPENDIX

APPENDIX A

INFORMED CONSENT STATEMENT

The purpose of this study is to investigate human emotional reactions to different situations. Your responses are confidential. At no time will you be identified nor will anyone other than the investigators have access to your responses. The demographic information collected will be used only for purposes of analysis. Your participation is completely voluntary, and you are free to terminate your participation at any time without any penalty.

The scope of the project will be explained fully upon completion.

Thank you for your cooperation.

I agree to participate in the present study being conducted under the supervision of a faculty member of the Department of Psychology at Austin Peay State University. I have been informed, either orally or in writing or both, about the procedures to be followed and about any discomforts or risks which may be involved. The investigator has offered to answer any further inquiries as I may have regarding the procedures. I understand that I am free to terminate my participation at any time without penalty or prejudice and to have all data obtained from me withdrawn from the study and destroyed. I have also been told of any benefits that may result from my participation.

Name _____
(print)

(signature)

Date _____