

EXAMINING THE EFFECTS OF WORK-LIFE BALANCE AND ORGANIZATIONAL JUSTICE PERCEPTIONS ON
COUNTERPRODUCTIVE WORK BEHAVIOR

—
Lauren Anne Kiproff

Examining the Effects of Work-Life Balance and Organizational Justice Perceptions on
Counterproductive Work Behavior

A Master's Thesis

Presented to

The College of Graduate Studies

Austin Peay State University

in Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Industrial-Organizational Psychology

Lauren Anne Kiproff

August, 2014

Copyrighted © 2014

By

Lauren Kiproff

All Rights Reserved

To the College of Graduate Studies:

We are submitting a thesis written by Lauren Kiproff entitled “Examining the Effects of Work-Life Balance and Organizational Justice Perceptions on Counterproductive Work Behavior.” We have examined the final copy of this thesis for form and content. We recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Industrial-Organizational Psychology.

[Handwritten signature]

DR. UMA J. IYER

Stephen A. Truhon / Stephen A. Truhon

Ken Hawn

Kev. Harris

Committee Member

Committee Member

Accepted for the Graduate and Research Council

Accepted for the Graduate and Research C

Dean, College of Graduate Studies

Statement of Permission to Use

In presenting this thesis in partial fulfillment of the requirements for the Master of Arts in Industrial-Organizational Psychology at Austin Peay State University, I agree that the library shall make it available to borrowers under the rules of the library. Brief quotations from this field study are allowable without special permission, provided that accurate acknowledgement of the source is made.

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

Luzen H. Proff

Signature

10/29/2014

Date

Dedications and Acknowledgments

There are a number of people without whom this thesis might not have been written, and to whom I am greatly indebted. To my parents, Peter and Ann Kiproff, for a giving me a lifetime of unconditional love and encouragement. To Michael Downer for being a constant source of love and support in my life. To Tevin Gatlin for being an incredible friend and helping me keep my sanity during my time in Clarksville. To Dr. Leigh Schmitt for introducing me to occupational health psychology and being my sounding board throughout this thesis process. To Dr. Paul Mego for instilling a relentless drive for academic excellence in me and teaching me to conduct research with clarity and precision.

I would like to offer special thanks to my adviser Dr. Uma J. Iyer for her guidance and tireless dedication to helping me achieve my goals throughout this thesis process.

I would also like to thank Dr. Stephen Truhon and Dr. Kevin Harris for generously giving of their time and expertise to better my work.

ABSTRACT

LAUREN A. KIPROFF. Examining the Effects of Work-Life Balance and Organizational Justice Perceptions on Counterproductive Work Behavior (Under the direction of Dr. Uma J. Iyer)

Numerous studies have explored the impact of work-life balance on employee morale and engagement. Research has also focused on possible antecedents of counterproductive work behaviors. However, limited if any research has been conducted to directly explore the role that work-life balance plays in employee involvement in counterproductive work behaviors. Limited research has also been conducted to examine the effects of work-life balance on how employees perceive the fairness and organizational justice the conditions of their organizations. Carrying out this study contributed to filling in those gaps in research. Survey data was collected from qualified voluntary participants. Data was collected using the Work Life Balance Scale (Hayman, 2005), the Counterproductive Work Behavior Checklist (10-item version; Spector, Bauer, & Fox, 2010), and the Organizational Justice Questionnaire (Colquitt, 2001). Data were analyzed to determine whether significant relationships exist among work-life balance factors, organizational justice factors, and counterproductive work behaviors. Additionally, data were examined to determine whether organizational justice factors and work-life balance each predicted significant variance in counterproductive work behaviors. Results were discussed in the light of existing literature. Implications for practice and directions for future research were suggested.

TABLE OF CONTENTS

Chapter

I.	Introduction.....	4
II.	Review of Literature	
	a. Organizational Justice.....	6
	b. Counterproductive Work Behavior.....	9
	c. Work-Life Balance.....	12
	d. Purpose of Study.....	14
	e. Hypotheses.....	14
III.	Methodology	
	a. Participants.....	17
	b. Measures.....	19
	c. Procedures.....	20
	d. Data Analysis.....	21
IV.	Results	
	Results.....	23
V.	Discussion and Conclusions	
	a. Evaluation of Findings.....	29
	b. Limitations and Future Research.....	31
	Reference List.....	33
	Appendix A.....	41
	Appendix B.....	42
	Appendix C.....	44

LIST OF TABLES

TABLE 1 DESCRIPTIVE STATISTICS OF WORK-LIFE BALANCE, ORGANIZATIONAL JUSTICE, AND COUNTERPRODUCTIVE WORK BEHAVIOR 21

TABLE 2 COUNTERPRODUCTIVE WORK BEHAVIOR AND WORK-LIFE BALANCE FACTOR CORRELATIONS 22

TABLE 3 WORK-LIFE BALANCE AND ORGANIZATIONAL JUSTICE FACTOR CORRELATIONS 23

TABLE 4 COUNTERPRODUCTIVE WORK BEHAVIOR AND ORGANIZATIONAL JUSTICE FACTOR CORRELATIONS 24

TABLE 5 COUNTERPRODUCTIVE WORK BEHAVIOR REGRESSED ON ORGANIZATIONAL JUSTICE AND WORK- LIFE BALANCE 25

TABLE 6 COEFFICIENTS FOR COUNTERPRODUCTIVE WORK BEHAVIOR REGRESSED ON ORGANIZATIONAL JUSTICE AND WORK-LIFE BALANCE..... 26

CHAPTER I

Introduction

Organizations are under pressure to evolve in order to remain competitive in response to globalization (Daipuria & Kakar, 2013). One change that has come from globalization is an increased tendency for organizations to expand the expected contributions of employees to meet the strategic needs of the organization. These expanded expectations have made employees more susceptible to higher levels of interrole conflict than ever before. Interrole conflict is the extent to which people encounter pressures and challenges in one role that are not compatible with pressures and challenges that arise within a different role (Allen & Finkelstein, 2014).

Employees have a variety of tasks and responsibilities they are expected to complete as part of their assigned role within their organization (Quarat-ul-ain, Khattak, & Iqbal, 2013). In a perfect world employees would have ample time to complete tasks each day in accordance with realistic expectations of their organization. However, many employees are now being faced with increasingly heavy workloads as organizations seek higher levels of productivity from employees (Karatepe, 2013). Heavy workloads can impose strain on employees to such an extent as to potentially interfere with any and all non-work related responsibilities an employee may have waiting to be addressed after the workday is complete.

Employees often struggle to effectively allocate their time each day in order to meet the wide array of professional and personal obligation they face. According to the conservation of resources theory, people have limited access to the scarce personal resources at their disposal (Grawitch & Barber, 2010). The scarcity of personal resources requires people to allocate these resources carefully in order to maximize their utility. One personal resource that employees must approach with particular discretion is the allocation of time. Limited time availability creates a

consistent challenge for employees as they strive to fully meet the obligations of their work lives and personal lives (Wood, Totterdell, & Michaelides, 2013).

Research has interpreted work-life balance in various forms but for the purposes of this study work-life balance pertains to employee perceptions that they can successfully allocate their time in order to allow work-life demands and personal life demands to be satisfied (Odle-Dusseau, Britt, & Bobko, 2012). The extent to which employees have a choice in defining aspects of their work role can influence perceptions of work-life balance (Nelson & Tarpey, 2010). Limited research has examined the influence of employee perceptions of the fairness or justice of organizational conditions and policies on employee perceptions of work-life balance. Previous research has suggested a relationship between organizational justice and employee behavior such that low perceptions of fairness could signify a higher likelihood that employees will behave in ways that are against the best interests of the organization for which they work (Chernyak-Hai & Tziner, 2014).

This study sought to extend prior research on work-life balance by examining whether employee perceptions of their own work-life balance and organizational justice contributed to employees engaging in counterproductive behavior at work. This study also sought to extend research on counterproductive work behavior by examining whether potential relationships existing between counterproductive work behavior and organizational justice are influenced by employee perceptions of work-life balance.

Chapter II

Literature Review

Organizational Justice

Organizations attempt to implement policies and practices to direct the work behaviors and work related ethics of employees (Bobocel, 2013). Employee perceptions of the fairness of work-related conditions could influence the attitudes with which they approach these work behaviors. Organizational justice pertains to the way employees evaluate the fairness of the treatment they encounter at work (Jacobs, Belschak, & Den Hartog, 2014). These justice perceptions can influence employee appraisals of general organizational practices and policies as well as specific individual events or outcomes (Bobocel, 2013).

Employee attitudes and work behaviors are influenced by the level of fairness employees perceive in the organizational policies and occurrences (Judge & Colquitt, 2004). Organizational justice pertains to employee perceptions of fair treatment at work (Fox, Spector, & Miles, 2001). Organizational justice was originally categorized into two factors: distributive justice and procedural justice (Greenberg, 1987).

Procedural justice refers to employee perceptions of fairness in decision-making policies that determine how decisions are made and outcomes are allocated within an organization (Thibaut & Walker, 1975). Employee perceptions of procedural fairness can vary based on the levels of representativeness, ethicality, consistency, correctability, bias suppression, and accuracy associated organizational policies. Perceptions of procedural justice are partially affected by process control, the ability to express opinions about organizational policies (Colquitt, 2001). Procedural justice perceptions are also influenced by decision control, the ability to influence organizational outcomes when evaluating an organization's policies.

Another aspect of organizational justice related to outcomes is distributive justice.

Distributive justice is a dimension of organizational justice concerned with employee perceptions of the fairness of the allocation of organizational outcomes in comparison to employees' contributions within the organization (Adams, 1965). Employee perceptions of distributive justice are related to equity theory. Equity theory states that employees compare their contributions and outcomes against those of coworkers in order to determine whether or not outcome allocation can be considered fair. Employee contributions that commonly influence distributive justice perceptions include role responsibilities, skills, education, experience, and time. Work outcomes associated with distributive justice include but are pay, promotions, awards, vacation time, and other incentives (Rousseau, Salek, Aubé, & Morin, 2009). Research has further suggested the employees perceiving a lack of distributive justice are more likely to engage in counterproductive behaviors at work.

Later research expanded the construct of organizational justice to include a dimension of interactional justice. Interactional justice is a form of organizational justice concerned with the way employees perceive they are being treated organizational authority figures on the basis of the policies and procedures that are in place in the organization (Colquitt, 2001). Interactional justice is a form of organizational justice concerned with the way employees perceive they are being treated organizational authority figures on the basis of the policies and procedures that are in place in the organization. Interactional justice perceptions are based on criteria including perceived justification, perceived truthfulness, perceived respect, and perceived propriety of the treatment of employees by organizational decision makers.

Research has suggested interactional justice can have particular influence on employee behavior (Le Roy, Bastounis, & Minibas-Poissard, 2012). A possible explanation is the tendency

for employees to be more aware of interactional justice dimensions in their everyday work environment than for issues of procedural and distributive justice due to required daily interaction with coworkers and supervisors. Perceptions of interactional justice can have lingering implications for the future health and contributions of employees (Yang, Bauer, Johnson, Groer, & Salomon, 2014).

According to social self-preservation theory, people who perceive interactional injustice feel that their social self is threatened will experience coping reactions that serve to minimize threats (Yang et al., 2014). The coping reactions experienced by threatened employees can be physiological, psychological, or behavioral in nature. The behavioral coping responses demonstrated by threatened employees manifest themselves in the form of counterproductive work behaviors.

Interactional justice has been categorized into distinct dimensions of informational justice and interpersonal injustice. Both forms relate to the quality of the interaction that takes place (Le Roy et al., 2012). Informational justice is a form of interactional justice concerned with the quality of received information. Interpersonal justice describes the quality of interactions occurring between employees in terms of such issues as respect, honesty, and appropriateness. Interpersonal justice is influential in any interaction between employees but is particularly significant in interactions between supervisors and subordinates.

Employee perceptions of organizational justice can be a highly influential stressor that can detrimentally influence the physical and emotional well-being of employees (Yang et al., 2014). This stressor can produce exhaustion, depression, insomnia, physical illness, and work absences related to illness. Several behavioral outcomes have been positively linked to individual-level perceptions of organizational justice (Ambrose, Schminke, & Mayer, 2013).

These behavioral outcomes include job satisfaction, performance, organizational commitment, and organizational citizenship behaviors.

Counterproductive Work Behavior

Employee coping behaviors can be beneficial or damaging to an organization based largely on the way an employee responds to an organizational environment (Krischer, Penney, & Hunter, 2010). Counterproductive workplace behaviors (CWBs) are behaviors that violate the legitimate interests of, or inflict harm upon, an organization or organizational stakeholders (Marcus, Taylor, Hastings, Sturm, & Weigelt, 2013). These behaviors have the potential of damaging organizational property, undermining organizational functioning, or negatively influencing employee effectiveness. Employees evaluate their organization's environment based on its demands on their physical, emotional, cognitive, and other personal resources (Krischer et al., 2010). Employee perceptions and emotional responses are moderated by how much control employees feel they have over environmental conditions (Spector & Fox, 2005).

Exposure to an abundance of work-related stressors could lead employees to engage in CWB (Meier & Spector, 2013). The stressor –emotion model of CWB illustrates the role emotion plays within the occurrence of CWBs in the workplace. According to this model the way employees perceive an organization's environment leads to a distinct emotional reaction on the part of the employee. If employee emotional reactions are negative then employees are more likely to engage in CWBs (Spector & Fox, 2005). Negative emotional responses to work environment can lead to revenge motives. Revenge motives occur when a victim of mistreatment or harm intentionally acts to damage, discomfort, injure, or punish the parties seen as responsible for harming the victim (Hung, Chi, & Lu, 2009).

CWBs directed at the organization as a whole are known as organizational counterproductive work behaviors (OCWBs; Klotz & Buckley, 2013). One common form of OCWB is production deviance. Production deviance behavior is the conscious and intentional failure of employees to perform the responsibilities of their jobs effectively. Research suggests that employees involved in production deviance will intentionally reduce individual performance levels. Behaviors associated with production deviance include excessive breaks, leaving work early, and intentionally working slowly (Zoghbi-Manrique-de-Lara, 2010).

Another type of organizational counterproductive work behavior equally detrimental to organizations is sabotage. Employee sabotage behaviors are employee behaviors intended to cause damage or disruption for an organization by defacing property, destroying possessions, physically harming employees or customers, and damaging the reputation of an employer or organization (Skarlicki, van Jaarsveld, & Walker, 2008). Employee sabotage is associated with retaliation motives generated from employee perceptions of injustice in an organization.

Withdrawal is another example of employee behavior that can harm an organization. Withdrawal behaviors are organizational counterproductive behaviors that restrict or reduce the amount of time worked to less than is required by the organization (Spector et al., 2006). Employees can withdraw from their organization psychologically or physically (Volpone & Avery, 2013). Psychological withdrawal is related to reduced employee organizational commitment and reduced employee engagement as employees separate themselves from the tasks and responsibilities associated with their jobs. Burnout is the most prevalent organizational counterproductive behavior associated with psychological withdrawal. Employee burnout is related to decreases in employee job performance, effectiveness, and productivity.

Physical withdrawal pertains to the behaviors employees use to separate directly themselves from the tasks and responsibilities associated with their jobs (Volpone & Avery, 2013). Intentional lateness, absenteeism, longer than authorized breaks, and unscheduled breaks are examples of physical withdrawal that employees engage in to remove themselves from their jobs. Employee psychological withdrawal generally precedes the onset of physical withdrawal.

Theft is the intentional and unapproved appropriation of organizational property by employees for the purpose of private use or sale to a third party (Sausser, 2007). Common forms of employee theft can involve fraud, embezzling company funds, taking office supplies or company equipment for unauthorized personal use, and using company time for personal business (Appelbaum, Cottin, Paré, & Shapiro, 2006). Employees are more likely to commit theft when they believe their organization is mistreating them (Sausser, 2007).

CWBs can also be directed toward individual employees. CWBs targeting individuals or groups of individuals within an organization are known as interpersonal counterproductive work behaviors (Spector et al., 2006). Interpersonal CWBs have been identified under the general category of abuse against others. Abuse pertains to harmful behaviors perpetrated against coworkers and others that damages physically or psychologically. Abuse behaviors can be person-focused or task-focused (Ho, 2012).

Abuse can occur at varying levels of severity. Meier and Spector (2013) described incivility experiences as low severity antisocial behaviors with a vague purpose of harming the target of the behavior. Targets of workplace incivility or neutral third-party observers in the workplace are often driven to retaliate against this behavior in a similarly uncivil manner. Workplace bullying is a form of interpersonal counterproductive work behavior characterized by repeated and regular abuse committed by supervisors or subordinates directed towards coworkers

(Gilbert, Raffo, & Sutarso, 2013). Bullying behaviors are directed against individuals or groups of individuals in an organization. These bullying behaviors can take the form of threats, verbal aggression, intimidation behaviors, and humiliation behaviors.

Though abuse take place at any level of an organization abusive behaviors are widely attributed to leadership positions within organizations (Wei & Si, 2013). Abusive supervision refers to employee perceptions that supervisors engage in abusive behaviors when interacting with subordinates. This abusive behavior can include publicly criticizing subordinates, holding subordinates responsible for things they could not control, and directing verbal frustration at subordinates without cause.

Subordinate employees exposed to supervisor abuse experience higher levels of turnover intention, role conflict, and lower job satisfaction than subordinates that have not been exposed to supervisor abuse (Zellars, Tepper, & Duffy, 2002). Abused subordinate employees also perceive lower levels of justice in the procedures by which supervisors make decisions and the behaviors of their supervisors.

Work-life Balance

Employees have encountered ever-increasing pressure to improve job performance, maximize individual contributions, and meet other obligations to their organizations (Tziner & Sharoni, 2014). In order to maximize their contributions to their organization employees find themselves taking on dramatically heavier workloads and other work-life responsibilities (Karatepe, 2013). Heavy workloads in turn expose employees to increased stress, physical fatigue, emotional exhaustion, and other sources of strain. In addition to work-life responsibilities employees meet with an additional set of obligations and responsibilities derived

from their personal lives (Glaser & Hecht, 2013). Personal life demands can include family responsibilities, school responsibilities, or other non-work related responsibilities or events.

Work-life balance (WLB) pertains to the way employees manage the demands of their work and personal life domains (Koubova & Buchko, 2013). Ideally, employees should be able to meet all work-life obligations while still having adequate time and energy to fulfill all personal life obligations (Ode-Dusseau et al., 2012). If employees can achieve this balance the result will be work personal-life enhancement (WPLE), which occurs when actions taken to meet the obligations of one role enhance the performance of actions taken to meet the obligations of other roles (Molino, Ghislieri, & Cortese, 2013).

Early research in WPLE focused primarily on employee efforts to achieve the balance between professional role responsibilities and family role responsibilities outside of work, known as work-family balance (Hayman, 2005). However, employees are increasingly faced with private life role responsibilities and commitments that extend beyond traditional family commitments (Parkes & Langford, 2008). Research has responded to this shift by expanding the similar construct of work-life balance, the ability of employees to meet their work and family commitments, as well as other non-work responsibilities and activities

Employees are prone to finding these roles and demands incompatible (Jin, Ford, & Chen, 2013). This incompatibility of the work role and personal life role is known as work-life conflict (Molino et al., 2013). Work-life conflict places increased pressure on employees as they endeavor to meet the differing demands of multiple roles without adequate time and other necessary personal resources (Glaser & Hecht, 2013). Work-life conflict can take the form of work interference with personal life (WIPL) and personal life Interference with work (PLIW). Work-life conflict is bidirectional in that it can come in the form of the professional role

interfering with the private role or in the private role interfering with the professional role (Brauchli, Bauer, & Hämmig, 2011).

Employees' perceptions of work-life balance can vary on the basis of their perceptions of organizational support (Del Campo, Cook, & Arthur, 2013). Organizational support can be indicated by the presence and quality of the organization's work-life policies. If work-life balance policies in place are seen by employees as beneficial and fair, these employees are more likely to increased job satisfaction, decreased turnover, and decreased burnout. The processes used to determine these and other organizational conditions can influence the way employees perceive WLB (Nelson & Tarpey, 2010).

Purpose of Study

Work-life conflict can be a source of significant stress for employees (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). Stress that is related to work-life conflict is known to negatively influence work-related outcomes including job satisfaction, organizational commitment, turnover intentions, burnout, absenteeism, organizational citizenship behavior, job performance, work related strain, and other work-related behaviors. On the basis of this research it seems reasonable to the author to examine the relationships between WLB, organizational justice, and CWB.

Hypotheses

The following hypotheses were developed to explore the relationships existing among WLB, organizational justice, and CWB:

H1: WIPL will be positively related to CWB;

H2: PLIW will be positively related to CWB;

H3: WPLE will be negatively related to CWB;

H4: WIPL will be negatively related to organizational justice;

H5: PLIW will be negatively related to organizational justice;

H6: WPLE will be positively related to organizational justice;

H7: Organizational justice will be negatively related to CWB;

H7a: Distributive justice will be negatively related to CWB;

H7b: Procedural justice will be negatively related to CWB;

H7c: Interpersonal justice will be negatively related to CWB;

H7d: Informational justice will be negatively related CWB;

H8: Organizational justice and WLB will predict significant variance in CWB;

H8a: Organizational justice will predict significant variance in CWB;

H8b: WLB will predict significant variance in CWB beyond that predicted by organizational justice.

Chapter III

Methodology

Participants

Two hundred sixty five participants were recruited from various outlets. Some participants were recruited from classes in the Austin Peay State University Psychology Department. Based on individual professor discretion, extra credit was awarded for participation. Additional participants were recruited online through social media outlets including Facebook and Linked-In. Participants had to be 18 years old or older, have been employed at least once, and provide consent in order to be eligible to participate. The Austin Peay State University Institutional Review Board approval was sought and the consent procedure was approved. A power analysis was conducted to determine the appropriate sample size for establishing significance of the statistical findings of this study.

Participants were administered an online survey. Optional items on age, gender, organization size, and participant level of education were included to collect demographic information. Demographic information for participant age is displayed in Figure 1, with 59.7 % of participants falling into the 18-22 year old range. Figure 2 displays that 76.2 % of participants were female. Figure 3 displays the size of the study participant's organization. According to Figure 3, 44.1% of study participants were employees by organizations employing between 2 to 50 employees. Figure 4 displays the education level of study participants. Figure 3 shows that 50 % of study participants have completed some college but have no degree.

Figure 1

Participant Age Range

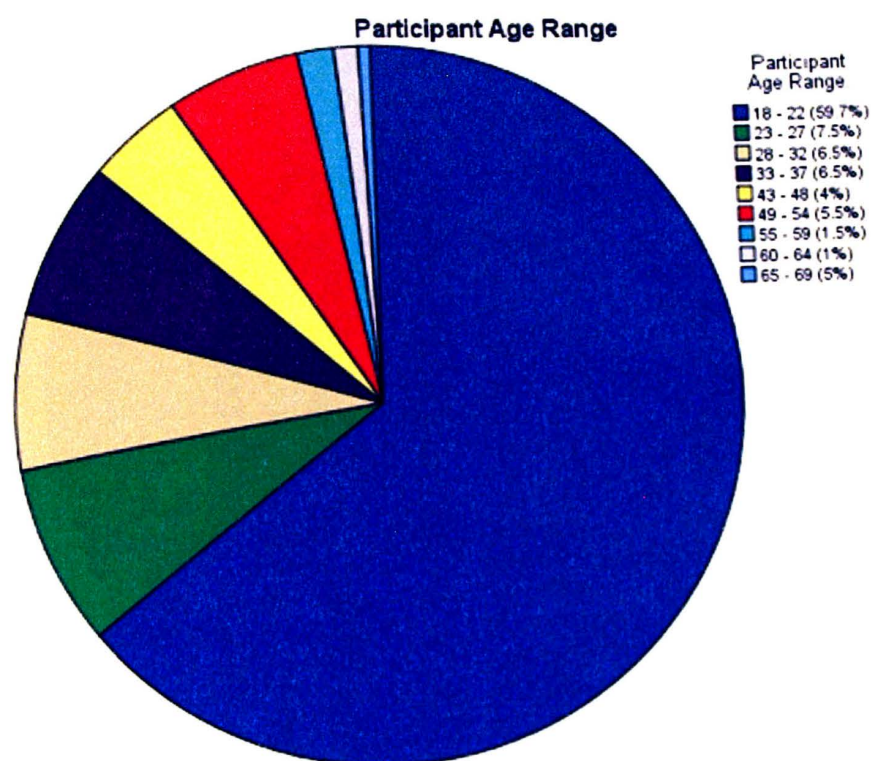


Figure 2
Participant Gender

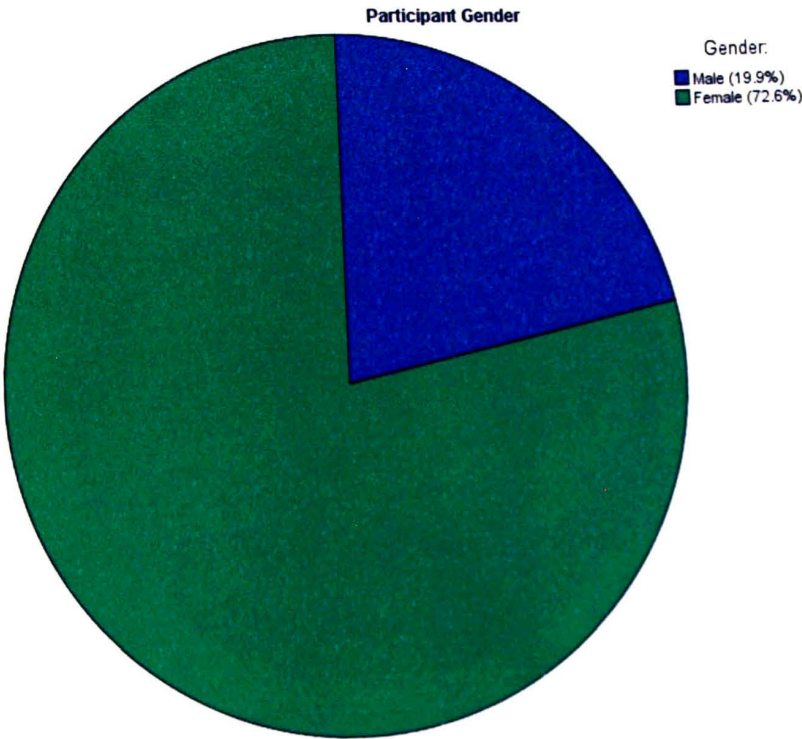


Figure 3
Participant Organization Size

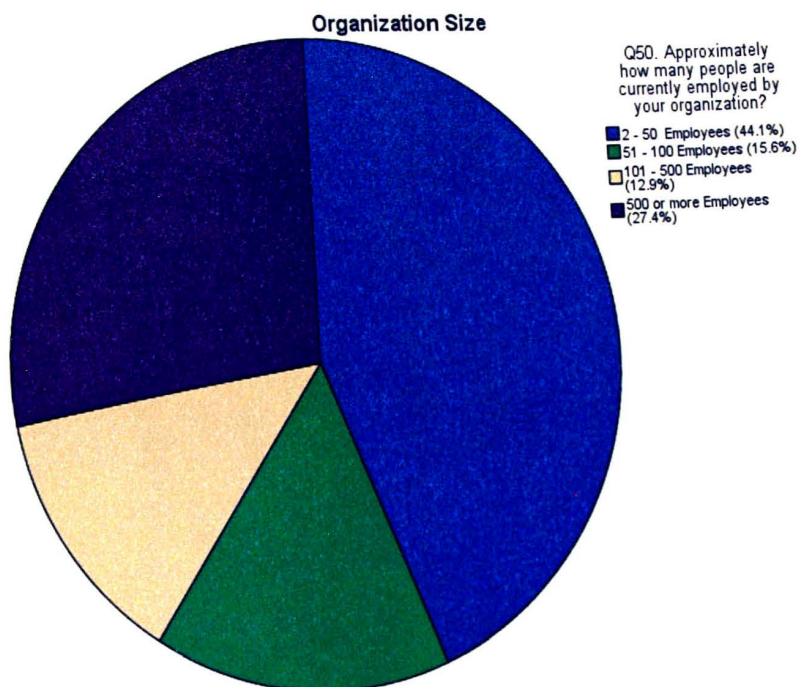
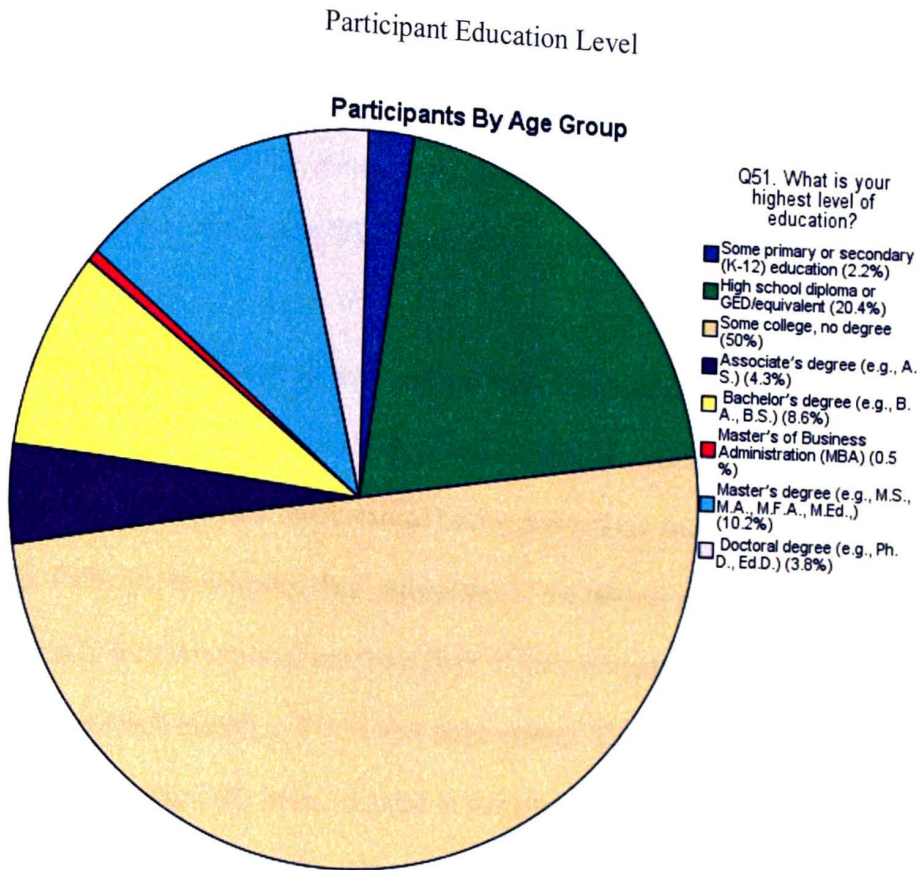


Figure 4



Measures

Participants took an anonymous self-report survey that included items related to work-life balance, organizational justice perceptions, and counterproductive work behavior. Work-life balance items were derived from Hayman's (2005) Work-Life Balance (WLB) Scale. The WLB Scale consisted of items examining three dimensions of work-life balance: work interference with personal life (WIPL), personal life interference with work (PLIW), and work/personal life enhancement (WPLE). Participants indicated how often they experienced particular feelings during the past three months using a seven-point time related scale (e.g., 1 = Not at all, 4 = Sometimes, and 7 = All the time). Higher means indicated that respondents report having

experienced that situation more frequently. In most cases, items with higher means are purported to indicate lower levels of work-life balance. Item six on the WIPL subscale was reverse scored. The WPLE subscale is worded positively and higher means indicate higher levels of perceived work-life balance. The reliability values for the three scales were $\alpha = .93$ for WIPL, $\alpha = .85$ for PLIW, and $\alpha = .69$ for WPLE. The WLB Scale items included in this study can be found in Appendix A.

Organizational justice items were adapted from the Organizational Justice Questionnaire (OJQ; Colquitt, 2001). The OJQ consisted of items related to procedural justice perceptions, distributive justice perceptions, interpersonal justice perceptions, and informational justice perceptions. Participants indicated their perceptions of the fairness of their workplace outcomes, the procedures of their workplace, and the actions of their workplace authority figures on a scale from 1 (to a very small extent) to 5 (to a very large extent). The reliability for the OJQ was $\alpha = .97$ (Colquitt, 2001). The OJQ items included in this study can be found in Appendix B.

CWB items were derived from the Counterproductive Work Behavior Checklist (CWB-C; Spector et al., 2006). This version of the CWB-C included items related to behaviors targeting an organization and items targeting people (Spector et al., 2010). Participants indicated how often they engaged in certain behaviors on a scale of 1 (*Never*) to 5 (*Every day*) (Spector et al., 2006). The reliability estimate for the CWB-C 10-item version is $\alpha = .78$ (Spector et al., 2010). The CWB-C items included in this study can be found in Appendix C.

Procedures

Survey data were collected online using Campus Labs Baseline in accordance with the Austin Peay State University Office of Institutional Research and Effectiveness (<http://www.apsu.edu/ire>). Survey data collection took place over a 10-week period from April

22, 2014 to June 30, 2014. Participants recruited from APSU Psychology classes were given a slip of paper with a link to the survey printed on it and a brief statement about the survey. Student participants typed the link into the web browser of their choice and would be taken to a page containing informed consent instructions. Participants recruited online responded to public participation requests posted in discussion sections of relevant groups on LinkedIn, Facebook, and other approved social media sources. These participation request posts contained the same brief statement and same link leading to the above-mentioned survey. Online participants were instructed to click on this link and were taken to the same informed consent page viewed by student participants.

After establishing informed consent, legal age, and adequate employment experience participants were taken to the online survey. Upon completion of the main portion of the survey participants were taken to a page inquiring about whether they were seeking academic credit for their participation. Participants not seeking academic credit were instructed to answer no and were then directed to a final screen thanking them for their participation and inviting them to exit the survey. Student participants seeking academic credit were instructed to answer yes and were directed to fill out a certificate of completion including the student's name, student identification number, the date of completion, and course information. After completing this page they were directed to a thank-you screen that included a certificate of completion, which they could print or save this certificate for submission to their professor for extra credit.

Data Analysis

Following the data collection period raw data from the 265 survey participants were downloaded from Campus Labs Baseline into Microsoft Excel 2013. Using Microsoft Excel 2013 the original 265 participant responses were screened to eliminate responses with missing

data. Then the updated Excel 2013 file with the remaining 201 participant responses was loaded into IBM SPSS Statistics 22 for further analyzed to obtain information about possible relationships between CWB, WLB factors, and Organizational Justice factors using correlation analyses. Finally, a hierarchical regression was conducted to examine any moderating influence WLB factors had on the possible relationship between CWB and each Organizational Justice factor. All data were analyzed using IBM SPSS Statistics 22.

Chapter IV

Results

Descriptive Statistics

Descriptive statistics were performed on the following variables: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), Work Personal Life Enhancement (WPLE), Distributive Justice, Procedural Justice, Interpersonal Justice, Informational Justice, and Counterproductive Work Behavior (CWB). Table 1 presents the means and standard deviations for each variable.

Table 1

Descriptive Statistics of Work-Life Balance, Organizational Justice, and Counterproductive Work Behavior

Measure	N	Minimum	Maximum	Mean	Standard Deviation
WIPL (WLBS)	201	6	40	24.6119	6.01570
PLIW (WLBS)	201	4	24	9.7214	4.04623
WPLE (WLBS)	201	0	23	13.7512	4.34141
Distributive Justice (OJQ)	201	3	19	12.4925	3.19236
Procedural Justice (OJQ)	201	7	35	21.8607	6.27140
Interpersonal Justice (OJQ)	201	3	15	11.2488	3.33284
Informational Justice (OJQ)	201	5	25	16.9701	5.32627
CWB (CWB-C)	201	10	34	16.4378	4.78825
Valid N (listwise)	201				

The potential relationships existing between WLB factors and CWB were examined in Hypotheses 1-3. The results of the correlational analyses are displayed in Table 2. As predicted in Hypothesis 1, the WIPL score was positively correlated with CWB ($r = 0.176, p < .05$). In addition the PLIW score was positively correlated with CWB ($r = 0.355, p < .01$), supporting

Hypothesis 2. The WPLE score was negatively related to CWB ($r = -.252, p < .01$), supporting Hypothesis 3.

Table 2
Counterproductive Work Behavior and Work-Life Balance Factor Correlations

	WIPL	PLIW	WPLE	CWB
WIPL		.277*	.072	.176*
PLIW	.277*		-.100	.335**
WPLE	.072	-.100		-.252**
CWB	.176*	.335**	-.252**	
All Ns = 201. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.				

Potential relationships existing between WLB factors and Organizational Justice were examined in Hypotheses 4-6. The results of the correlational analyses are displayed in Table 3. Hypothesis 4, the relationship between WIPL and Organizational Justice, was partially supported by the significant negative correlations existing between WIPL and Procedural Justice ($r = -.204, p < .01$), Interpersonal Justice ($r = -.189, p < .01$), and Informational Justice ($r = -.244, p < .01$), a nonsignificant correlation between WIPL and Distributive Justice ($r = -.041$). Hypothesis 5, the relationship between PLIW and Organizational Justice, was partially supported by the significant negative correlations existing between WIPL and Procedural Justice ($r = -.207, p < .01$), Interpersonal Justice ($r = -.228, p < .01$), and Informational Justice ($r = -.208, p < .01$). But PLIW did not significantly correlate with Distributive Justice ($r = -.062$). Hypothesis 6 was confirmed by the positive correlation of WPLE and all Organizational Justice factors. WPLE was positively

correlated to Distributive Justice ($r = .180, p < .05$), Procedural Justice ($r = .201, p < .01$), Interpersonal Justice ($r = .212, p < .01$), and Informational Justice ($r = .227, p < .01$).

Table 3

Work-Life Balance and Organizational Justice Factor Correlations

	WIPL	PLIW	WPLE	Distributive Justice	Procedural Justice	Interpersonal Justice	Informational Justice
WIPL		.227*	.072	-.041	-.204**	-.189**	-.244*
PLIW	.277**		-.100	-.062	-.207	-.228**	-.208**
WPLE	.072	-.100		.180*	.201**	.212**	.227**
Distributive Justice	-.041	-.062	.180*		.518**	.324**	.434**
Procedural Justice	-.204**	-.207	.201**	.518**		.611**	.719**
Interpersonal Justice	-.189**	-.228**	.212**	.324**	.611**		.763**
Informational Justice	-.244*	-.208**	.227**	.434**	.719**	.763**	

All Ns = 201. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.

The correlations between CWB and Organizational Justice factors (Hypothesis 7) are displayed in Table 4. Hypothesis 7 was fully supported with statistically significant negative correlations between CWB and all Organizational Justice factors. Hypothesis 7a was supported by a negative correlation between Distributive Justice and CWB ($r = -.152, p < .05$). Hypothesis 7b was supported by a negative correlation between Procedural Justice and CWB ($r = -.148, p < .05$). Hypothesis 7c was supported by a negative correlation between Interpersonal Justice and CWB ($r = -.264, p < .01$). Hypothesis 7d was supported by a negative correlation between Informational Justice and CWB ($r = -.213, p < .05$).

Table 4
Counterproductive Work Behavior and Organizational Justice Factor Correlations

	Distributive Justice	Procedural Justice	Interpersonal Justice	Informational Justice	CWB
Distributive Justice		.518**	.324**	.434**	-.152*
Procedural Justice	.518**		.611**	.719**	-.148*
Interpersonal Justice	.324**	.611**		.763**	-.264**
Informational Justice	.434**	.719**	.763**		-.213**
CWB	-.152*	-.148	-.264	-.213**	
N = 201. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.					

Hypothesis 8 examined whether Organizational Justice and WLB predicted significant variance in CWB. Hypothesis 8 was tested through hierarchical regression. Hypothesis 8a explored whether Organizational Justice predicted significant variance in CWB. The Organizational Justice factors explained 7.8% of variance in CWB (Model 1; $p = .003$). Hypothesis 8a was supported.

Counterproductive Work Behavior Regressed on Organizational Justice and Work- Life Balance

Model	Variables	R	R ²	Adjusted R ²	Standard Error of Estimate	ΔR ²	F	Df	p
1	Organizational Justice ^a	.279	.078	.059	4.64514		4.128	4, 196	.003
2	Organizational Justice ^a , Work Life Balance ^b	.451	.204	.175	4.34947	.126	10.184	3, 193	< .001

^a Predictors: Informational Justice, Distributinal Justice, Procedural Justice, and Interpersonal Justice; ^b PLIW, WPLE, and WIPL

Table 6

Coefficients for Counterproductive Work Behavior Regressed on Organizational Justice and Work-Life Balance

Model	Variables	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>P</i>
		B	Standard Error	Beta		
1	(Constant)	21.535	1.529		14.088	< .001
	Distributive Justice	-.145	.121	-.097	-1.200	.232
	Procedural Justice	.065	.081	.086	.809	.419
	Interpersonal Justice	-.371	.154	-.258	-2.403	.017
	Informational Justice	-.032	.110	-.035	-.287	.774
2	(Constant)	17.123	2.248		7.619	< .001
	Distributive Justice	-.160	.114	-.107	-1.401	.163
	Procedural Justice	.104	.076	.136	1.370	.172
	Interpersonal Justice	-.291	.145	-.203	-2.003	.047
	Informational Justice	.015		.017	.146	.884
	WIPL	.085	.055	.106	1.536	.126
	PLIW	.312	.081	.264	3.855	< .001
	WPLE	-.223	.074	-.202	-3.004	.003

Chapter V

Discussion

Evaluation of Findings

Employee perceptions of WLB and organizational justice factors were found to influence CWBs in an organization. This suggests that WLB perceptions and organizational justice perceptions are factors that should be addressed along with job satisfaction, personality, stress, negative emotions, boredom and other potential causes of CWB (Klotz & Buckley, 2013). The relationships identified within this study display weak to moderate correlations among study variables.

These findings suggest that organizations need to continue to explore alternative methods of generating unbiased feedback from employees. An unfortunate reality in many organizations is that CWBs frequently go unreported and unaddressed (Greco, O'Boyle, & Walter, 2014). Failure to address these behaviors could stem partially from non-response bias. Non-response bias pertains to errors in determining characteristics of a population caused by over-response to assessments of positive behaviors and under response to assessments of negative behavior.

This refusal to report the full extent of CWBs or perceptions of work-life conflict could itself be interpreted as an indicator that the employees most likely to engage in CWBs may be displaying withdrawal behaviors through their refusal to contribute accurate responses. However, it is likely that participants in this study provided appropriate responses regarding their perceptions of WLB, organizational justice, and CWB present in their organization. In this case several useful implications can be drawn from these findings that could help in cultivating a more productive and engaging organizational environment.

The study found that employees experiencing higher levels of work interference with personal life or personal life interference with work are more likely to be involved in CWB. Organizations seeking to reduce incidents of CWB influenced by time-based conflict could adopt work-life flexibility policies. Such work-life flexibility policies could extend the availability of health or personal leave time, flex-time, and telework options for employees (Berg, Kossek, Misra, & Belman, 2014).

Organizations can also implement employee assistance programs or other counseling options to provide employees with opportunities to address strain-based work-life conflict and reduce the potential for CWBs. Employee assistance programs or other counseling opportunities could be provided by in-house counselors meeting with individual employees, outside therapists regularly visiting with individual employees in their workplace, or outside therapists regularly meeting with employees at a different location (Tompkins, 2003).

The findings of this study also reinforce the importance of developing a strong organizational justice climate for organizations seeking to reduce employee CWBs and perceptions of work-life conflict among employees. Negative relationships among the WLB factors of work interference with personal life and personal life interference with work and the organizational justice factors of procedural justice, interpersonal justice, and informational justice could suggest employees are less likely to perceive conflicts between their work roles and personal life roles when they view the policies and interactions with authority figures that influence their work roles are fair. No relationship was shown between these WLB factors and distributive justice perceptions, which could indicate that pay and other rewards are not sufficient to offset the strain work-life conflict imposes on employees.

All organizational justice factors were found to have negative correlations with counterproductive work behaviors. This is consistent with previous studies that have found significant negative relationships between organizational justice and both organizational CWBs and interpersonal CWBs (Devonish & Greenidge, 2010). The relationship between organizational justice and CWB was moderated by WLB perceptions. This would suggest that CWBs are more likely to occur when organizational justice perceptions and WLB perceptions are high.

Limitations and Future Research

This study employed self-report survey measures to explore employee perceptions of CWB, organizational justice, and WLB. The use of these survey measures made it difficult for the author of this study to control against the potential of non-response bias (Greco et al., 2014). Future research could explore the relationships between CWB, WLB, and organizational justice using methods other than self-report surveys in order to reduce this potential problem.

One item on the interpersonal justice section of Colquitt's (2001) OJQ was excluded from the study analysis due to an insufficient number of participant responses. The excluded item asked whether the authority figure had refrained from improper remarks or comments. Although the item could have been maintained, the author did not feel the exclusion of this item from the study analysis had a significant influence on the results. The remaining items included in the interpersonal justice portion of the scale explored similar information regarding employees' interactions with their supervisors.

An additional limitation of this study was a lack of diversity in terms of age and work experience. Despite the collection of data from numerous sources, the results showed the majority of respondents were college age females. The present results are meaningful but future

search could target diverse populations in terms of race, culture, and religion in order to generate a more complete picture of the relationships existing among work-life balance, organizational justice perceptions, and counterproductive work behaviors in the workplace (Kamenou, 2008).

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in social psychology* (Vol. 2, pp. 267-299). New York, NY: Academic Press.
- Allen, T. D., & Finkelstein, L. M. (2014). Work-family conflict among members of full-time dual-earner couples: An examination of family life stage, gender, and age. *Journal of Occupational Health Psychology, 19*, 376-384. doi:10.1037/a0036941
- Ambrose, M. L., Schminke, M., & Mayer, D. M. (2013). Trickle-down effects of supervisor perceptions of interactional justice: A moderated mediation approach. *Journal of Applied Psychology, 98*, 678-689. doi:10.1037/a0032080
- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology, 16*, 151-169. doi:10.1037/a0022170
- Appelbaum, S. H., Cottin, J., Paré, R., & Shapiro, B. T. (2006). Employee theft: From behavioural causation and prevention to managerial detection and remedies. *Journal of American Academy of Business, Cambridge, 9*(2), 175-182.
- Berg, P., Kossek, E. E., Misra, K., & Belman, D. (2014). Work-life flexibility policies: Do unions affect employee access and use? *Industrial and Labor Relations Review, 67*, 111-137.
- Bobocel, D. R. (2013). Coping with unfair events constructively or destructively: The effects of overall justice and self-other orientation. *Journal of Applied Psychology, 98*, 720-731. doi:10.1037/a0032857

- Brauchli, R., Bauer, G. F., & Hämmig, O. (2011). Relationship between time-based work-life conflict and burnout: A cross-sectional study of employees in four large Swiss enterprises. *Journal of Swiss Psychology*, 70, 165-173. doi:10.1024/1421-0185/a000052
- Chernyak-Hai, L., & Tziner, A. (2014). Relationships between counterproductive work behavior, perceived justice and climate, occupational status, and leader-member exchange. *Journal of Work and Organizational Psychology*, 30, 1-12. doi:10.5093/tr2014a1
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400. doi:10.1037/0021-9010.86.3.386
- Daipuria, P., & Kakar, D. (2013). Work-life balance for working parents: Perspectives and strategies. *Journal of Strategic Human Resource Management*, 2(1), 45- 52.
- Del Campo, R. G., Cook, A., & Arthur, M. M. (2013). Cultural differences in work-family policies and perceptions of organizational support. *Employee Responsibilities and Rights Journal*, 25, 23-39. doi:10.1007/s10672-011-9188-9
- Devonish, D., & Greenidge, D. (2010). The effect of organizational justice on contextual performance, counterproductive work behaviors, and task performance: The moderating role of ability-based emotional intelligence. *International Journal of Selection and Assessment*, 18, 75-86. doi:10.1111/j.1468-2389.2010.00490.x
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59, 291-301. doi:10.1006/jvbe.2001.1803
- Gilbert, J. A., Raffo, D. M., & Sutarso, T. (2013). Gender, conflict, and workplace bullying: Is civility policy the silver bullet? *Journal of Managerial Issues*, 25(1), 79-98.

- Glaser, W., & Hecht, T. D. (2012). Work-family conflicts, threat-appraisal, self-efficacy and emotional exhaustion. *Journal of Managerial Psychology*, 28, 164-182. doi:10.1108/02683941311300685
- Grawitch, M. J., & Barber, L. K. (2010). Work flexibility or nonwork support? Theoretical and empirical distinctions for work-life initiatives. *Consulting Psychology Journal: Practice and Research*, 62, 169-188. doi:10.1037/a0020591
- Greco, L. M., O'Boyle, E. H., & Walter, S. L. (2014). Absence of malice: A meta-analysis of non-response bias in counterproductive work behavior research. *Journal of Applied Psychology*, Advance online publication. <http://dx.doi:10.1037/a0037495>.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, 12, 9-22. doi:10.2307/257990
- Hayman, J. (2005). Psychometric assessment of an instrument designed to measure work life balance. *Research and Practice in Human Resource Management*, 13(1), 85-91.
- Ho, V. T. (2012). Interpersonal counterproductive work behaviors: Distinguishing between person-focused and task-focused behaviors and their antecedents. *Journal of Business Psychology*, 27, 467-482. doi:10.1007/s10869-012-9256-7
- Hung, T.-K., Chi, N.-W., & Lu, W.-L. (2009). Exploring the relationships between perceived coworker loafing and counterproductive work behaviors: The mediating role of a revenge motive. *Journal of Business and Psychology*, 24, 257-270. doi:10.1007/s10869-009-9104-6
- Jacobs, G., Belschak, F. D., & Den Hartog, D. N. (2014). (Un)ethical behavior and performance appraisal: The role of affect, support, and organizational justice. *Journal of Business Ethics*, 121, 63-76. doi:10.1007/s10551-013-1687-1

- Jin, J. F., Ford, M. T., & Chen, C. C. (2013). Asymmetric differences in work-family spillover in North America and China: Results from two heterogeneous samples. *Journal of Business Ethics*, 113, 1-14. doi:10.1007/s10551-012-1289-3
- Judge, T. A., & Colquitt, J. A. (2004). Organizational justice and stress: The mediating role of work-family conflict. *Journal of Applied Psychology*, 89, 395-404. doi:10.1037/0021-9010.89.3.395
- Kamenou, N. (2008). Reconsidering work-life balance debates: Challenging limited understanding of the 'life' component in the context of ethnic minority women's experiences. *British Journal of Management*, 19(Suppl. 1), S99-S109. doi:10.1111/j.1467-8551.2008.00575.x
- Karatepe, O. M. (2013). The effects of work overload and work-family conflict on job embeddedness and job performance the mediation of emotional exhaustion: The mediation of job exhaustion. *International Journal of Contemporary Hospitality Management*, 25, 614- 634. doi:10.1108/09596111311322952
- Klotz, A. C., & Buckley, M. R. (2013). A historical perspective of counterproductive work behavior targeting the organization. *Journal of Management History*, 19, 114-132. doi:10.1108/17511341311286222
- Koubova, V. & Buchko, A. A. (2013). Work-life balance emotional intelligence as a crucial component of achieving both personal life and work performance. *Management Research Review*, 36, 700-719. doi:10.1108/MMR-05-2012-0115
- Krischer, M. M., Penney, L. M., & Hunter, E. M. (2010). Can counterproductive work behaviors be productive? CWB as emotion-focused coping. *Journal of Occupational Health Psychology*, 15, 154-166. doi:10.1037/a0018349

- Le Roy, J., Bastounis, M., & Minibas-Poissard, J. (2012). Interactional justice and counterproductive work behaviors: The mediating role of negative emotions. *Social Behavior and Personality*, 40, 1341-1356. doi:10.2224/sbp.2012.40.8.1341
- Marcus, B., Taylor, O. A., Hastings, S. E., Sturm, A., & Weigelt, O. (2013). The structure of counterproductive work behavior: A review, a structural meta-analysis, and a primary study. *Journal of Management*, Advance online publication. doi:10.1177/0149206313503019.
- Meier, L. L., & Spector, P. E. (2013). Reciprocal effects of work stressors and counterproductive work behavior: A five-wave longitudinal study. *Journal of Applied Psychology*, 98, 529-539. doi:10.1037/a0031732
- Molino, M., Ghislieri, C., & Cortese, C. G. (2013). When work enriches family-life: The mediational role of professional development opportunities. *Journal of Workplace Learning*, 25, 98-113. doi:10.1108/13665621311299780
- Nelson, M. F., & Tarpey, R. J. (2010). Work scheduling satisfaction and work life balance for nurses: The perception of organizational justice. *Academy of Health Care Management Journal*, 6(1), 25-36.
- Odle-Dusseau, H. N., Britt, T. W., & Bobko, P. (2012). Work-family balance, well-being, and organizational outcomes: Investigating actual versus desired work/family time discrepancies. *Journal of Business Psychology*, 27, 331-343. doi:10.1007/s10869-001-9246-1
- Parkes, L. P., & Langford, P. H. (2008). Work-life balance or work-life alignment? A test of the importance of work-life balance for employee engagement and intention to stay in organizations. *Journal of Management and Organization*, 14, 267-284.

- Quarat-ul-ain, Khattak, M. A., & Iqbal, N. (2013). Impact of role conflict on job satisfaction, mediating role of job stress in private banking sector. *Interdisciplinary Journal of Contemporary Research in Business*, 4, 711-722.
- Rousseau, V, Salek, S., Aubé, C., & Morin, E. M. (2009). Distributive justice, procedural justice, and psychological distress: The moderating effect of coworker support and work autonomy. *Journal of Occupational Health Psychology*, 14, 305-317.
doi:10.1037/a0015747
- Sauser, W. I., Jr. (2007, Summer). Employee theft: Who, how, why, and what can be done. *SAM Advanced Management Journal*, 72(3), 13-25.
- Skarlicki, D. P., van Jaarsveld, D. D., & Walker, D. D. (2008). Getting even for customer mistreatment: The role of moral identity in the relationship between customer interpersonal justice and employee sabotage. *Journal of Applied Psychology*, 93, 1335-1347. doi:10.1037/a0012704
- Spector, P. E., Bauer, J. A., & Fox, S. (2010). Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know? *Journal of Applied Psychology*, 95 (4), 781-790.
doi:10.1037/a0019477
- Spector, P. E., & Fox, S. (2005). A model of counterproductive work behavior. In S. Fox, & P. E. Spector (Eds.). *Counterproductive workplace behavior: Investigations of actors and targets* (pp. 151-174). Washington, DC: American Psychological Association.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68, 446-460. doi:10.1016/j.jvb.2005.10.005

- Thibaut, J. & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsboro, NJ: Lawrence Erlbaum Associates.
- Tompkins, L. M. (2003). An employee assistance program: A study of its scope, use, behavioral change, volunteerism, and confidentiality. *Dissertations Abstracts International*, 62, 992B.
- Tziner, A. & Sharoni, G. (2014). Organizational citizenship behavior, organizational justice, job stress, and work-family conflict: Examination of their interrelationships with respondents from a non-Western culture. *Journal of Work and Organizational Psychology*, 30, 35-40. doi:10.5903/tr2015a5
- Volpone, S. D., & Avery, D. R. (2013). It's self defense: How perceived discrimination promotes employee withdrawal. *Journal of Occupational Health Psychology*, 18, 430-448. doi:10.1037/a0034016
- Wei, F., & Si, S. (2013). Tit for tat? Abusive supervision and counterproductive work behaviors: The moderating effects of locus of control and perceived mobility. *Asia Pacific Journal of Management*, 30, 281-296. doi:10.1007/s10490-011-9251-y
- Wood, S., Totterdell, P., & Michaelides, G. (2013). The impact of fluctuating workloads on well-being and the mediating role of work-nonwork interference in this relationship. *Journal of Occupational Health Psychology*, 18, 106-119. doi:10.1037/a0031067
- Yang, L.-Q., Bauer, J., Johnson, R. E., Groer, M. W., & Salomon, K. (2014). Psychological mechanisms that underlie the effects of interactional unfairness on deviant behavior: The role of cortisol activity. *Journal of Applied Psychology*, 99, 310-321. doi:10.1037/a0034413

ellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87, 1068-1076.
doi:10.1037/0021-9010.87.6.1068

Zoghbi-Manrique-de-Lara, P. (2010). Employee deviance as a response to injustice and task-related discontent. *The Psychologist-Manager Journal*, 13, 131-146.
doi:10.1080/10887156.2010.500256

Appendix A

Items from the Work-Life Balance Scale (Hayman, 2005)

The following items are designed to measure how you view your personal life and your work life as dimensions of work life balance. Answer each item as carefully and as accurately as you can by selecting the number that corresponds to your choice.

	Not at all			Sometimes			All the time
Personal life suffers because of work	1	2	3	4	5	6	7
Job makes personal life difficult	1	2	3	4	5	6	7
Neglect personal needs because of work	1	2	3	4	5	6	7
Put personal life on hold for work	1	2	3	4	5	6	7
Miss personal activities because of work	1	2	3	4	5	6	7
Struggle to juggle work and non-work	1	2	3	4	5	6	7
Happy with the amount of time for non-work activities*	1	2	3	4	5	6	7
Personal life drains me of energy for work	1	2	3	4	5	6	7
Too tired to be effective at work	1	2	3	4	5	6	7
My work suffers because of my personal matters	1	2	3	4	5	6	7
Hard to work because of personal matters	1	2	3	4	5	6	7
Personal life gives me energy for my job	1	2	3	4	5	6	7
Job gives me energy to pursue personal activities	1	2	3	4	5	6	7
Better mood at work because of personal life	1	2	3	4	5	6	7
Better mood because of my job	1	2	3	4	5	6	7

* Reverse coded item

Appendix B

Items from the Organizational Justice Questionnaire (Colquitt, 2001)

The following items refer to your work outcomes (such as pay, pay raise, promotional opportunities etc.). To what extent:

	To a small extent				To a large extent
Does your (outcome) reflect the effort you have put into your work?	1	2	3	4	5
Is your (outcome) appropriate for the work you have completed?	1	2	3	4	5
Does your (outcome) reflect what you have contributed to the organization?	1	2	3	4	5
Is your (outcome) justified, given your performance?	1	2	3	4	5

The following items refer to the procedures used to arrive at your work outcomes. To what extent:

	To a small extent				To a large extent
Have you been able to express your views and feelings during those procedures?	1	2	3	4	5
Have you been able to express your views and feelings during those procedures?	1	2	3	4	5
Have those procedures been applied consistently?	1	2	3	4	5
Have those procedures been free of bias?	1	2	3	4	5
Have those procedures been based on accurate information?	1	2	3	4	5
Have you been able to appeal the (outcome) arrived at by those procedures?	1	2	3	4	5
Have those procedures upheld ethical and moral standards?	1	2	3	4	5

The following items refer to the authority figure who enacted the procedure. To what extent:

	To a small extent				To a large extent
Has (he/she) treated you in a polite manner?	1	2	3	4	5
Has (he/she) treated you with dignity?	1	2	3	4	5
Has (he/she) treated you with respect	1	2	3	4	5
Has (he/she) refrained from improper remarks or comments	1				

the following items refer to (the authority figure who enacted the procedure). To what extent:

	To a small extent				To a large extent
Has (he/she) been candid in (his/her) communications with you?	1	2	3	4	5
Has (he/she) explained the procedures thoroughly?	1	2	3	4	5
Were (his/her) explanations regarding the procedures reasonable?	1	2	3	4	5
Has (he/she) communicated details in a timely manner?	1	2	3	4	5
Has (he/she) seemed to tailor (his/her) communications to individuals' specific needs?	1	2	3	4	5

Counterproductive Work Behavior Checklist (10-item version; Spector et al., 2010)

	Never	Once or Twice	Once or Twice per month	Once or Twice per week	Every day
How often have you done each of the following things on your present job?	1	2	3	4	5
Purposely wasted your employer's materials/supplies?	1	2	3	4	5
Complained about insignificant things at work?	1	2	3	4	5
Told people outside the job what a lousy place you work for?	1	2	3	4	5
Came to work late without permission?	1	2	3	4	5
Stayed home from work and said you were sick when you weren't?	1	2	3	4	5
Insulted someone about their job performance?	1	2	3	4	5
Made fun of someone's personal life?	1	2	3	4	5
Ignored someone at work?	1	2	3	4	5
Started an argument with someone at work?	1	2	3	4	5
Insulted or made fun of someone at work?	1	2	3	4	5