# AN ABSTRACT OF THE THESIS OF <u>Alison V. Rowland</u> for the <u>Master of Science</u> in <u>Psychology</u> presented on <u>September 16, 1996</u> Title: A Correlational Study of State and Trait Anger in <u>Relation to the Five-Factor Model of Personality</u> Abstract approved: <u>Max D Max</u>

The association between state and trait anger measured by the State-Trait Anger Expression Inventory (STAXI) and the Five Factor Model of Personality measured by the Revised NEO Personality Inventory (NEO-PI-R) was investigated. The Neuroticism domain of the NEO-PI-R was of prime interest. Participants were 80 college volunteers (38 men and 42 The results indicated an association between Statewomen). Anger and Neuroticism, Trait-Anger and Neuroticism, and Trait-Anger and Agreeableness. However, associations only accounted for a small percentage of the variance between each of these variables. The findings indicate that although these two tests are intended to measure personality traits, they seem to be assessing different constructs. The NEO-PI-R appears to measure broad personality characteristics such as neuroticism and extraversion, whereas the STAXI measures the specific personality trait of anger.

A CORRELATIONAL STUDY OF STATE AND TRAIT ANGER IN RELATION TO THE FIVE-FACTOR MODEL OF PERSONALITY

A Thesis

Presented to

the Division of Psychology and Special Education EMPORIA STATE UNIVERSITY

In Partial Fulfillment

\_\_\_\_\_

of the Requirements for the Degree

Master of Science

by Alison V. Rowland December 1996

Curé

1117 1 ~

Approved for the Division of Psychology and Special Education

the Graduate Council Approved for

### ACKNOWLEDGMENTS

I would like to thank Dr. Wheeler, Dr. Tompkins, and especially my chairman Dr. Baker for serving on my committee. I extend my sincere appreciation to all three members for their emotional and professional guidance during my endeavor. I would like to give special thanks to Dr. Baker for his unwavering patience and support. Finally, I would like to thank my parents for their unrelenting faith in me and continual encouragement. Without them I would be lost.

# TABLE OF CONTENTS

Pag	ge
ACKNOWLEDGMENTS i:	ίi
TABLE OF CONTENTS iv	v
LIST OF TABLES v:	i
CHAPTER	
1 INTRODUCTION	1
The Five-Factor Model of Personality	3
The NEO Personality Inventory	4
The State-Trait Anger Expression Inventory	6
Personality and Affectivity	7
Conclusion	8
2 METHOD	9
Participants	9
Instruments	9
Revised NEO Personality Inventory	9
State-Trait Anger Expression Inventory 1	0
Procedure 12	2
3 RESULTS 1	3
4 DISCUSSION 1	7
Limitations 1	8
Conclusion 1	9
REFERENCES 2	1
APPENDICES	
Appendix A: Consent Form 2	6
Appendix B: Demographics Information 2	8

- Appendix C: Instructions for the STAXI..... 30
- Appendix D: Instuctions for the NEO-PI-R..... 32

# TABLE

- 1. Descriptive Statistics for the NEO-PI-R and STAXI
- 2. Pearson Correlations Between Scales on the NEO-PI-R on the STAXI

# CHAPTER 1

# INTRODUCTION

During the past two decades there has been remarkable progress in the study of traits or individual differences. A growing body of research has pointed to the five-factor model (FFM) as a recurrent and comprehensive taxonomy of personality traits. Trait measures have shown evidence of convergent and discriminant validity across instruments (McCrae, 1989) and observers (Kenrick & Funder, 1988). Longitudinal studies of both self-reports and observer ratings have shown impressive stability of a wide range of traits across the adult lifespan (Block, 1981; McCrae & Costa, 1990). The FFM of personality has now gained wide acceptance among personality researchers (Digman, 1990; John, 1990). The NEO Personality Inventory (NEO-PI) is a concise, comprehensive measure of the five major domains of adult personality.

Anger is considered a vital concept in many theories of personality, and although global traits such as extraversion or neuroticism are stable or consistent dispositions over the course of a lifetime, studies of more specific personality traits such as anger have produced inconsistent results (Biaggio, Supplee, & Curtis, 1981). However, several studies have found that spousal abuse may be attributed to personality traits (Carlson, 1977; Pagelow, 1979; Roy, 1977). Beasley and Stoltenberg (1992) conducted a study in which they examined the presence of trait differences between men involved in abusive relationships and men in nonabusive but distressed relationships. They found that men who were identified as batterers scored significantly higher on trait anger scales than did their counterparts. Also, in a study by Muller (1990), traits of aggression, controlled affect, guilt, and social inhibition were investigated in German cohorts born between 1930 and 1972. It was found that many personality traits, including anger, are fairly stable between the ages 20-60.

The State-Trait Anger Expression Inventory (STAXI) has been used most extensively in research in behavioral medicine and health psychology. Although the STAXI measures anger as a personality trait, it has not been assessed for correlation with any personality measurements. The Revised NEO Personality Inventory (NEO-PI-R) correlates strongly with most major personality inventories from the Personality Research Form (Costa & McCrae, 1988) to the California Psychological Inventory (McCrae, Costa, & Piedmont, 1993). The purpose of this study is to look at state and trait anger measured by the STAXI in relation to the five domains of personality measured by the NEO-PI-R. It is hypothesized there will be a strong association between these two instruments, specifically in relation to Trait-Anger and Neuroticism.

2

## The Five-Factor Model of Personality

The FFM is a hierarchical model of the structure of personality traits. Personality traits are often defined as enduring "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (McCrae & Costa, 1990, p. 23). Traits reflect relatively enduring dispositions and are distinguished from states or moods, which are more transient.

An emergent and still-growing consensus regarding the FFM suggests this is a comprehensive classification of personality dimensions. By the early 1990s there had been considerable research confirming the FFM and demonstrating the value of studying individual differences in personality (e.g., Digman, 1990; McCrae, 1992; Wiggins & Pincus, 1989).

The five broad dimensions (N,E,O,A,C) of personality, sometimes described as the "big five," are usually labeled Neuroticism (N), Extroversion (E), Openness to Experience (O) or Intellect, Agreeableness (A), and Conscientiousness (C) or Will to Achieve (Digman, 1990; John, 1990). Neuroticism indicates proneness to experience unpleasant and disturbing emotions. Extroversion concerns differences in the preferences for social interaction and lively activity. Openness to Experience refers to receptiveness to new ideas, approaches, and experience. Agreeableness refers to selfless concern for others and trusting, generous sentiments. Conscientiousness concerns individual differences in organization and achievement (Shaver & Brennan, 1992). These factors have been recovered in studies of self-reports and observer ratings, standardized questionnaires, adults and children, and several different cultures (see Costa & McCrae, 1992 for a review).

# The NEO Personality Inventory

A decade of work by Costa and McCrae has culminated in a psychometrically sound measure of the "big five," the NEO-PI. The initial scale was designed by Costa and McCrae (1985) to measure the first three factor domains and simultaneously to measure six facet subfactors within each domain.

Five of the six Neuroticism facets are easily understood from their labels: Anxiety, Hostility, Depression, Self-consciousness, and Impulsiveness. The sixth Neuroticism facet is Vulnerability, "vulnerable people tend to panic in emergencies, to break down, and to become dependent on others for help" (Shaver & Brennan, 1992, p. 537). The six facets of Extroversion can be divided into three interpersonal traits (Warmth, Gregariousness, and Assertiveness) and three temperamental traits (Activity, Excitement Seeking, and Positive Emotions). The facets of Openness are Openness to Fantasy (imagination and daydreams), Openness to Aesthetics (characteristic of artists), Openness to Feelings ("open individuals experience their own feelings strongly, and they value the experience, seeing it as a source of meaning in life"; Shaver & Brennan, 1992, p. 537), Openness to Actions (trying new foods, seeing new films, traveling), Openness to Ideas (being curious, valuing knowledge for its own sake), and Openness to Values (being liberal in values, "admitting that what is right and wrong for one person may not be applicable in other circumstances"; Shaver & Brennan, 1992, p. 538).

With the NEO-PI-R, Costa, McCrae and Dye (1991) added the factor domains and facets of Agreeableness and Conscientiousness. The six facets of Agreeableness are Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tendermindedness. The six facets of Conscientiousness are Competence, Order, Dutifulness, Achievement Striving, Self-discipline, and Deliberation.

Within Agreeableness, Trust can be defined as the tendency to attribute benevolent intent to others. Straightforwardness implies directness and frankness in dealing with others. Altruism is selflessness and concern for others. Compliance is an interpersonal style that is seen when conflicts arise; compliant individuals defer to others instead of fighting. Modesty refers to humility or self-effacement. Tendermindedness refers to the tendency to be guided by feelings, particularly those of sympathy, in making judgments and forming attitudes (Costa et al., 1991).

Within Conscientiousness, Competence means the sense that one is capable, sensible, prudent, and effective. Order is the tendency to keep one's environment tidy and well organized. Dutifulness refers to strict adherence to standards of conduct. Achievement Striving is related to diligence, purposefulness, and a sense of direction in life. Self-discipline is viewed primarily in terms of persistence, the ability to continue with a task despite boredom or other distractions. Finally, Deliberation means caution, planning, and thoughtfulness (Costa et al., 1991). The State-Trait Anger Expression Inventory

The emotional states of anger, hostility and aggression are not always clearly defined in the literature. Howells (1988), for example, attempted to differentiate between them by describing anger as a subjective state of emotional arousal, hostility as an attitude or a longer-term negative evaluation of people or events, and aggression as overt behavior involving harm to another person. He went on to acknowledge that these terms are interrelated.

The State-Trait Anger Expression Inventory (STAXI) was developed to evaluate various dimensions of anger. Spielberger (1988) considered anger to be an emotional state that varied in intensity from mild annoyance or irritation to intense fury and rage, accompanied by muscular tension and arousal of the autonomic nervous system. In the development of this measure, Spielberger emphasized the important distinctions between state and trait components of anger and between the experience of anger (angry feelings) and the expression of anger (actual manifestations or aggression) in addition to differentiatiating anger from the related constructs of hostility and aggression. The subscales of this inventory include State Anger or the feeling of anger at a particular time, Trait Anger or the frequency with which anger has been experienced over time, Anger In or the suppression of anger, Anger Out or the expression of anger (aggression), and Anger Control. Measures of hostility, anger, and similar personality variables have been shown to be substantially correlated with measures of trait anxiety, depression, stress reactivity, and similar indexes of neuroticism (Tellegen, 1985).

# Personality and Affectivity

A strong association has been found between the extroversion dimension of most major personality instruments and positive emotional experiences (Diener, Sandvik, Pavot, & Fujita, 1992). Intense negative emotions and emotional instability, on the other hand, have typically been associated with neurotic traits such as stress reaction, alienation, worry, hostility and feelings of anxiety (Costa & McCrae, 1989; Hepburn & Eysenck, 1989; Terry, 1991). Substantial evidence suggests neuroticism underlies poor psychological adjustment. Moreover, individuals with higher neuroticism scores experience a greater degree of stress over time than those with lower scores (Costa & McCrae, 1980; Gallahger, 1990; Watson & Clark, 1984). A study by Dorn and Matthews (1992) on driver stress found more neurotic participants have distinctive coping strategies which they bring to bear across different situations. For driving, those who score high on neuroticism report

7

significantly greater use of aggressive, confrontive coping, seeking social support, and attempts to escape or avoid unpleasant emotion. The same study indicated neuroticism is positively related to driver stress, and to both aggression and dislike of driving.

# <u>Conclusion</u>

Research has shown the FFM of personality to be a comprehensive taxonomy of personality traits. In addition, the NEO-PI-R has been established as a psychometrically sound measure of the FFM. This study will examine the association between the NEO-PI-R and the STAXI. It is expected there will be a strong association (i.e.,  $\mathbf{r} = .70$  to .80) between the two measurements, specifically between Neuroticism and Trait-Anger.

# CHAPTER 2

# METHOD

# Participants

The participants for this study consisted of 80 college volunteers (38 men and 42 women) from a small Midwestern university. Of the 80 participants, 62 were traditional students (age 25 or under), and 18 were nontraditional students. They were recruited through introductory psychology classes, where instructors encourage students through class points to participate in research studies conducted at the university. A bulletin board displaying various studies allowed the students to sign up for the study.

# Instruments

Revised NEO Personality Inventory. The Revised NEO Personality Inventory (NEO-PI-R) is a concise measure of the five major dimensions, or domains, of personality and some of the more important traits or facets that define each domain. Together, the 5 domain scales and 30 facet scales of the NEO-PI-R allow a comprehensive assessment of adult personality (Costa & McCrae, 1992).

This study used Form S of the NEO-PI-R for selfreports. Form S consists of 240 items answered on a 5-point scale. It is self-administered and is appropriate for men and women of all ages (Costa & McCrae, 1992). Possible raw scores for each of the five domains ranges from 0 to 32. The NEO-PI-R embodies a conceptual model that distills decades of factor analytic research on the structure of personality. The scales themselves were developed and refined by a combination of rational and factor analytic methods and have been the subject of intensive research conducted for 15 years on both clinical and normal adult samples (Costa & McCrae, 1992).

Good test-retest reliability is essential to measures of personality traits, which are expected to show little change over short intervals of time. The NEO-PI-R, however, is one of the few instruments that has demonstrated it does, in fact, measure enduring dispositions. The test-retest reliability for a college sample on N,E,O,A, and C are .79, .79, .80, .75, and . 83 respectively (Costa & McCrae, 1992).

State-Trait Anger Expression Inventory. The State-Trait Anger Expression Inventory (STAXI) provides concise measures of the experience and expression of anger. The STAXI was developed to provide a method of assessing components of anger that could be used for detailed evaluations of normal and abnormal personality and to provide a means of measuring the contributions of various components of anger to the development of medical conditions, including hypertension, coronary heart disease, and cancer (Spielberger, 1988).

Spielberger (1988) conceptualized the experience of anger, as measured by the STAXI, as having a state and trait component. State anger is defined as an emotional state marked by subjective feelings that vary in intensity from mild annoyance or irritation to intense fury and rage. State anger is generally accompanied by muscular tension and arousal of the autonomic nervous system. Over time, the intensity of state anger varies as a function of perceived injustice, attack or unfair treatment by others, and frustration resulting from barriers to goal-directed behavior. Spielberger (1988) defined trait anger as the disposition to perceive a wide range of situations as annoying or frustrating and the tendency to respond to such situations with more frequent elevations in state anger. Individuals high in trait anger experience state anger more often and with greater intensity.

The STAXI consists of 44 items forming six scales. In responding to each of the 44 STAXI items, individuals rate themselves on 4-point scales that assess either the intensity of their angry feelings or the frequency that anger is experienced, expressed, suppressed, or controlled. Although Spielberger outlines several subscales of the STAXI, for the purpose of this study, only the State-Anger (S-Anger) and Trait-Anger (T-Anger) scales were used.

S-Anger is a 10-item scale that measures the intensity of angry feelings at a particular time. T-Anger is a 10item scale that measures the individual differences in the disposition to experience anger (Spielberger, 1988). Raw scores on both the S-Anger and the T-Anger scale range from 0 to 40. The reliability for S-Anger and T-Anger are .93 and .82 respectively, for male college students, and .90 and .83, for female college students.

# <u>Procedure</u>

To obtain participants the researcher posted a sign-up sheet for students who wanted to participate in the study to receive class points. The participants were asked to sign a consent form (Appendix A) and fill out a demographics sheet (Appendix B). They were then administered both the STAXI and the NEO-PI-R in groups of approximately 10 to 15 at various times during the day. Instructions for the STAXI (Appendix C) and instructions for the NEO-PI-R (Appendix D) were given verbally by the researcher one time. Participants were then asked to read the instructions carefully on their own before beginning each test. The tests were hand scored by the researcher.

### CHAPTER 3

# RESULTS

Five scores were obtained from administering the Revised NEO Personality Inventory (NEO-PI-R) and two scores from State-Trait Anger Expression Inventory (STAXI) to 80 college volunteers (38 men and 42 women). The means and standard deviations are presented in Table 1.

The normative sample means combining men and women for the NEO-PI-R for Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C) were 79.1, 100.4, 110.6, 124.3, and 123.1 respectively. The normative sample means for men for N, E, O, A, and C were 75.2, 108.5, 110.1, 120.1, and 123.6. The normative sample means for women for N, E, O, A, and C were 83.1, 110.3, 111.0, 128.5, and 122.7 (Costa & McCrae, 1985).

Means and standard deviations for the STAXI normative sample are given by gender only. The normative sample means for S-Anger and T-Anger for men were 15.89 and 20.08, respectively. The normative sample means for S-Anger and T-Anger for women were 12.30 and 20.35, respectively (Spielberger, 1988).

Pearson product-moment correlation coefficients were computed to determine the associations among the five domain scores obtained on the NEO-PI-R and the two scale scores obtained on the STAXI. Table 2 provides the summary of these correlations. A significant positive correlation was found between S-Anger and N and T-Anger and N. A

# Table 1

# Descriptive Statistics for the NEO-PI-R and STAXI

	Men		Women		Combined			
Scales	М	SD	М	<u>SD</u>	М	SD		
Ν	88.82	20.03	91.29	21.15	90.16	20.53		
E	112.74	19.89	123.33	16.06	180.30	18.64		
0	111.42	18.85	123.69	23.03	117.86	21.91		
А	106.82	18.84	120.48	14.86	113.99	18.11		
С	109.50	18.94	109.76	22.91	109.64	20.99		
S-Anger	11.89	4.31	11.79	3.58	11.84	3.92		
T-Anger	16.92	6.46	16.40	4.86	16.65	5.65		
N = Neuroti	 M = Me	M = Mean						
E = Extraversion			SD = Standard Deviation					
O = Openness to Experience			S-Ange	S-Anger = State-Anger				
A = Agreeableness			T-Ange	T-Anger = Trait-Anger				
C = Conscientiousness								

# Table 2

# Pearson Correlations Between Scales on the NEO-PI-R and on the STAXI

STAXI						
	<u>S-Anger</u>		<u>T-A</u>	nger		
<u>NEO-PI-R</u>	r	r <sup>2</sup>	r	<u>r</u> 2		
N	.35*	.12	.32*	.10		
Ε	06	.00	29*	.08		
0	13	.02	26	.07		
A	26	.07	42*	.18		
С	16	.03	21	.04		

\* p < .01

significant negative correlation was found between T-Anger and E and T-Anger and A. Although statistical significance was found, these correlations were not .70 or .80 as was expected.

### CHAPTER 4

# DISCUSSION

This correlational study looked at state and trait anger measured by the State-Trait Anger Expression Inventory (STAXI) in relation to the five domains of personality measured by the Revised NEO Personality Inventory (NEO-PI-R). The correlations between the STAXI and the NEO-PI-R ranged from .32 to .35 for positive correlations and -.06 to -.42 for negative correlations.

It was hypothesized the strongest association would be between Trait-Anger and Neuroticism since both are purportedly measuring traits. However, the strongest correlation was not between these two, but between State-Anger and Neuroticism. There was a positive correlation of .35 between State-Anger and Neuroticism indicating that as State-Anger scores increase, there is also an increase in the Neuroticism score. However, this association only accounted for 12.3% of the correlation between these two variables. While the STAXI measures the specific experience and expression of anger, the NEO-PI-R measures five major, but non-specific dimensions of personality. This difference in what is measured may account for some of the variance.

Although it was not expected, the STAXI Trait-Anger and the NEO-PI-R Agreeableness showed the strongest negative correlation at -.42 indicating that as individuals' Trait-Anger score increases, their Agreeableness score decreases. This makes sense intuitively, because anger and agreeableness are not usually viewed as compatible dispositions. An angry individual is not open to the ideas and requests of others. Often they are the opposite of agreeable and are quite obstinate. If an individual possesses anger as a personality trait, he would be less likely to possess agreeableness as a personality trait. However, data from this study indicates this inverse relationship is not particularly strong. The association of agreeableness and trait-anger only accounted for 17.6% of the variance in these two variables within this sample. Again, the difference in what each test measures may account for some of the variance.

# <u>Limitations</u>

There are some limitations that should be considered when evaluating this study. All participants were volunteer college students from a small Midwestern university. Attitudes and beliefs held by college educated participants about the appropriateness and value of anger expression may have some impact on generalization to other populations.

The length of the testing procedure was also of some concern. Although the STAXI can be completed in 10 minutes, the NEO-PI-R requires approximately 30 to 40 minutes. This could perhaps contribute to participants becoming tired or irritated, thus affecting their state anger. Counterbalancing the two tests most likely would have eliminated this concern.

18

# <u>Conclusion</u>

The lack of strength in correlation between the Neuroticism domain of the NEO-PI-R and both the Trait-Anger and State-Anger scales of the STAXI indicates that although these two tests are intended to measure negative personality traits, they seem to be assessing different constructs. The Neuroticism scale appears to measure much broader negative personality characteristics such as pessimism or intolerance, whereas the STAXI perhaps measures the specific personality trait of anger.

The significant negative correlation between Trait-Anger and Agreeableness may be of some interest in future research. Comunian (1994) and Dollinger and Orf (1991) have obtained associations between anger and conscientiousness, anger and openness to experience, and anger and curiosity. However, little has been done regarding anger and agreeableness. Anger as a trait is defined as the disposition to perceive a wide range of situations as annoying or frustrating and the tendency to respond to such situations with more frequent elevations in state anger (Spielberger, 1988). Agreeableness, on the other hand, could be defined as the disposition to perceive events in a positive manner and the tendency to respond to these events in an opportunistic manner with less state anger. Perhaps the Agreeableness domain of the NEO-PI-R is not measuring a broad personality characteristic like Neuroticism appears to do. Possibly Agreeableness is a more specific personality trait, like anger seems to be.

#### REFERENCES

Beasley, R., & Stoltenberg, C.D. (1992). Personality characteristics of males spouse abusers. <u>Professional</u> <u>Psychology: Research and Practice, 23,</u> 310-317.

Biaggio, M.K., Supplee, K., & Curtis, N. (1981). Reliability and validity of four anger scales. <u>Journal of</u> <u>Personality Assessment, 45,</u> 639-648.

Block, J. (1981). Some enduring and consequential structures of personality. In A.I. Rabin, J. Aronoff, A.M. Barclay, & R.A. Zucker (Eds.), <u>Further explorations in</u> <u>personality</u> (pp.27-43). New York: Wiley-Interscience.

Carlson, B. (1977). Battered women and their assailants. <u>Social Work, 22,</u> 455-460.

Comunian, A.L. (1994). Anger, curiosity, and optimism. Psychological Reports, 75, 1523-1528.

Costa, P.T., & McCrae, R.R. (1980). Influence of extroversion and neuroticism on subjective well-being: Happy and unhappy people. Journal of Personality and Social Psychology, 38, 668-678.

Costa, P.T., & McCrae, R.R. (1985). <u>NEO Personality</u> <u>Inventory manual.</u> Odessa, FL: Psychological Assessment Resources.

Costa, P.T., & McCrae, R.R. (1988). From catalog to classification: Murray's needs and the five-factor model. Journal of Personality and Social Psychology, 55, 258-265. Costa, P.T., & McCrae, R.R. (1989). <u>The NEO Personality</u> <u>Inventory supplement.</u> Odessa, FL: Psychological Assessment Resources.

Costa, P.T., & McCrae, R.R. (1992). <u>Revised NEO</u> Personality Inventory (NEO-PI-R) professional manual.

Odessa, FL: Psychological Assessment Resources.

Costa, P.T., McCrae, R.R., & Dye, D.A. (1991). Facet scales for the agreeableness and conscientiousness: A revision of the NEO personality inventory. <u>Personality and</u> <u>Individual Differences, 12,</u> 887-898.

Diener, E., Sandvik, E., Pavot, W., & Fujita, F. (1992). Extroversion and subjective well-being in a U.S. national probability sample. Journal of Research in Personality, 26, 205-215.

Digman, J.M. (1990). Personality structure: Emergence of the five-factor model. <u>Annual Review of Psychology, 41,</u> 417-440.

Dollinger, S.J., & Orf, L.A. (1991). Personality and performance in personality: Conscientiousness and openness. Journal of Research and Personality, 25, 276-284.

Dorn, L., & Matthews, G. (1992). Two further studies of personality correlates of driver stress. <u>Personality and</u> <u>Individual Differences, 13,</u> 949-951.

Gallagher, D. (1990). Extroversion, neuroticism and appraisal of stressful academic events. <u>Personality and Individual Differences, 11,</u> 1053-1057.

Hepburn, L., & Eysenck, M. (1989). Personality, average mood and mood variability. <u>Personality and Individual</u> <u>Differences, 10,</u> 975-983.

Howells, K. (1988). The management of angry aggression: A cognitive-behavioral approach. In W. Dryden & P. Trower (Eds.), <u>Developments in cognitive psychotherapy</u> (pp. 150-163). London: Sage.

John, O.P. (1990). The "big five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L.A. Pervin (Ed.), <u>Handbook of</u> <u>personality theory and research</u> (pp. 66-100). New York: Guilford.

Kenrick, D.T., & Funder, D.C. (1988). Profiting from controversy: Lessons from the person-situation debate. American Psychologist, 43, 25-34.

Kroner, D.G., & Reddon, J.R. (1992). The anger expression scale and state-trait anger scale: Stability, reliability, and factor structure in an inmate sample. <u>Criminal Justice and Behavior, 19,</u> 397-408.

McCrae, R.R. (1989). Why I advocate the five-factor model of personality: Joint analysis of the NEO-PI and other instruments. In D.M. Buss & N. Canter (Eds.), Personality psychology: Recent trends and emerging directions (pp. 237-245). New York: Springer-Verlag.

McCrae, R.R. (1992). The five-factor model: Issues and applications. Journal of Personality, 60, 218-238.

McCrae, R.R. & Costa, P.T. (1990). <u>Personality in</u> <u>adulthood.</u> New York: Guilford.

McCrae, R.R., Costa, P.T., & Piedmont, R.L. (1993). Folk concepts, natural language, and psychological constructs: The California Psychological Inventory and the five-factor model. Journal of Personality, 61, 1-26.

Muller, M.M. (1990). The stability of anger across age and sex in German cohorts born between 1930 and 1972. Personality and Individual Differences, 10, 417-425.

Pagelow, M. (1979). Research on woman battering. In J. Baker-Fleming (Ed.), <u>Stopping wife abuse</u> (pp. 19-32). Garden City, NY: Anchor-Doubleday.

Roy, M. (1977). A current survey of 150 cases. In M.
Roy (Ed.), <u>Battered women</u> (pp. 25-44). New York: Reinhold.
Spielberger, C.D. (1988). <u>State-Trait Anger Expression</u>
<u>Inventory (STAXI) professional manual.</u> Tampa, FL:
Psychological Assessment Resources.

Shaver, P.R., & Brennan, K.A. (1992). Attachment styles and the "big five" personality traits: Their connections with each other and with romantic relationship outcomes. <u>Personality and Social Psychology Bulletin, 18,</u> 536-545.

Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A.H. Tuma & J.D. Maser (Eds.), <u>Anxiety</u> and the anxiety disorders (pp. 681-706). Hillsdale, NJ: Erlbaum. Terry, D. (1991). Coping resources and situational appraisals as predictors of coping behavior. <u>Personality and Individual Differences, 12,</u> 1031-1047.

Watson, D., & Clark, L.A. (1984). Negative affectivity: The disposition to experience aversive emotional states. Psychological Bulletin, 96, 465-425.

Watson, D., & Pennebaker, J.W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. <u>Psychological Review, 96,</u> 234-254.

Wiggins, J.S., & Pincus, A.L. (1989). Conceptions of personality disorders and dimensions of personality. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1, 305-316. Appendix A

Consent Form

This study is to assess the attitudes/personality traits of students in a Midwestern university. Strict confidentiality will be used throughout the study. Names will not be used in any description or discussion of this study or the results found. Only the experimenter will have access to the initial data collected.

This study is not a mandatory part of your curriculum. If you agree to participate you will be asked to fill out several questionnaires. If at anytime you choose to discontinue this study you may do so. If you do not agree to participate in this study no negative recourse will be taken by either the experimenter or the instructor of the course.

This study will be reviewed and approved by the Institutional Review Board. It will not contain any harmful events to the participants either physically or emotionally. If you agree to participate in this study, please sign this form.

I understand that confidentiality will be used in this study, that the Institutional Review Board has approved this study, and I agree to participate.

Signature of Participant

If you would like follow up information regarding the results of this study, please leave your address below.

Appendix B

Demographics Information

# Demographics Information

Please circle the correct answer as it pertains to you.

- 1. Male Female
- 2. Traditional Non-Traditional (over age 25)

Appendix C

Instructions for STAXI

### Instructions for the STAXI

The State-Trait Anger Expression Inventory (STAXI) booklet is divided into three Parts. Each Part contains a number of statements that people use to describe their feelings and behavior. Please note that each Part has different directions. Carefully read the directions for each Part before recording your responses (Spielberger, 1988).

# Part 1 Directions

A number of statements that people use to describe themselves are given below. Read each statement and then fill in the circle with the number which indicates how you feel right now. Remember that there are no right or wrong answers. Do not spend too much time on any one statement, but give the answer which seems to best describe your present feelings (Spielberger, 1988).

# Part 2 Directions

A number of statements that people use to describe themselves are given below. Read each statement and then fill in the circle with the number which indicates how you generally feel. Remember that there are no right or wrong answers. Do not spend too much time on any one statement, but give the answer which seems to best describe how you generally feel (Spielberger, 1988).

# Part 3 Direction

Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people use to describe their reactions when they feel angry or furious. Read each statement and then fill in the circle with the number which indicates how often you generally react or behave in the manner described when you are feeling angry or furious. Remember that there are no right or wrong answers. Do not spend too much time on any one statement (Spielberger, 1988). Appendix D

Instructions for NEO-PI-R

### Instructions for the NEO-PI-R

The NEO-PI-R contains 240 statements. Please read each item carefully and circle the one answer that best corresponds to your agreement or disagreement (Costa & McCrae, 1992).

There are no right or wrong answers, and you need not be an "expert" to complete this questionnaire. Describe yourself honestly and state your opinions as accurately as possible (Costa & McCrae, 1992).

Answer every item. Note that the answers are numbered down the columns on the answer sheet. Pleas make sure that your answer is marked in the correctly numbered space. If you make a mistake or change you mind, do not erase. Make an "X" through the incorrect response and then draw a circle around the correct response (Costa & McCrae, 1992).

I, \_\_\_\_Alison V. Rowland \_\_\_\_\_, hereby submit this thesis to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

<u>Alucen V. Rewland</u> Signature of Author

<u> 11 / 16 / 96</u>

A Correlational Study of State and Trait Anger in Relation to the Five-Factor Model of Personality Title of Thesis/Research Project

Signature of Graduate Office Staff Member

<u> 12 - 9 - 96</u> Date Received