

THE MODERATING ROLE OF EQUITY SENSITIVITY ON THE OPTIMISM AND STRESS  
RELATIONSHIP

By

James William Dalluge

Approved:

---

Bart L. Weathington  
UC Foundation Associate Professor  
(Thesis Chair)

---

Brian J. O'Leary  
Associate Professor  
(Committee Member)

---

Christopher J.L. Cunningham  
UC Foundation Associate Professor  
(Committee Member)

---

Herbert Burhenn  
Dean of the College of Arts and Sciences

---

A. Jerald Ainsworth  
Dean of the Graduate School

THE MODERATING ROLE OF EQUITY SENSITIVITY ON THE OPTIMISM AND STRESS  
RELATIONSHIP

By

James William Dalluge

A Thesis  
Submitted to the Faculty of the  
University of Tennessee at Chattanooga  
in Partial Fulfillment of the Requirements  
for the Degree of Master of Science  
in Industrial/Organizational Psychology

The University of Tennessee at Chattanooga  
Chattanooga, TN

May 2012

Copyright © 2012  
By James William Dalluge  
All Rights Reserved

## ABSTRACT

Research supports optimism as a predictor of how well individuals are able to cope with stress (Chang, Rand, & Strunk, 2007; Riolli & Savicki, 2003). Additionally perceived inequity is considered as a stressor (Taris, Peeters, Le Blanc, Scheurs, & Schaufeli, 2001) and the extent to which individuals perceive inequity is determined by equity sensitivity (Miles, Hatfield, Huseman, 1989). The present research proposes a new framework in which the relationship between optimism and feelings of inequity is moderated by equity sensitivity. The final part of the framework analyzes perceived inequity's relationship to perceived stress. The results indicated that optimism's relationship was actually mediated by positive affect. There was mixed support for a significant interaction between optimism and equity sensitivity in its relationship to perceived inequity. Perceived inequity was a predictor of stress.

## DEDICATION

I would like to dedicate this research to my friends and family for all of their support.

## ACKNOWLEDGEMENTS

I would like to thank all of the individuals that have helped make completion of this thesis project possible. First I would like to thank my thesis committee chairperson, Dr. Bart Weathington for his patience in answering my abundance of questions and guidance throughout the process. Additionally I would like to thank Dr. Chris Cunningham and Dr. Brian O'leary for their invaluable and insightful feedback. Finally I would to express my gratitude towards the individuals who participated in my study. Without them, this thesis would not be possible.

## TABLE OF CONTENTS

DEDICATION .....	v
ACKNOWLEDGEMENTS .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
CHAPTER	
I. INTRODUCTION AND LITERATURE REVIEW .....	1
Optimism related to stress .....	2
Equity and Stress .....	3
Optimism related to Equity .....	6
Equity Sensitivity .....	7
II. METHOD .....	9
Participants and Procedures .....	9
Measures .....	10
III. RESULTS .....	12
Analysis of the Proposed Model .....	12
IV. DISCUSSION .....	18
Implications .....	21
Limitations .....	21
Future Research .....	22
REFERENCES .....	24
APPENDIX	
A. SURVEY MEASURES GIVEN TO PARTICIPANTS .....	27

B. IRB APPROVAL LETTERS.....	39
VITA.....	41



## LIST OF TABLES

1. Descriptive Statistics .....	13
2. Correlations Between Scale Variabes .....	14
3. Regression Analysis for Variables Predicting Stress .....	16
4. Regression Analysis for Variables Predicting Effort Reward Imbalance (ERI) .....	17

## LIST OF FIGURES

1. Proposed Model .....	12
2. Mediated Model .....	28
3. Revised Model .....	30

## CHAPTER I

### INTRODUCTION AND LITERATURE REVIEW

Individuals often seek equality or balance in their relationships (Adams, 1965; Siegrist, 1996). This includes the exchange relationship an employee has with work. Specifically, in an employment relationship there is reciprocity between the rewards received from work and effort invested by the individual. This reciprocity is known as equity or effort-reward balance. Adams (1965) conceptualized this relationship in equity theory, a key component of which is that a deficit in terms of reciprocity between effort and reward results in perceptions of inequity.

Perceived inequity is a predictor of negative outcomes such as low motivation (Buunk & Schaufeli, 1999). Consistent with this, Siegrist (1996) posits that lack of reciprocity between rewards and efforts increases perceived stress. In addition to inequity, optimism, having a positive outlook on future events, is related to lower levels of stress (Scheier & Carver, 1985). Optimists' positive expectations tend to transcend universally. Specifically an optimist's positive lens allows perceptions of negative situations such as a perceived pay inequity to be less stressful (Segerstrom, Taylor, Kemeny, & Fahey, 1998; Scheir & Carver, 1985).

Therefore this study examines both perceived equity and dispositional optimism's role in determining stress. First, an overview of the literature on stress, equity, equity sensitivity and optimism is presented. Second the relationships between optimism, stress, and equity sensitivity is investigated. Specifically, optimism will predict perceived equity, which then predicts

perceived stress. Additionally equity sensitivity will moderate the relationship between optimism, equity, and stress (See Figure 1). The results, implications, and future research opportunities are discussed in the final part of the study.

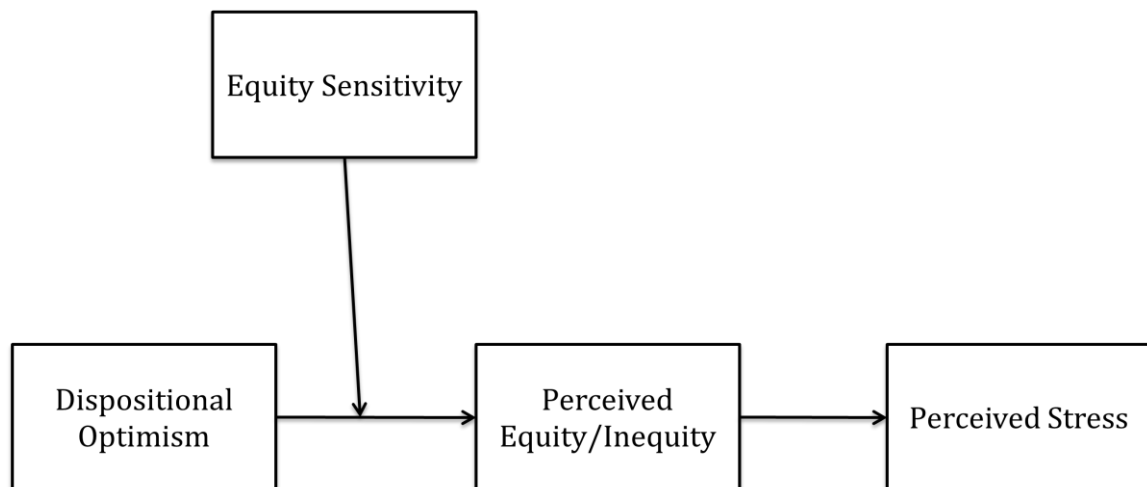


Figure 1

The Proposed Model

### Optimism Related to Stress

Individuals differ in their abilities to cope with stress (Lazarus & Folkman, 1984). Individuals also vary in their expectations of future outcomes. Dispositional optimism is the tendency to expect positive outcomes (Scheier & Carver, 1985). Conversely, dispositional pessimism is the inclination to expect negative outcomes. Individuals with an optimistic disposition generally have a stronger resiliency to stressors leading to lower levels of perceived stress (Chang, Rand, & Strunk, 2000; Hayes & Weathington, 2007; Segerstrom et al., 1998). Specifically, dispositional optimists are more likely to evaluate a stressful situation with the belief that the problem will be resolved.

Scheier, Weintraub, and Carver (1985) investigated how particular dispositions influence individual coping strategies in relation to perceived stress. Individuals were presented with hypothetical situations and asked to write down how they would respond to each of the situations. Responses to the hypothetical situations were categorized into coping strategies. The results indicated that optimists had a positive correlation with active coping strategies and seeking social support. Active coping or problem-focused coping refers to the tendency for individuals to engage and solve the problems that create stress (Lazarus & Folkman, 1984). Additionally emotion focused coping is when individuals adjust their emotions to deal with stress. Optimists tend to be negatively associated with emotion-focused coping. Contrasting this, pessimists are more inclined to believe that the stressful situation will not be resolved successfully. Therefore pessimists are more inclined to adjust their emotions or exert effort when avoiding the stressor. Because optimism is related to coping behaviors that reduce perceived stress, it is hypothesized that:

*Hypothesis 1:* Individuals higher in dispositional optimism (Optimists) will perceive less stress than individuals who are lower in dispositional optimists (Pessimists).

### Equity and Stress

The effort reward imbalance (ERI) model defines stress as an outcome of high amount of effort invested in comparison to a low amount rewards received (Siegrist, 1996). The ERI model states that rewards are disseminated to the employees by money, esteem, and status control. According Siegrist, status control refers to one's power over his/her occupational role within the

organization. Threats to a person's status control include job termination, job instability, and lack of prospect for promotion.

In addition to rewards, high effort is derived from two sources (Siegrist, 1996). The extrinsic cause for high effort is the demand of the job. High effort is also contingent upon the intrinsic source of need for control. Individuals who have a high need for control tend to overestimate or underestimate stimuli. This often prompts "high need for control" individuals to put forth effort that is beyond necessary to complete tasks. The need to invest greater effort than is needed in addition to the need for approval is characteristic of a personality trait known as overcommitment. The overcommitment component of the ERI model is individual specific whereas rewards and efforts are situation specific. Overcommitted individuals generally experience more stress when rewards are low.

Siegrist (1996) identified overcommitment as one of the conditions in which individuals' perceptions of stress from ERI is maintained. ERI's negative outcomes are also maintained when individuals are faced with no alternative choice in the job market. Individuals will continue to perceive imbalance if they are unable to escape the high effort/low reward situation, by transitioning into a new job in which there is balance. Also individuals may endure long-term imbalance for potential increases in rewards through promotions. If none of these conditions are true, the individual may attempt to restore balance through a decrease in effort or seeking higher paying jobs outside of the company (Adams, 1963). Therefore the likelihood of adverse health effects from ERI is decreased when imbalance is short term (Siegrist, 1996).

If the strength of the perceived stress exceeds a certain amount, individuals are more at risk for negative health consequences (Segerstrom, Taylor, Kemeny, & Fahey, 1998; Siegrist, 1996). Specifically, Siegrist (1996) found that the ERI stress model had predictive power for

identifying individuals at risk for cardiovascular disease. Additionally stress is a risk factor for decreased immune system functionality (Segestrom & Miller, 2004).

One potential source of workplace stress is perceived inequity (Taris et al., 2001; McKenna, 1987). Similar to ERI theory, equity is defined as a balance between inputs (efforts invested) and outcomes (rewards received) (Taris et al. 2001; Adams, 1963; 1965). According to Adams (1963), inputs include intelligence, experience, education, training, and on the job effort. Essentially, anything an individual considers to be a contribution relevant to the exchange of work is considered an input. In return for inputs, individuals expect to receive outcomes. Outcomes generally include pay, benefits, job status, and other job intrinsic rewards. Additionally the received outcome must be of some value to the individual.

According to Adams (1965), inequity is based on social comparisons. To better understand equity and social comparisons, “person” and “other” must be defined. “Person” is the individual who perceives equity or inequity. “Other” refers to a different employee or group that the “person” uses for social comparison. The “person” compares his or her own inputs and outcomes with the “other’s” inputs and outcomes. If the comparison of inputs and outcomes between the “person” and “other” is disproportionate, then inequity is perceived. To reduce inequity, the individual can increase or decrease effort invested to match other employees. Also the person may increase the outcomes received by asking for a raise or a promotion.

According to conservation of resource theory (Hobfoll, 1989), individuals also become stressed when they have a low amount of resources, lose resources, or perceive a threat to lose resources (Lazarus & Folkman, 1984). Examples of resources include reward contingencies, participation in making decisions, opportunities for job enhancement, and social support (Hobfoll, 1989). Individuals who have a dearth of resources have less control over the situation.

This causes the individual to perceive stress. This is especially true if the situation is demanding in nature. Conversely, individuals who have a plethora of resources will feel less stressed in a work situation. Taris et al. (2001) argued that individual perceptions of equity are synonymous with having low levels of resources. Therefore they found that inequitable exchanges between employee effort and reward predicted stress. The following relationship is therefore, predicted:

*Hypothesis 2:* Individuals who perceive workplace inequity will perceive greater amounts of stress. Individuals who perceive equity will perceive lower amounts of stress.

#### Optimism Related to Equity

Riulli and Savicki (2003) found support for dispositional optimism to negatively predict burnout in low resource conditions such as no opportunities for advancement and low social support. This was under the premise that optimism promoted strong coping behaviors that reduced stress which in turned reduced burnout. The amount of individual resources also predicted level of burnout from stress. Conservation of resources theory posits that employees desire to preserve, build, and control resources necessary for goal attainment (Hobfoll, 1989). Employees perceive stress when they lose or have the potential to lose these resources. Resources such as reward contingencies and opportunities are examples of outcomes in equity theory and ERI theory (Adams, 1965 & Siegrist, 1996). Consequently to fully understand how optimism is related to stress when individuals perceive optimism, the following hypotheses were proposed.

*Hypothesis 3a:* Individual high in dispositional optimism will perceive less inequity.  
Individuals low in dispositional pessimism will perceive higher inequity.



*Hypothesis 3b:* Perceived equity/inequity will mediate the relationship between optimism and stress.

### Equity Sensitivity

According to Miles, Hatfield, and Huseman (1987; 1989), not all individuals perceive equity in the same way or to the same degree in all situations. To help explain this individual difference, Miles et al. proposed the construct of equity sensitivity, which captures the individual difference of reactions to inequity. They posited that individuals react differently, but consistently when perceiving equity or inequity due to their underlying preference or sensitivity to potentially inequitable interactions.

The possible equity sensitivity classifications are posited to exist along a continuum (Miles et al., 1987) ranging from benevolent to equity sensitive to entitled. *Benevolent* individuals are the least sensitive to equity out of the categories. They are indifferent to situations where other individual's balance of effort and rewards are greater than their own. The *equity sensitive* individuals prefer situations where their effort reward balance is compatible with other individuals. Equity sensitive individuals are distressed when their ratio of effort and rewards is lower than others. *Entitled* individuals prefer situations where other individuals have lower ratios than their own. Out of the three categories, entitled individuals (high in equity sensitivity) are expected to be the most likely to perceive inequity. The benevolent individuals (low in equity sensitivity) are the least likely to experience inequity. Therefore it was proposed that:

*Hypothesis 4:* Equity Sensitivity will moderate the relationship between optimism and ERI. High equity sensitivity (entitled) will weaken the relationship

between optimism and inequity. Low equity sensitivity (benevolent) will strengthen the relationship between optimism and inequity.

## CHAPTER II

### METHOD

#### Participants and Procedures

Participants were 181 working adults solicited through the use of email or social networking sites such as LinkedIn. Participants were recruited by posting the survey link on various groups on Facebook and LinkedIn. Participants were required to be 18 of age and currently working part or full time. Individuals that did not meet this requirement were excluded from the study. The participants were instructed to complete an IRB consent form prior completion of the survey. Participants were informed that the study was anonymous and completed on a volunteer basis. The participants completed the survey through the SurveyMonkey Internet survey system.

The age of the participants ranged from 18 to 64 with a mean of 33 ( $SD = 13.13$ ). The majority of participants were employed full time (67.1%); 25.4 % were employed part-time. The majority of the participants were white (88%). Of the participants, 62 were male (37.1%). 38% of the participants had their masters degree, 29% bachelors degree, 15% had some college, 9% associates degree, 7% degree associates degree and the rest had their high school education or less.

#### Measures

Dispositional optimism was evaluated using the Life Orientation test (LOT-R; Scheier,

Carver, & Bridges, 1994). The LOT-R consists of 10 items that measure the expectations of the subjects according to positive and negative outcomes utilizing a seven-point Likert Scale (1=I agree a lot to 5=I disagree a lot). A high score indicates high levels of dispositional optimism. The data on this measure resulted in an alpha coefficient of .84

Stress was measured using the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). The PSS measures how much individuals view life scenarios as stressful. The PSS is a 10 items with a seven-point Likert scale (1-never to 7-very often). The alpha coefficient for this sample was .88.

This scale was used to measure stress specifically related to work. This scale involves eight statements about specific work related aspects to which the participant responds yes, no, or not sure. The revised version of the SIG (Brodke, Gopalkrishnan, Oyer, Yankelovich, Withrow, Sliter, Lake, Gillespie, Gillespie, Balzer, 2009) had a alpha coefficient of .82.

There are two existing measures of equity sensitivity that compliment each other in terms of strengths and weaknesses and both were used in the present study. The Equity Sensitivity Instrument (ESI) is a forced-choice questionnaire developed by Miles et al. (1989) that requires participants to distribute 10 points each to five pairs of statements. An example would be, “It would be more important for me to (a) take from the group; (b) give back to the group.” The scale score was calculated by summing the item responses. The alpha coefficient for this sample was .88.

The Equity Preference Questionnaire (EPQ; Sauley & Bedian, 2000) is a 16-item scale created by Sauley and Bedeian (2000). The responses range from 1 = strongly disagree to 7 = strongly agree. A sample question might be “If I received low pay, I would still try to do my

best at my position.” The EPQ scale score was calculated by the mean of the responses. The alpha coefficient for this sample was .89.

The PANAS (Watson, Clark, & Tellegen, 1988). measures an individual’s level of positive and negative affectivity. Due to the overlap in similarity between optimism and positive affect, the PANAS was employed as a control variable. The scale involves 20 items to which the participant rates on a seven-point scale(1 = very slightly/not at all to 7= extremely). The items were adjectives (e.g. alert) to which the participant indicated the degree to which they felt this in the last month. A subscale for both positive and negative affect was calculated. The alpha coefficient for positive affect was .9. The alpha coefficient for negative affect was .89.

*Effort Reward Imbalance (Effort Reward Imbalance Scale; ERI; Siegrist, Starke, Chandola, Godin, Marmot, Niedhammer, & Peter, R. 2004).* The ERI measures an individual’s imbalance between their efforts invested and rewards received. This includes a 22 item seven-point scale. This measures a ratio between effort and reward. Following Siegrist’s recommendation, the effort scale score was divided by the reward score, which was multiplied by a correction factor of .454545. A higher score indicated greater inequity while a lower score indicated equity. The alpha coefficient for reliability was .87 for the effort sub scale. The reward subscale was .83.

## CHAPTER III

### RESULTS

#### Analysis of the Proposed Model

Means and standard deviations for all analyzed variables are presented in Table 1. Correlations between all of the variables were calculated (Table 2). Several of the variables showed significant correlations between each other. Optimism had a significant positive relationship with positive affect ( $r = .59^*$ ) as well as a significantly negative relationship with negative affect ( $r = -.51^{**}$ ). Additionally optimism had a significant correlation with the PSS ( $r = -.53^{**}$ ) and SIG ( $r = -.17$ ). The two equity sensitivity scales (ESI, EPQ) had a significant positive correlation with one another ( $r = .47^{**}$ ).

Table 1  
Descriptive Statistics

	<i>N</i>	<i>M</i>	<i>SD</i>
Stress (SIG)	181	1.28	.92
Stress (PSS)	167	3.4	.85
Positive Affect (PA)	181	4.86	.97
Negative Affect (NA)	181	2.87	1.08
Equity Sensitivity(EPQ)	182	5.66	.87
Equity Sensitivity(ESI)	179	29.65	6.47
ERI	172	.93	.35
Optimism (LOT-R)	185	5.04	1.21

Table 2  
Correlations Between Scale Variables

	1	2	3	4	5	6	7	8	9	
1.Effort Reward Imbalance (ERI)	--									
2.Positive Affect (PA)	-.12	--								
3.Negative Affect (NA)	.20**	-.39**	--							
4.Equity Sensitivity (ESI)	-.02	.15	-.12	--						
5.Equity Sensitivity (EPQ)	.04	.21**	-.28	.47**	--					
6.Optimism (LOT-R)	-.12	.59**	-.51**	.11	.25**	--				
7.Workplace Stress (SIG)	.51**	-0.18	.30**	.01	.02	-.15	--			
8. Perceived Stress (PSS)	.24**	-.62**	.75**	-.089	-.26**	-.52**	.29**	--		
9. Gender	.08	.07	.22**	.019	.06	-.06	.05	.19*	--	
10. age	.10	-.02	-.27**	.06	.28**	.05	.04	-.14	-.07	--

\* $p < .05$ . \*\* $p < .01$



To test Hypothesis 1, which predicted dispositional optimists would perceive less stress in their work environment, two separate regression analyses were used. The first regression analysis tested the perceived stress scale model (Cohen et al., 1983). The second regression analyzed the life orientation's capacity to predict stress measured by the stress in general scale (Stanton et al., 2001). Positive affect was included as a covariate in the regression analysis to control for its effect. Negative affect was not included due to its extreme skewness. The results indicated that when controlling for positive affect, optimism was a significant predictor of stress measured by the PSS ( $\beta = .19, p < .05$ ). Results from Table 3 indicated that positive affect was a significant predictor for stress when measured by the PSS ( $\Delta R^2 = .16, p < .05$ ). Table 3 also presents the regression results for the stress in general scale. After controlling for positive affect, optimism was not a significant predictor of stress when measured by the SIG. Positive affect was also not a significant predictor for the SIG. Therefore hypothesis 1 was partially supported.

Hypothesis 2 predicted that inequity leads to greater amounts of perceived stress. Results on tables 3 show mixed results between the SIG and PSS. When stress was measured by the PSS, ERI did not have a significant relationship ( $\beta = .17, p < .05$ ) with stress. However when ERI was regressed onto the SIG measure of stress, there was a significant positive relationship ( $\beta = .52, p < .05$ ). Therefore there is partial support for hypothesis 2.

Hypothesis 3a stated that dispositional optimism would predict an individual's equity as measured by the ERI. After controlling for positive and negative affect, the results (table 4) did not indicate a significant relationship between optimism and ERI ( $\beta = -.12, p > .05$ ). Hypothesis 3a was not supported. Hypothesis 3b stated that ERI would act as a mediator between optimism

and stress. Although ERI did predict stress (Table 3), there was no relationship between optimism and ERI. Therefore 3b was not supported.

Table 3  
Regression Analysis for Variables Predicting Stress

		Work Stress (SIG)			Perceived Stress (PSS)		
		$\beta$	$\Delta R^2$	$R^2$	$\beta$	$\Delta R^2$	$R^2$
Step 1			.00	.00		.05	.05
	Gender	.06			.15		
	Age	.02			-.15		
Step 2			.02	.02		.23	.28
	Optimism (LOT-R)	-.13			-.48**		
Step 3			.28	.00		.16	.44
	Positive Affect (PA)	-.11			-.50**		
	Optimism (LOT-R)	-.07			-.19*		
Step 4			.26	.29		.03	.47
	Effort Reward Imbalance (ERI)	.52**			.17		

\* $p < .05$ . \*\* $p < .01$

Hypothesis 4 proposed that equity sensitivity would moderate the relationship between optimism and inequity. To test for moderation, interaction terms were created multiplying equity sensitivity measures and optimism (Aiken & West, 1991). In steps 1,2, and 3, the covariates of optimism, positive affect, gender, and age were entered. Equity sensitivity and optimism were entered in step 4. The interaction term of both equity sensitivity measures was entered in steps 5 and 6. Both equity sensitivity measures did not significantly predict ERI. The results indicated

(Table 4) that the ESI\*LOT-R interaction term was significantly related to ERI ( $\Delta R^2 = 0.03$ ). The EPQ\*LOT-R interaction term was not significant. Hypothesis 4 was partially supported.

Table 4  
Regression Analysis for Variables Predicting Effort Reward Imbalance (ERI)

Predictors	Effort Reward Imbalance (ERI)		
	$\beta$	$\Delta R^2$	$R^2$
Step 1		.02	.02
	Gender	.10	
	Age	.12	
Step 2		.01	.04
	Optimism (LOT-R)	-.12	
Step 3		.00	.04
	Positive Affect (PA)	-.09	
	Optimism (LOT-R)	-.04	
Step 4		.00	.04
	Equity Sensitivity (ESI)	.05	
	Equity Sensitivity (EPQ)	-.02	
Step 5		.03	.07
	ESI*LOT-R	1.0*	
Step 6		.00	.07
	ESI*LOT-R	-.02	
	EPQ*LOT-R	1.1	

## CHAPTER IV

### DISCUSSION

The objective of this study was to build a better framework for understanding how optimism, equity sensitivity, and stress were related. Strong relationships were found across the variables. Optimism was a predictor of stress after controlling for positive affect. Positive affect did predict stress after controlling for optimism. This result did partially support the original hypothesis. Optimism did not predict this relationship when the SIG scale measured stress. This may be due to the different focuses of the SIG and the PSS. The SIG is a stress scale measuring work stress. The PSS measured general perceptions of stress. The results indicated that positive affect ( $\Delta R^2 = .16$ ) is a more proximal predictor to stress than optimism ( $\Delta R^2 = .02$ ). One explanation is optimistic individuals generally have high levels of positive affect, which in turn helps buffer against stress. Therefore a potential new framework for the optimism and stress relationship could involve positive affect as a mediator (See Figure 2).



Figure 2 Mediated Model

Hypothesis 2 posited that individuals who perceived their efforts and rewards to be out of balance were expected to experience the most stress. There was partial support for this hypothesis. The SIG measure found that greater imbalance or inequity leads to greater amount of stress. The PSS had a positive relationship with ERI as well but it was not significant. One factor may be that the SIG asks questions directly related to one's job where the PSS is a more generic stress measure. Another factor may have been the size of the sample size. Had the sample size been larger, PSS may have had a significant positive relationship with ERI.

Past studies have examined both optimism (Riulli & Savicki, 2003; Chang, 1998) and perceived inequity (Taris et al., 2001) relationship to stress. This study attempted to connect optimism to equity. Hypothesis 3 predicted optimism to be an antecedent of perceived ERI. The results did not support this relationship. Optimism did have a negative relationship with ERI, however it was not significant. Therefore optimistic individuals were not less likely to have a perceived imbalance in their efforts and rewards. One explanation is that the ERI ratio variable was skewed which could have reduced optimism's power to predict.

Hypothesis 4 stated that equity sensitivity would moderate the relationship optimism had with inequity. Specifically that high equity sensitivity individuals (entitled) would be more likely to perceive inequity in their exchanges with work than those who were low on equity sensitivity (benevolent). Therefore the relationship between optimism and equity would be weakened when equity sensitivity was high. The results partially supported this hypothesis. The interaction between equity sensitivity measured by the ESI and optimism did have significant relationship with ERI. Therefore this supports our original hypothesis. However when the EPQ measured equity sensitivity, there was no significant interaction.

The ESI and the EQP did not have a significant direct relationship with the ERI. Past research suggest that the EPQ has internal reliability concerns however this was not the case in this sample (cronbach's alpha= .89). There are several possible explanations for the ESI inability to predict the ERI. The ESI may not work well with perceptual measures like the LOT-R, PSS, and SIG. Past research has criticized it as a context dependent measure (Sauley & Bedian, 2000; Weathington, & Reddock, 2011). Also there are various methodological issues that come with forced distribution measures like the ESI.

The findings in this study illustrate the need for a different model than the one originally proposed. The revised model (figure 3) shows optimism predicting positive affect as a mediator to perceived stress. Additionally inequity is another covariate that predicts perceived stress in the workplace.

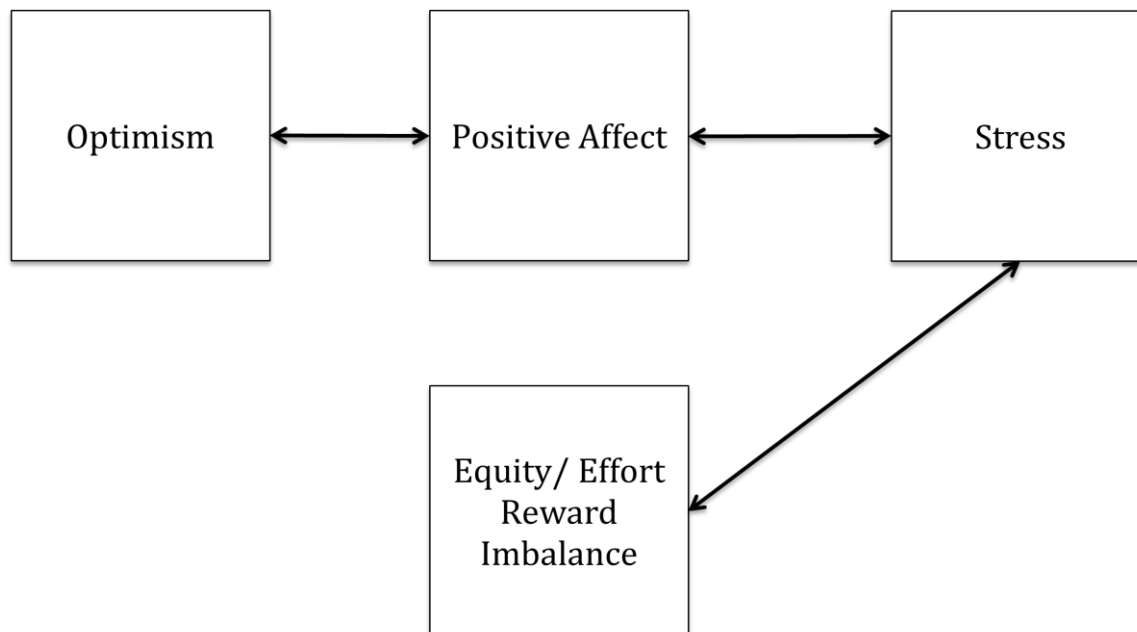


Figure 3 Revised Model

## Implications

The results of this study outline several implications. Specifically organizations may want to reconsider how to compensate employees during high stress periods. If more inequity is felt during these situations, it may be prudent to provide opportunities for employees to earn more during high stress situations. A workforce that is experiencing great amounts of stress may have large amounts of inequity. Change management professionals wanting to reduce costs related to health and burnout would want to consider pay equity in their organizational diagnosis (Chang et al., 2000; Segerstrom & Miller, 2004). Additionally, optimism is treated similarly as a personality trait due to its stability. Therefore it makes sense for organizations wanting to reduce stress, to select personnel on the basis of optimism as a job relevant competency.

## Limitations

There are many factors those limitations in this study. The first being sample size. An analysis involving moderated mediation requires a large sample size. A larger sample size may have detected significant interactions between optimism and equity sensitivity. Additionally the ERI is not a true measure of equity. It measures a similar construct in which individuals assess their own internal perceptions of rewards compared to efforts. This does not take into account external perceptions such as the pay of other employees. Individuals that compare their own pay against others doing similar work may find inequity if they see others receiving greater rewards. Therefore a pure measure of equity may have provided stronger results.

A majority of the sample was white and female. The study may have greater ability to generalize to the public if it had a more demographically balanced sample. Also surveys that are not proctored and distributed through the Internet run the risk of participants not taking the survey seriously. One final limitation is that the data was gathered through the use of self-report

measures. Self-report measures are limited due to their inherent biases such as social desirability and exaggerated responses. This study was also vulnerable to common method bias with self-report data being the only collection technique. Qualitative data in future studies exploring similar areas would help supplement the quantitative survey data.

### Future Research

This study presented a new framework for understanding workplace stress. There has been a lack of research on positive affects relationship to stress. Future research needs address this gap. Additionally the results suggest equity sensitivity as distal antecedent to stress through its relationship to ERI. More research is needed to better understand equity sensitivity's role in inequity and its related outcomes. Stress is often cited as a predictor for burnout (Gustafsson & Skoog, 2012; Bawa & Kaur, 2011). A new framework connecting equity sensitivity to burnout would extend the research even further. A better understanding optimism, positive affect, and equity provide new opportunities in areas such as occupational health and burnout (Segerstrom et al., 1998; Taris et al., 2001).

Positive affect should be more closely examined for its research and practical implications. Our findings suggest that positive affect has a strong negative relationship with stress. Therefore future research should explore positive affect's relationship with other relevant variables such as burnout. One potential research question this poses is "Do individuals who have higher positive affect experience less burnout due to lower amounts of perceived stress?" It is also possible that equity has some role in this relationship. Past research has examined the role of social support in stress related burnout (Etzion, 1984). Future studies should investigate how social support interacts with dispositional traits such as optimism. Chang et al. (2000) found support for this relationship by using perceived stress and a mediator between optimism and



burnout. Taris et al. (2001) found a mediated relationship between perceptions of inequity and burnout (Stress was the mediator). Future research will need to clarify the roles of each variable in this relationship.

## REFERENCES

- Adams, J. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, 67(5), 422-436.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bawa, N., & Kaur, R. (2011). Occupational stress and burnout among police officers. *Indian Journal Of Community Psychology*, 7(2), 362-372.
- Brodke, M.R. H., Gopalkrishnan, P., Oyer, B., Yankelovich, M., Withrow, S., Sliter, M.T., Lake, C., Gillespie, M., Gillepsie, J., Balzer, W. (2009) Stress in general revision. Bowling Green: Bowling Green State University.
- Buunk, B. P., & Schaufeli, W. B. (1999). Reciprocity in interpersonal relationships: An evolutionary perspective on its importance for health and well-being. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 10, pp. 259-291). Chichester, England: Wiley.
- Chang, E. C. (1998). Dispositional optimism and primary and secondary appraisal of a stressor: Controlling for confounding influences and relations to coping and psychological and physical adjustment. *Journal of Personality and Social Psychology*, 74(4), 1109-1120.
- Chang, E. C., Rand, K. L., & Strunk, D. R. (2000). Optimism and risk for job burnout among working college students: Stress as a mediator. *Personality and Individual Differences*, 29(2), 255-263.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Etzion, D. (1984). Moderating effect of social support on the stress-burnout relationship. *Journal Of Applied Psychology*, 69(4), 615-622.

- Gustafsson, H., & Skoog, T. (2012). The meditational role of perceived stress in the relation between optimism and burnout in competitive athletes. *Anxiety, Stress & Coping: An International Journal*, 25(2), 183-199.
- Hayes, C. T., & Weathington, B. L. (2007). Optimism, stress, life satisfaction, and job burnout in restaurant managers. *Journal of Psychology: Interdisciplinary and Applied*, 141(6), 565-579.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- McKenna, J. F. (1987). Equity/inequity, stress and employee commitment in a health care setting. *Stress Medicine*, 3(1), 71-74.
- Miles, E. W., Hatfield, J.D., & Huseman, R. C. (1987). A new perspective on equity theory: The Equity Sensitivity construct. *Academy of Management Review*, 12 (2), 222-234.
- Miles, E. W., Hatfield, J. D., & Huseman, R. C. (1989). The equity sensitivity construct: potential implications for worker performance. *Journal of Management*, 15(4), 581-588.
- Rioli, L., & Savicki, V. (2003). Optimism and Coping as Moderators of the Relation Between Work Resources and Burnout in Information Service Workers. *International Journal of Stress Management*, 10(3), 235-252.
- Sauley, K. S., & Bedeian, A. G. (2000). Equity sensitivity: construction of a measure and examination of its psychometric properties. *Journal of Management*, 26; 885-910.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.
- Scheier, M. F., Weintraub, J. K., & Carver, C. S. (1985). *Optimism and ways of coping*. Unpublished manuscript.
- Schulman, P. (1999). Applying learned optimism to increase sales productivity. *Journal of Personal Selling & Sales Management*, 19(1), 31-37.
- Seegerstrom, S. C., & Miller, G. E. (2004). Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry. *Psychological Bulletin*, 130(4), 601-630.

- Segerstrom, S. C., Taylor, S. E., Kemeny, M. E., & Fahey, J. L. (1998). Optimism is associated with mood, coping and immune change in response to stress. *Journal of Personality and Social Psychology*, 74(6), 1646-1655.
- Siegrist, J. (1996). Adverse health effects of high-effort/ low-reward conditions. *Journal of Occupational Health Psychology*, 1, 27–41.
- Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004). The measurement of effort-reward imbalance at work: European comparisons. *Social Science & Medicine*, 58(8), 1483-1499.
- Stanton, J. M., Balzer, W. K., Smith, P. C., Parra, L., & Ironson, G. (2001). A general measure of work stress: The Stress in General scale. *Educational and Psychological Measurement*, 61(5), 866-888.
- Taris, T. W., Peeters, M. W., Le Blanc, P. M., Schreurs, P. G., & Schaufeli, W. B. (2001). From inequity to burnout: The role of job stress. *Journal of Occupational Health Psychology*, 6(4), 303-323.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal Of Personality And Social Psychology*, 54(6), 1063-1070.
- Weathington, B. L. & Reddock, C. M. (2011). Equity Sensitivity in “Fringe” Benefit Value and Satisfaction. *Journal of Behavioral and Applied Management*.

APPENDIX A  
SURVEY MEASURES GIVEN TO PARTICIPANTS

**PROTOCOL TITLE: The moderating role of equity sensitivity on the optimism and stress relationship**

**Please read this consent document carefully before you decide to participate in this study. This research has been approved by the University Institutional Review Board.**

**Purpose of the research study:**

**The purpose of this study is to examine optimism's effect on stress in relation to pay equity perceptions.**

**What you will be asked to do in the study:**

**After reading the consent form, you are asked to complete the survey.**

**Time required:**

**10-30 minutes**

**Risks and Benefits:**

**There are no potential risks for this study.**

**Compensation:**

**Extra credit will be awarded to students enrolled at the University of Tennessee at Chattanooga.**

**Confidentiality:**

**This information will not be used for the purpose of making business related decisions (Such as termination, promotion, or demotion). Participant's information and results will be kept anonymous.**

**Voluntary participation:**

**Your participation in this study is completely voluntary. There is no penalty for not participating.**

**Right to withdraw from the study:**

**You have the right to withdraw from the study at anytime without consequence.**

**Whom to contact if you have questions about the study:**

**James Dalluge (Student Researcher)**

**James.dalluge@gmail.com**

**641-488-6748**

**Bart Weathington (Faculty Advisor)**

**Bart-Weathington@utc.edu**

**Helt Hall 380- C**

**Department 2803**

**618 McCallie Avenue**

**Chattanooga, TN 37403**

**(423) 428-4289**

**Agreement:**

**I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.**

**If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact Dr. Bart Weathington, Chair of the Institutional Review Board, at 423-428-4289. Additional contact information is available at [www.utc.edu/irb](http://www.utc.edu/irb)**

Participants Electronic  
Signature

Date

**3. This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this within the past month.**

	Very Slightly or not at all	a little	below moderate	Moderately	above moderate	quite a bit	Extremely
interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

were on top of things?

11. In the last month, how often have you been angered because of things that happened that were outside of your control?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. In the last month, how often have you found yourself thinking about things that you have to accomplish?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13a. In the last month, how often have you been able to control the way you spend your time?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## 5. SIG

**4. Do you find your job stressful? For each of the following words or phrases below write: Y for "Yes" if it describes your job, N for "No" if it does not describe your job, "?" if you cannot decide or are unsure.**

	Yes	No	?
Demanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pressured	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Many things stressful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hassled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nerve-racking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More stressful than I'd like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overwhelming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 6. LOTR

**5. Respond to the following questions as accurately and honest as possible. Do not let your answers to one question influence your answers to another. There are no right or wrong answers. On each item choose one of the following: Strongly disagree, disagree, somewhat disagree, neither disagree or agree, somewhat agree, agree, strongly agree.**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat agree	Agree	Strongly Agree
1. In uncertain times, I usually expect the best.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. It's easy for me to relax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If something can go wrong for me, it will.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I'm always optimistic about my future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I enjoy my friends a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It's important for me to keep busy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I hardly ever expect things to go my way.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I don't get upset too easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I rarely count on good things happening to me*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Overall, I expect more good things to happen to me than bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**6. Respond to the following questions as accurately and honest as possible. Do not let your answers to one question influence your answers to another. There are no right or wrong answers. On each item choose one of the following: Strongly disagree, disagree, somewhat disagree, neither disagree or agree, somewhat agree, agree, strongly agree.**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat agree	Agree	Strongly Agree
1. I prefer to do as little as possible at work while getting as much as I can from my employer.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am most satisfied at work when I have to do as little as possible.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I am at my job, I think of ways to get out of work.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If I could get away with it, I would try to work just a little bit slower than the boss expects.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. It is really satisfying to me when I can get something for nothing at work.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It is the smart employee who gets as much as he/she can while giving as little as possible in return.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Employees who are more concerned about what they can get from their employer rather than what they can give to their employer are the wise ones.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. When I have completed my task for the day, I help out other employees who have yet to complete their tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Even if I received low wages and poor benefits from my employer, I would still try to do my best at my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. If I had to work hard all day at my job, I would probably quit.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I feel obligated to do more than I am paid to do at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. At work, my greatest concern is whether or not I	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

am doing the best job I can.

13. A job which requires me to be busy during the day is better than a job which allows me a lot of loafing.

14. At work, I feel uneasy when there is a little work for me to do.

15. I would become very dissatisfied with my job if I had little or no work to do.

16. All other things being equal, it is better to have a job with a lot of duties and responsibilities than one with few duties and responsibilities.

For each pair of statements, please distribute ten points between each choice. For example:

When trying to lead a healthy life style, it is more important for me to

a) exercise \_\_\_7\_\_\_

b) healthy diet \_\_\_3\_\_\_

Answer each question by thinking of the organization you currently work for.

**7. In any organization I work for It would be more important for me to**

A. Get from the Organization

B. Give to the Organization

**8. In any organization I work for, It would be more important for me to**

Help others

Watch out for my own good

**9. I would be more concerned about**

What I received from the organization

What I contributed to the organization

**10. The hard work I do should**

Benefit the organization

Benefit me

**11. My personal philosophy in dealing with the organization would be**

If I don't look out for myself, nobody else will

It's better for me to give than to receive

**12. Respond to the following questions as accurately and honest as possible. Do not let your answers to one question influence your answers to another. There are no right or wrong answers. On each item choose one of the following: Strongly disagree, disagree, somewhat disagree, neither disagree or agree, somewhat agree, agree, strongly agree.**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat agree	Agree	Strongly Agree
1. I have a constant time pressure due to a heavy workload.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I have many interruptions and disturbances in my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have a lot of responsibility in my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am often pressured to work overtime.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Over the past few years, my job has become more and more demanding.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I receive the respect I deserve from my superiors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I receive the respect I deserve from my colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I experience adequate support in difficult situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I am treated unfairly at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Considering all my efforts and achievements, I receive the respect and prestige I deserve at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. My job promotion prospects are poor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. My current occupation I position adequately reflects my education and training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Considering all my efforts, and achievements, my work prospects are adequate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Considering all my efforts and achievements, my salary/income is adequate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have experienced or I expect to experience an undesirable change in my work situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My job security is poor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

1. I get easily overwhelmed by time pressures at work.

2. As soon as I get up in the morning I start thinking about work problems.

3. When I get home, I can easily relax and switch off work.

4. People close to me say I sacrifice too much for my job.

**13. The following questions are for demographic data. This information will be destroyed upon completion of the study.**

**What is your gender**

Gender

**14. How old are you?**

**15. What best describes your level of education?**

- Less than high school degree
- High School completed
- Some college but no degree
- Associates Degree
- Bachelors Degree
- Masters Degree
- Doctoral Degree

**16. What is your employment status? How many hours a week do you work generally?**

- Not employed
- employed, less than 20 hours a week
- employed, on average 20-30 hours a week
- employed, on average 30-40 hours a week
- employed, on average 40-50 hours a week
- employed, on average 50-60 hours a week

**17. If you are currently employed, how many years have you been with the company?**

**18. What best describes your ethnic background? Mark all that apply**

- White/White, non-Hispanic
- African American
- Hispanic
- Asian-Pacific Islander
- Native American

**19. What best describes the industry you are currently employed in?**

- Education
- Agriculture
- Forestry or Fishing
- UtilitiesMining
- Retail
- Construction
- Finance, Insurance, or Real Estate
- Manufacturing
- Services
- Transportation
- Public Administration
- Communication
- Other



APPENDIX B  
IRB APPROVAL LETTERS

**MEMORANDUM**

TO: James Dalluge  
Dr. Bart Weathington  
IRB # 11-189

FROM: Lindsay Pardue, Director of Research Integrity  
Dr. Bart Weathington, IRB Committee Chair

DATE: December 5, 2011

SUBJECT: IRB # 11-189: The Moderating role of equity sensitivity in the optimism and stress relationship

The Institutional Review Board has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

**The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 11-189.**

Please remember that you must complete a Certification for Changes, Annual Review, or Project Termination/Completion Form when the project is completed or provide an annual report if the project takes over one year to complete. The IRB Committee will make every effort to remind you prior to your anniversary date; however, it is your responsibility to ensure that this additional step is satisfied.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page <http://www.utc.edu/irb> or email [instirb@utc.edu](mailto:instirb@utc.edu).

Best wishes for a successful research project.

## VITA

James William Dalluge is from Marshalltown, Iowa. He attended the University of Northern Iowa and received a Bachelor of Arts in Psychology with a minor in Ethics in 2010. He began graduate studies at the University of Tennessee at Chattanooga in August 2010. James graduates in May 2012 with a Masters of Science in Psychology: Industrial-Organizational