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The Relationship Between Occupational Stress and Instigator Workplace Incivility as Moderated by Personality: A Test of an Occupational Stress and Workplace Incivility Model

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THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND INSTIGATOR

WORKPLACE INCIVILITY AS MODERATED BY PERSONALITY TO

ORGANIZATIONAL OUTCOMES: A TEST OF AN OCCUPATIONAL STRESS

AND WORKPLACE INCIVILITY MODEL

A dissertation submitted in partial fulfillment of the

requirements for the degree of

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in

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AND

HUMAN RESOURCE DEVELOPMENT

by

Laura C. Batista

2017

To: Dean Michael R. Heithaus
      College of Arts, Sciences and Education

This dissertation, written by Laura C. Batista, and entitled The Relationship Between Occupational Stress and Instigator Workplace Incivility as Moderated by Personality to Organizational Outcomes: A Test of an Occupational Stress and Workplace Incivility Model, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Date of Defense: June 29, 2017

The dissertation of Laura C. Batista is approved.

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Dean Michael R. Heithaus
College of Arts, Sciences and Education

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Andrés G. Gil
Vice President for Research and Economic Development
and Dean of the University Graduate School

Florida International University, 2017

DEDICATION

I dedicate this dissertation to my parents, my siblings, my fiancé and my major professor. Their love, encouragement, unwavering support and incredible patience have made it possible for me to be able to successfully complete this academic endeavor. Their continued belief and confidence in me has made it possible for me to achieve this long-term academic goal.

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Completing my doctoral studies has been a goal that I have held since I began my academic journey as an undergraduate student. Achieving this academic goal has been made possible by all the support I have received throughout the years by various important people in my life. I would like to acknowledge my dissertation committee members and Dr. Linda Bliss for all their continued support and feedback that has continued to improve this work. I would also like to acknowledge my major professor and mentor, who has been instrumental in my academic journey. Finally, my family has been supporting me and motivating me to continue this journey and have provided me with the additional drive to achieve this academic goal.

ABSTRACT OF THE DISSERTATION

THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND INSTIGATOR

WORKPLACE INCIVILITY AS MODERATED BY PERSONALITY TO

ORGANIZATIONAL OUTCOMES: A TEST OF AN OCCUPATIONAL STRESS

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Laura C. Batista

Florida International University, 2017

Miami, Florida

Professor Thomas G. Reio Jr., Major Professor

In the face of competition and competing demands on organizations, employees are taxed to exert more effort with fewer resources. The type of environment can create the recipe for increased levels of occupational stress and an environment of increased workplace incivility. Therefore, it is not surprising that research has begun to look at the interaction between occupational stress and workplace incivility. The current work environment requires employees to exert more effort or face negative consequences from supervisors and peers. All too often, the salary increases, bonus structure, career progression, job security and mobility that might be reasonably expected from producing such extra effort do not align with organizational reality. The vexing situation creates workplace settings in which employees would be more likely to release their frustrations generated by unmet expectations through engaging in uncivil behaviors. Andersson and Pearson (1999) define workplace incivility as a "low-intensity deviant behavior with

ambiguous intent to harm the target, in violation of workplace norms for mutual respect"
(p. 457).

The purpose of this quantitative study was to explore the relationship between occupational stress and instigator workplace incivility, as moderated by personality, to select organizational outcomes (i.e., perceived physical health and intent to turnover). Data were collected from 206 fulltime working adults in the healthcare industry utilizing Amazon MTurk. Moderated hierarchical regressions were conducted to test the possible moderating role of personality on the stress-incivility relationship; the results demonstrated partial support for H_1-H_4. Hierarchical regression analyses were conducted also to explore the degree stress and incivility predicted the outcome variables of perceived physical health and intentions to turnover; the data indicated support for the notion that greater stress and incivility positively predicted turnover intent.

The findings suggest that personality did play a role in the stress-incivility relationship. Conscientiousness and agreeableness dampened the relationship, while neuroticism and extraversion strengthened the relationship. Further, this study found that intent to turnover increased as workplace incivility also increased, even after controlling for stress. Future research was proposed to test the models examined in this study in different settings, with additional moderators, and longitudinally. The practical findings suggest the possible utility of stress reduction training to reduce the likelihood of uncivil behavior.

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CHAPTER I

INTRODUCTION

The present study explored the relationship between occupational stress and workplace incivility as moderated by personality. Chapter 1 begins with identifying the background of the problem, the problem statement, the purpose of the study, research questions and hypotheses, and conceptual framework. Chapter 1 also discusses the significance of the study, delimitations, and definition of terms. Finally, the chapter closes with the presentation of an integrated occupational stress model that will guide the research study.

Background of the Problem

The Occupational Health and Safety Act (OSHA) of 1970 was passed to protect and promote employee health. The OSHA Act is a clear indication of the importance placed on providing a healthy work environment and conditions for all employees. In addition to the United States government, scholars have also taken an interest in understanding the cause, relationship and impact of occupational stress. There were over two thousand articles published on this topic between 1990 and 1999 (Hart & Cooper, 2001). Although most employees experience some level of stress at work, chronic continuous exposure to occupational stress has been linked to negative physical health, such as, hypertension, cardiovascular illnesses, abdominal pain, decrease cognitive functioning, mental health outcomes, and workplace incivility, which has been found to magnify the negative health-related outcomes (Andre-Peterson, Engstrom, Hedblad, Janzon, & Rosvall, 2007; Bridger, Brasher, Dew, Sparshott, & Kilminster, 2010; Robinson & Bennett, 1995; Theorell & Karasek, 1996). Employers must comply with

OSHA guidelines to provide and promote a well-being environment under the OSHA Act of 1970; therefore, making occupational stress an area of concern garnishing attention from the U.S. government and employers.

In addition to compliance concerns, understanding the impact of occupational stress on employees is critical as it can have negative effects on the organization. Occupational stress has been estimated to cost about $300 billion annually to organizations in decreased productivity, turnover, absenteeism, and health issues (Leiter & Maslach, 2005). The Bureau of Labor Statistics (1999) reported 44% of occupational stress incidents resulted in 31 or more days away from work. The study conducted by the Bureau of Labor Statistics also found that white-collar workers and women reported higher incidents of occupational stress than men and blue-collar workers. Occupational stress is not only detrimental to employees health, but it is also costly to organizations in the form of lost productivity that resulted from tardiness, days missed, voluntary turnover, decreased job satisfaction, and decreased job performance (Motowidlo, Manning, & Packard, 1998; Yahaya, Yahaya, Tamyes, Ismail & Jaalam, 2010).

In the face of competing demand, global market demands and competition among organizations, employees are taxed to exert more effort with fewer resources. The work environment described above can create the recipe for increased levels of occupational stress and an environment of increased workplace incivility (Griffiths, 1998; Schabracq & Cooper, 2000). Therefore, it is not surprising that research has begun to look at the interaction between occupational stress and workplace incivility. The current work environment requires employees to exert more effort or face negative consequences from supervisors and peers. All too often, the salary increases, bonus structure, career

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progression, job security and mobility that might be reasonably expected from producing such extra effort do not align with organizational reality. This vexing situation creates workplace settings in which employees would be more likely to release their frustrations generated by unmet expectations through engaging in uncivil behaviors (Reio & Ghosh, 2009). Consequently, it is imperative for human resource development professionals to understand the workplace dynamics that enhance employee well-being (e.g., reducing occupational stress) and become attuned to incidences of uncivil behaviors that can jeopardize functioning productively at work (Estes & Wang, 2008; Ghosh, Jacobs & Reio, 2011; Gilbreath & Montesino, 2006).

Research in the field of human resource development (HRD) focuses heavily on a wide array of antecedent variables that have been linked theoretically and empirically to both positive and negative organizational outcomes. Examples of such variables are occupational stress, workplace incivility and personality traits (Reio & Ghosh, 2009). Human Resource Development researchers, for example, could identify promising moderating and individual difference variables associated with reducing stress and uncivil behavior that could be addressed in intervention programs. Moreover, HRD professionals in conjunction with managers need to find ways of implementing proactive programs that might create positive environments focused on reducing uncivil behavior that would, in turn, increase employee well-being. Employee participation in such programs has been demonstrated to be effective in reducing the likelihood of the increased occupational stress manifesting in uncivil behaviors that are associated with increased turnover intentions and voluntary turnover (Avey, Luthans & Jensen, 2009; Reio & Ghosh, 2009; Shuck, Twyford, Reio & Shuck, 2014).

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Stress is not a new concept, as it was first described and operationalized well over 50 years ago. Selye (1936) defined stress as a non-specific response to stimuli. As the world of work has become more technologically sophisticated, and the line between work and home has been blurred, so has the definition of stress expanded beyond a response to a stimulus and it has now been presented in three categories or approaches: (a) engineering approach, in which stress is described as a level of demand; (b) physiological approach, stress is defined by the physiological changes undergone by the person while they are in a state of stress; and (c) psychological approach, this approach defines stress as an interaction between individuals and their environment (Cox & Griffiths, 1995). There are several models of occupational stress that align with one of the approaches mentioned above to define stress. A strong body of evidence indicates that exposure to adverse psychosocial work conditions is a major hazard for the health of workers in modern economies (Hodgson, Jones, Elliot, & Osman, 1993; Karasek, 1979; Rial-Gonzalez, 2000). Physical conditions of stress are: hypertension, heart disease, strokes, diabetes, and ulcers, to name a few (Karasek, 1979). The psychological conditions that result from stress are: depression, accidents, suicidal behavior, alcoholism, substance abuse (Gabriel, 2000; Wang & Pattern, 2001).

Workplace incivility is another factor affecting the workplace today. As with occupational stress, workplace incivility has also been associated negatively with employee perceptions of physical health, organizational commitment, and job satisfaction (Reio & Ghosh, 2009), as well as health-related issues that decrease productivity and ultimately the organizations bottom line (Porath & Pearson, 2013).

Occupational stress also impacts employee behavior. Workplace incivility has been found to occur in chronic stressful work environments, like healthcare settings (Johnson & Indvik, 2001). Andersson and Pearson (1999) define workplace incivility as a "low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect" (p. 457). Specifically, "uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (p. 457). Similarly to occupational stress, scholars have found negative health-related outcomes in work environments which are characterized by uncivil behavior (Lim, Cortina & Magley, 2008). Consequently, occupational stress and workplace incivility lead to loss of work days due to health-related issues, as well as having a negative impact on individuals' mental health.

Problem Statement

The world of work continues to change. The continued advances in technology have created blurred lines between work and home life (Schabracq & Cooper, 2000). It is less clear to employees when work ends and home life begins, making it all-too-easy for work to spill over into one's home life. Thus, it is important to understand how we can mitigate the negative impact of stress on employees in workplace settings. There is a gap in the current literature which fails to address the possible link between workplace incivility and occupational stress and its concomitant organizational outcomes, such as declined perceived physical health and turnover intent (a strong predictor of actual voluntary turnover). Workplace incivility tends to be examined from either the target, onlooker or instigator perspective (Reio & Ghosh, 2009). We need more research about how incivility affects organizational outcomes, especially from an instigator perspective

because so little research has examined this type of incivility. Having a clear understanding of a link between stress and workplace incivility from an instigator perspective will inform HR researchers and professionals of possible organizational programs to put in place to lessen the negative organizational outcomes (e.g., decreased productivity, absences, greater turnover intent, decreased job performance and satisfaction).

Additionally, while it is important to understand how occupational stress may be linked to the incidence of workplace incivility, promising moderator variables that might strengthen or weaken the relationship between the two variables must be investigated as well because so little research exists currently. Individual difference variables, such as personality traits, may be critical moderators of the stress-incivility relationship. Emotional stability, for example, has been shown to be linked to both stress and incivility (Reio, 2011), but not tested as a moderator between the two variables. Additionally, both conscientiousness and agreeableness have been found to have a negative relationship to stress and counterproductive work behaviors (Bowling & Eschleman, 2010). However, negative affectivity has been found to have a positive relationship with stress and a closely related construct, counterproductive workplace behavior (Bowling & Eschleman, 2010). The new insights gained from testing personality trait moderators of the relationship between stress and incivility might be useful for guiding future theory building, empirical research and practice-related efforts.

Purpose of the Study

The purpose of this study was to explore the relationship between occupational stress and workplace incivility (instigator) as moderated by personality with select

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organizational outcomes (i.e., perceived physical health and intent to turnover). Through this research and its findings, it will help enrich the research literature by further demonstrating a link between occupational stress and workplace incivility and how individual difference factors (i.e., personality traits) play a role in this relationship. Additionally, the findings of this study will help to guide practice, by using the further understanding gained from this study to implement programs in the workplace which will lead to decrease intention to turnover and increase physical health.

Research Questions and Hypotheses

There were two questions guiding this study: (a) What is the relationship between occupational stress and workplace incivility (instigator), as moderated by personality? and, (b) What is the relationship among occupational stress and workplace incivility (instigator) and important organizational outcomes (i.e., perceived physical health and intent to turnover)? To explore these research questions, nine hypotheses were tested. Research question 1: What is the relationship between occupational stress and workplace incivility, as moderated by personality?

When testing the hypotheses, when incivility is mentioned, the researcher is referring to instigator incivility, and not onlooker or target incivility, which is beyond the scope of this research. Further, for the purposes of this research, the imagination/intellect type of personality will be considered synonymous with McCrae and Costa's (1987) more commonly known openness to experience variable (Goldberg, 1992).

H_1: Extraversion moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H$_2$:   Neuroticism moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H$_3$:   Conscientiousness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H$_4$:   Agreeableness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H$_5$:   Imagination/intellect moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

Research question 2: What is the relationship among occupational stress and workplace incivility and organizational outcomes (i.e., perceived physical health and intent to turnover)?

H$_6$:   After controlling for occupational stress, workplace incivility will be negatively related to perceived physical health.

H$_7$:   After controlling for occupational stress, workplace incivility will be positively related to turnover intention.

Conceptual Framework

The current study will be guided by Lazarus and Folkman's (1984) transactional approach of occupational stress, specifically using the social environmental and the person-environment-fit models (i.e., role ambiguity, role conflict, and organizational constraint). The researcher used the Social Environment model, which is also referred to as the Institute of Social Research (ISR), to explore the relationship between occupational stress and both health- and organizational-related outcomes (Choi, Kawakami, Chang, Koh, Bjorner, Punnett & Karasek, 2008; Probst, 2010), as well as a component of the

Person-Environment-Fit model, specifically understanding the experienced mismatch between the individual's goals and the supplies/equipment made available by the work environment. Additionally, the Robinson and Bennett's (1995) typology of workplace incivility to understand the relationship between occupational stress and workplace incivility was employed. Further, the Big Five Factor model will be used to understand the role of personality in the relationship between occupational stress and workplace incivility. The Lexical Big Five Factor model is based on the research which cataloged trait words from the lexicon (from the English language dictionary). Researchers then identified the recurrent traits which derived from the lexical research (Topolewska, Skimina, Strus, Cieciuch & Rowinski, 2014). The Lexical Big Five Factor model includes the following dimensions of personality: imagination/intellect (closely akin to openness to experience), conscientiousness, extraversion, agreeableness, and neuroticism (Goldberg, 1990, 1992; McCrae & Costa, 1987). French, Caplan and Harrison's (1982) Person-Environment-Fit model explains the relationship between the experience of a mismatch between the individual's needs/goals and the resources, materials/equipment and organizational policies which make up the environmental characteristics. Employees experiencing this type of work environment report experiencing a high level of strain. Finally, French and Kahn's (1962) Social Environment model focuses on the impact of the environmental stressors (i.e., role ambiguity, role conflict, workload and work expectations) on the level of stress experienced by the individual.

The integration of the occupational stress models will help capture a more comprehensive view and study of occupational stress through exploring the dimensions of the environmental factors and incivility. Ostry, Kelly, Demers, Mustard and Hertzman

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(2003) found the combined models explained 11.7% and 41.1% more variance

respectively when combining the models, as opposed to using the models separately.

Using the models together can increase our understanding of the nature of occupational

stress and how it is associated with negative organizational outcomes like workplace

incivility. For instance, Roberts, Scherer, and Bowyer (2011) found that occupational

stress is an antecedent of workplace incivility. The authors found occupational stress

increases employees' tendencies to engage in uncivil behaviors. Employees experiencing

occupational stress had less emotional bandwidth to be able to cope with the stressors.

Therefore, there was a tendency in these employees to express a higher amount of uncivil

workplace behaviors. Dai et al. (2008) conducted a study combining job stress models

(job demand control and effort reward imbalance) to predict burnout. The authors found

the effort-reward imbalance model explained emotional exhaustion and

depersonalization, while social support was a predictor of personal accomplishment; both

models demonstrated significant power in predicting the three dimensions of burnout.

Adding the effort-reward imbalance to the study provided additional information about

how to interpret the coping mechanisms of participants. Additional studies have also

demonstrated increased predictive power by combining the job demand-control and the

effort-reward imbalance models (Dai et al., 2008; Fillion et al., 2007).

As noted in the section above, employees' perceptions of control influence the

relationship between occupational stress and strain. A greater sense of control reduces the

sense of stress and strain. Social support also played a role in this relationship;

supervisors trained on how to support esteem-building and provide meaningful

recognition had employees with reduced levels of cortisol secretion (Theorell, 2001); that

is, less cortisol secretion is linked with reduced stress levels. Mark and Smith (2008) proposed a combined and comprehensive model of occupational stress. The authors' initial findings support the important role of the relationship between demands, control and social support, especially from supervisors. Similarly, Spector (1998, 2002) proposed an occupational stress model highlighting again the pivotal role of control and support. The author also stressed understanding the coping mechanisms of individuals, so that the organization can better help them alleviate occupational stress.

Personality traits also fit into this study's conceptual model in that they have been linked to occupational stress and incivility. Working from Goldberg's (1990, 1992) Lexical Big Five Personality Model, the imagination/intellect, conscientiousness, extraversion, agreeableness, and neuroticism personality traits should each moderate the relationship between stress and incivility. For example, neuroticism has been linked to increased stress and uncivil behavior (Reio & Sanders-Reio, 2011) because individuals high in this trait tend to react to more situations as being threatening and lack the coping skills required to manage stressful situations, which, in turn, can increase the likelihood of behaving rudely. Alternatively, imagination/intellect should moderate the stress-incivility link because a high level of this trait is associated with the willingness to try new things and being tolerant of uncertainty and rapid change. Being able to skillfully handle uncertainty leaves the individual less likely to feel increased level of stress and therefore behave uncivilly when pressed with the impulses of a rapidly changing workplace. Similar to imagination/intellect, conscientiousness and agreeableness should also moderate the stress-incivility linkage in that each should dampen the association between the variables. Thus, those who are high in any of these three traits would be

better able to handle stress (McCrae & Costa, 1987) and less likely to aggress in the form of uncivil behavior (Reio & Sanders-Reio, 2011).

Robinson and Bennett's (1995) incivility typology includes two categories (organizational and individual) and four dimensions (property, production, political, and personal aggression). The two categories are critical to understanding the antecedents or drivers to the behavior and the dimensions aid in understanding the target of the behavior. The workplace incivility typology supports the notion that incivility is linked to negative organizational outcomes. For example, Reio and Ghosh (2009), using Bennett and Robinson's (2000) interpersonal incivility scale, found that perpetrator interpersonal incivility negatively predicted perceived physical health and job satisfaction. In a study of teacher incivility, Reio and Reio (2011) discovered that 85% of the participants experienced incivility over the past year. Further, they reported that being the target of uncivil behavior from one's supervisor was associated with less organizational commitment and greater turnover intent, while coworker incivility did not explain additional variance in the regression equations. Pearson, Andersson and Wegner (2001) demonstrated that incivility matters to not only instigators and targets, but also witnesses or even those hearing about an incident because they too either withdraw more from the organization or join in the spiral of increasingly uncivil behavior. In summary, incivility has been shown to have pronounced linkages to negative organizational outcomes.

Significance of the Study

The aim of the current study is to explore the relation between occupational stress and workplace incivility (from the instigator perspective) and link of this relationship to important organizational outcomes, as moderated by personality. The current literature

concerning occupational stress has focused on the interaction of the environment and the individual or the transaction between the two. To better understand occupational stress and be better equipped to design interventions, the researcher will explore the role of personality and workplace incivility with regards to occupational stress. The current study will add to the occupational stress literature through exploring the degree to which workplace incivility is associated with occupational stress. Understanding the relationship between occupational stress and workplace incivility will add to the current literature by providing additional insight into the frequency of uncivil behavior occurrences and the degree to which they uniquely predict two vital organizational outcomes linked to the economic viability of the organization (Reio & Ghosh, 2009); that is, perceived physical health and turnover intent. Furthermore, this research is answering the call of Schilpzand, De Pater and Erez (2016) for future research into studies exploring workplace incivility from the instigator perspective, which is a proactive approach to understanding how to prevent workplace incivility; as opposed to the witnessed or experienced perspective of workplace incivility; a reactive approach on how to deal with the aftermath of workplace incivility. Additionally, including personality traits as potential moderators of the stress-incivility link will further enrich our understanding of the relationship between occupational stress and workplace incivility. The insights gained from this research might also be useful for guiding HRD and managerial practice in organizations that could reduce employee stress and reduce the likelihood of uncivil behavior, which subsequently could be associated with better physical health, less turnover intent, and ultimately less voluntary turnover.

Delimitations of the Study

While it would be ideal to study the stress-incivility link in a wide range of organizations across a number of geographic regions to increase the study's generalizability (external validity), the scope of this research will be delimited to the context of the U.S. The research will also restrict its aim to examining this hypothesized relationship among incivility instigators and not onlookers or targets of uncivil behavior. Because of the nature of this research where it was not possible to acquire actual employee turnover data, turnover intent was measured instead because it is a strong predictor of actual voluntary turnover (Reio & Ghosh, 2009).

The research will focus on one industry; that is, the healthcare industry. The researcher will focus this industry because of its vital importance to the welfare of our citizens and the costly nature of the high turnover in this industry, especially among nurses. Additionally, there have been several studies that have demonstrated a link between the stressful nature of being healthcare professionals and their propensity to engage in uncivil behaviors, which have resulted in lost productivity, escalations to physical violence, and physical health detriments (e.g., Felblinger, 2008; Hutton & Gates, 2008). Because the researcher will not have access to participant personnel files, perceived physical health will be investigated rather than actual physical health. Perceptions of physical health have been shown to be positively associated with actual physical health (Reio & Ghosh, 2009). The participants in this research will be working adults who will provide self-reports of their stress, personality traits, experience with being the perpetrator of uncivil behavior, intent to turnover, and physical health.

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        ┌─────────────────┐
        │ Personality (Big 5) │
        └─────────────────┘
                 │
┌──────────────────┐          ┌────────────────────┐      ┌──────────────────┐
│ Occupational Stress │───────│ Workplace Incivility │─────│ Physical Health  │
└──────────────────┘          └────────────────────┘      └──────────────────┘
                                                            ┌──────────────────┐
                                                            │ Intention to Turnover │
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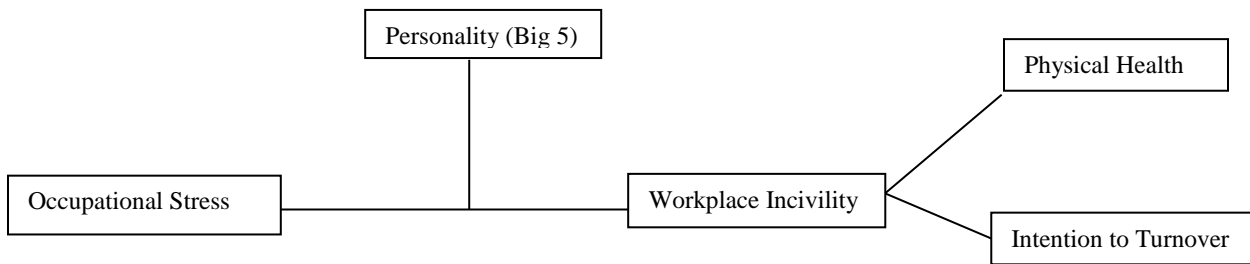
Figure 1. Conceptual model of the link between occupational stress, workplace incivility and workplace outcomes as moderated by Big Five personality traits.

Definition of Terms

Big Five Personality Factors: The Big Five factor model will be defined using Goldberg's (1990, 1992) lexical approach five-factor personality model, which includes imagination/intellect, conscientiousness, extraversion, agreeableness, and neuroticism. For the purposes of this research, imagination/intellect will be considered a synonymous term to McCrae and Costa's (1987) more commonly known openness to experience term.

Workplace Incivility: Andersson and Pearson (1999) define workplace incivility as a "low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Specifically, "uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (p. 457).

Intentions to turnover. Tett and Meyer (1993) defined intention to turnover as "… the conscious and deliberate willfulness to leave the organization" (p. 262).

Occupational stress: A process which involve the stressors (organizational, role) within an environment, which lead to potential health decline (Jex, Beehr, & Roberts, 1992; Lazarus, 1991).

CHAPTER II

LITERATURE REVIEW

Chapter II begins with the introduction and definition of occupational stress. Second, models of occupational stress are reviewed, followed by the review of workplace incivility, personality as moderator variables, and finally a review of perceived physical health. Finally, the chapter concludes with the presentation of a hypothesized holistic model of occupational stress and workplace incivility, and a summary.

Occupational Stress Overview

Occupational stress has continued to be a concern for HRD practitioners and researchers. The literature on occupation stress has demonstrated the negative impact occupational stress has on employees and on the organization's bottom line, as well as the amount of HRD research focused on examining and understanding the sources and outcomes of stress (Avey, Luthans, & Jensen, 2009). HRD professionals need to continue to focus on how to design positive work environments which will reduce occupational stress and increase employee well-being (Gilbreath & Montesino, 2006). Selye (1936) defined stress as a non-specific response to demands. However, since his broad proposed definition of stress, there has been a lack of consensus in the occupational stress literature for a definition of stress. Occupational stress has been studied through a number of different perspectives, including the engineering, physiological, and psychological approaches; each of which has helped to shape the varied definitions of stress (Cox, 1978; Cox & Griffiths, 2005). The engineering approach views stress as a demand on the system, while the physiological approach focuses on the physiological impact due to the demands on the individual. Finally, the psychological approach generally thought to be

the more complete view of occupational stress, this approach views stress as a process and an interaction between the individual and the environment. Role ambiguity and role conflict have been among the first type of constructs studied using the psychological approach (Beehr, 1995). Role ambiguity is characterized by not having adequate or the needed information to perform or complete the required task. On the other hand, role conflict occurs when there are two or more sets of incompatible demands (Kahn et al., 1964). HRD researchers have also studied individual differences, such as personality traits, to better understand the relationship of occupational stress and physiological outcomes (Restrepo, Weinstein, & Reio, 2015).

HRD and organizational researchers have continued studying different types of psychological stressors to better understand the stress process and variables involved, such as, stressors and strain. Stressors are work-related demands or events which lead to strain; for example, perceptions of not having control over work functions, or not receiving the fair amount of reward for the effort exerted. Strain is the physical and mental outcomes from stress; for example, depression and cardiovascular issues (Beehr, 1995). Therefore, Beehr (1995) defined occupational stress as occurring when work-characteristics (stressors) lead to poor physical or mental health (strain).

In the occupational stress literature, stress has been defined and conceptualized depending on the perspective (e.g., individual, interaction, or environment) and therefore the model used to study the construct (Cox & Griffiths, 2005). In the following section, I review three models representing the psychological approach of occupational stress; each will provide their own perspective of stress and focus (individual or environment). Cox (1978) suggested that the psychological approach of studying occupational stress can be

divided in two theories: transactional and interactional theories. The transactional

approach to the study of occupational stress involves the individual's environmental

perception, coping strategies, and individual differences (e.g., personality traits). On the

other hand, the interactional theories focus on the interaction between the individual and

the environment, and the outcome from that interaction. The transactional approach will

be reviewed first, using the effort-reward imbalance model and the Michigan model,

followed by the review of the interactional approach with the person-environment fit and

the demand-control models.

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Models of Occupational Stress
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Transactional Approach

Three models within Lazarus and Folkman's (1984) transactional approach of

occupational stress will be discussed. First the Effort-Reward Imbalance model, which

will be discussed followed by the Social Environment model and the Person-

Environment-Fit model, the latter two models, will help to guide the conceptual

framework of this study. The transactional approach of occupational stress focuses on the

perception the environment has on the individual therefore driving the level of stress

(Marks & Smith, 2008). Research in this approach of occupational stress, specifically

with healthcare employees, has found when there is disconnect between the environment

and employees' expectations stress increases and job satisfaction decreases (Gellis, 2002;

Siu, Cooper, & Phillips, 2013; Taylor & Kluemper, 2012).

Siegrist's (1996) model of effort-reward imbalance is based on social reciprocity

of the work contract, which suggests the level of effort exerted should be compatible or in

balance with the level of rewards received. Using this model, stress can be characterized

by a transaction between the individual and the environment in which a contractual

reciprocity is expected because of an exchange of adequate rewards (money, esteem, or career mobility/job security), measured on the effort (task), that is required to complete the task (Siegrist, 2008). If there is an imbalance between the amount of effort required and the reward received in exchange for the effort, then emotional distress will be experienced. There are two dimensions of effort: extrinsic (e.g., external pressures and demands), and intrinsic (e.g., individual's motivation). Reward is characterized by three factors: money, esteem and career (i.e., mobility and job security). In this model, an element of fairness is also manifested. If adequate rewards are not received in exchange for the effort, then the individual might perceive this as unfairness, which has been linked to lower self-esteem (Siegrist & Marmot, 2004).

Effort-reward imbalance has been operationalized in the form of the Effort-Reward Questionnaire, a 23-item; self-report five-point Likert scale which measures effort, reward, and over commitment. Effort is measured by six items, rewards is measured with 11 items, and over commitment is measured by six items. An effort-reward ratio is then derived to assess the amount of imbalance. The ratio is derived using the following formula: e/(rxc); e represents efforts, r rewards, and c the correction factor. A ratio closer to zero represents working conditions that are balanced; however, the higher the ratio (closer to one), the more imbalanced working conditions exists. Ratios closer to one represent imbalance conditions where the rewards received are not indicative of the effort (Siegrist, Starke, Chandola, Godin, Marmot, & Niedhammer, Peter, 2004). The Effort-Reward Questionnaire has been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and has been well tested in the literature.

The model has been further developed to explain under what conditions non-reciprocity is expected to occur. Non-reciprocity is expected under three conditions: dependency, strategic choice, and over commitment (Siegrist, 2008). Dependency condition refers to a type of employment contract in which the rewards are not equitable to the effort. The type of employment condition described above typically occurs with elderly employees. The second condition, strategic choice, is described as a decision made by the employee to enter into an employment contract in which there will be incongruence between the effort and the reward provided for the effort demonstrated. The type of employment condition described above typically occurs when an employee is willing to forgo current rewards for future rewards. Positioning oneself for later career promotion is indicative of this condition. The third condition is over commitment. Individuals which are highly motivated and excessively committed to their work fall into this category. Individuals falling under this condition typically have a high need for acceptance and esteem (Siegrist, 2005, 2008).

Research in using the effort-reward imbalance model to understand the impact of occupational stress on employees has found detrimental health outcomes. Additionally, high demands and low control adds to the state of emotional distress which has been linked to poor physical health, such as, increased body mass index and cholesterol concentration (Kivimäki, Leino-Arjas, Luukkonen, Riihimäki, Vahtera, & Kirjonen, 2002), higher risk of coronary heart disease (Kivimäki, Ferrie, Brunner, Head, Shipley, Vahtera, & Marmot, 2005), depression, cardiovascular disease mortality and incident of type 2 diabetes (Siegrist, 2004). Organizations need to develop policies that will lessen the incidence of stress and alleviate the impact once it occurs. Siegrist (2005) proposed

stress management training for employees and leadership training for supervisors focusing on how to provide esteem and recognition to employees.

The Social Environment model which is also referred to as the Institute of Social Research (ISR) was developed at the University of Michigan in 1962 by French and Kahn. This model is focused on the environmental/role stressors, such as role ambiguity, role conflict, workload, and role expectations impact on the level of stress experienced by the individual. In fact, The National Institute for Occupational Safety and Health (NIOSH) report (2008) found that role ambiguity and role conflict were among the factors which cause healthcare professionals to experience stress. Further, the model also explores the role of the moderators, such as personality and social support in the stress-strain relationship (Mark & Smith, 2008). The occupational stress construct will be operationalized using several instruments in order to capture the essence of this model in understanding the transaction between the environment and the perception of the individuals. The following instruments will be used: Abdel-Halim's (1978) Role Stressor 10-item scale which captures role conflict and role ambiguity; Spector and Jex (1997) Organizational Constraint 11-item which captures the perception of control latitude; and finally Spector and Jex's (1997) 5-item Quantitative Workload Inventory. These scales have been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and have been well tested in the literature.

The Social Environment model has been the foundation for the Person-Environment Fit model (French, Caplan & Harrison, 1982), because both focus on the transaction between the environment and the individual, for example organizational

constraint, which is defined as the resources, materials/equipment available to the individual. Hurrell and McLaney (1988) from the National Institute of Occupational Health and Safety (NIOSH) have advanced the model to explore how individual differences as well as other objective environmental factors impact the perceptions of stress.

Interactional Approach

The job demand-control model developed by Karasek (1979) conceptualizes stress as the interaction between the demands of the job and the control of the individual. Psychological demands are characterized as the demands that are placed on an individual to complete a task. On the other hand, control or decision latitude is the degree in which the individual can impact the load or has the skill set to facilitate completing the task. The job demand control model states that high job demands and low control will result in job strain, therefore leading to negative health outcomes.

The model can be further delineated to four levels of strain: high-strain jobs, active jobs, low-strain jobs, and passive jobs (Karasek & Theorell, 1990). The most common conceptualization of this model is the quadrant approach (as detailed above), although some researchers urge for other approaches of this model to be studied (Courvoisier & Perneger, 2010). High-strain jobs are characterized by high job demands and low control (e.g., nurse's aide, health technician, public school bus driver); on the other side of the spectrum are low-strain jobs which are described as having low job demands and high control (e.g., repairman and architect). Active jobs are referred to jobs which have high demands and control (e.g., surgeons and electrical engineers); on the other side of coin are passive jobs which have low demands and low control (e.g., janitor

or billing clerk; Karasek & Theorell, 1990). Personality traits have also been studied in conjunction with this model. In particular, Type A behavior and locus of control. Karasek and Theorell explored the relationship of Type A behaviors, which are characterized as having a need for control with their model. The authors found that Type A individuals' need for control makes the experience of having low control even more impairing for them than for other individuals. The authors found that individuals with Type A behaviors are at higher risk of heart disease when exposed to high strain. Moreover, for individuals in which locus of control is important, they will be impacted more severely from being in a low control situation; conversely, an individual who has control might perceive having additional control as more stressful.

The job-demand control construct is operationalized using the Job Content Questionnaire. The instrument has been used as a means to measure psychological demands (job demand, time pressure, and conflicting demands) and control (decision latitude/authority, and skill discretion) in the workplace (Karasek & Theorell, 1990). The scale has been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and has been well tested in the literature. However, there has been some criticism of this measure stemming from not measuring either intensity or frequency. Vagg and Spielberg (1998) proposed a new measure, the Job Stress Survey (JSS), which was designed to address the issue of frequency and intensity. The authors conducted a factor analysis of this measure and found two major dimensions: job pressure and lack of organizational support. Despite this criticism, many studies have found a relationship between strain and mental and physical health.

The job demand-control model is one of the most widely used models to understand the impact of occupational stress on health. There have been several studies conducted which have used this model to test the impact on a variety of health related outcomes. For instance, Sun, Wang, Zhang and Li (2007) conducted a study with industrial employees and found a relationship between high levels of job strain (high demands-low control) and higher allostatic load, body mass index, and systolic blood pressure. Additionally, Agardh et al. (2003) found that high job strain was associated with increased incidence of Type 2 diabetes. High levels of job strain have also been linked to increased risk for major depression, and for women this relationship was moderated by the level of social support they received (Blackmore, Stansfeld, Welles, Munch, Zagorski, & Stewart, 2007). Additionally, individuals exposed to chronic high strain, which is characterized as experiencing strain in at least two out of the three time periods in a longitudinal study, were associated with increased risk of recurrent coronary heart disease (Aboa-eboule, Brisson, Maunsell, Masse, Bourbonnais, et al., 2007). Job strain has also been associated with increased risk of hypertension and increased left ventricle mass (Schnall, Pieper, Schwartz, Karasek, Schlussel, Devereux, et al., 1990).

Bridger, Kilminster and Slaven (2007) highlighted the importance of gender in the study of occupational stress. The authors found that female officers had a higher prevalence of experiencing strain than their male counterparts; non-officers also reported higher levels of stress compared to officers. A follow-up study demonstrated that individuals reporting high levels of strain were experiencing difficulty coping with the increased demands and therefore they were found to make more mistakes (cognitive

failure); the phenomenon described above was again more prevalent in women and non-officers (Bridger, Brasher, Dew, Sparshott & Kilminster, 2010).

Karasek (1990) found that increased control is indicative of better health and organizational outcomes. Specifically, the authors found that employees which experienced higher levels of control also reported decreased incidence of coronary heart disease, psychological strain, absenteeism, and increased job satisfaction (Karasek & Theorell, 1990). Individuals, who experience high levels of strain and low levels of social support, have been found to also be at higher risk of cardiovascular disease (Jonson & Hall, 1988). Supervisors are essential in shaping employees' perception of control by including employees' in the decision making process of their workloads, adjusting workloads, and providing additional resources. Finally, research has indicated that increased control reduces illnesses, such as, coronary heart disease, among full-time employees (Karasek, 1990). In the section to follow, the researcher will discuss how control and social support, specifically supervisory support, play a role in mitigating the effects of occupational stress (Hart & Cooper, 2001).

The Job Demand-Control-Support Model

Just as there has been significant interest in understanding occupational stress, social support has also gained momentum in the stress literature. In the last forty years, studies have explored the relationship between social support and occupational stress. The study of this relationship was also further developed to understand how social support can moderate or buffer the perception of stress and therefore its impact on health. Social support has been defined as the level and quality of social interactions at work (Karasek & Theorell, 1990; Viswesvaran, Sanchez & Fisher, 1999). Instrumental

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support, emotional support, esteem support, and informational are the four types of social support which have been identified in the literature (House, 1981). Instrumental support refers to providing resources, while information support refers to providing information. Emotional support focuses on demonstrating empathy, while esteem support refers to providing feedback essential to self-evaluation (Rooney & Gottlieb, 2007).

The literature on occupational stress and social support describes this construct as a moderator or buffer of strain that has been demonstrated to have a link to job satisfaction and decreasing negative health-related outcomes (Karasek, Triantis, & Chaudhry, 1982; LaRocco, House, & French, 1980; Mark & Smith, 2008). To better understand this relationship, for example, Bowling, Beehr, Johnson et al. (2004) studied the antecedents of social support. The authors found that organizational citizenship behavior and social competence (reciprocity) were positively associated with the amount of social support that individuals received.

Johnson and Hall (1988) used the demand-control model to guide their study of occupational stress and included the social support construct to test if this new construct moderated the relationship between strain and health outcomes. The authors found that employees reporting low levels of social support also reported higher levels of strain. Johnson, Hall and Theorell (1989) explored the relationship with strain and social support further, and tested if low social support predicted the physiological outcome of strain. The authors found that employees who reported high levels of strain and low levels of social support were at higher risk of cardiovascular disease morbidity.

Given the findings of Johnson and his colleagues, the demand-control model was expanded to include a third dimension, social support, which aligns with the

conceptualization of the social process of work life (Karasek & Theorell, 1990). Social

support includes interactions by both supervisors and co-workers to assist or ease the

high demands of the workload. The model was further expanded to include the dimension

of social support and its four levels in accordance with the four levels of strain: isolated

prisoner, cowboy hero, participatory leader, and obedient comrade. High demand-low

control (high-strain) jobs characterized by low social support are labeled as "isolated

prisoner" due to their isolated and automated process of working. The second level is

high demand-high control (active) jobs, described as low social support and labeled as

"cowboy hero": although many individuals might work independently, having high

decision latitude alleviates receiving low social support. Low demand-high control (low

strain) jobs, also described as being high in social support, are labeled as "participatory

leader," again as a result of the high decision latitude and shared influence individuals in

these professions experience. Finally, low control and demand (passive) jobs, described

as being high in social support, are labeled as "obedient comrade"; many service

professionals fall within this quadrant and although their functions are important for

operations, they are typically overlooked (Karasek & Theorell, 1990).

The relationship between occupational stress and social support was further

developed by Johnson et al. (1989) in their research when they introduced a new

construct (i.e., iso strain) to explain the impact of social support on occupational stress.

Landsbergis, Schnall, Warren, Pickering, and Schwartz (1994) identified iso strain as the

highest level of occupational stress, characterized by a condition of high job demands,

low control and low social support. The authors found that employees who experience

high demands, low control and low social support (iso strain) were at higher risk of

cardiovascular disease morbidity. Viswesvaran et al. (1999) found that social support lessens the impact of strain on employees by reducing the job pressures and intensity of the stressors and therefore reducing strain.

Social support has also been found to explain part of the relationship between occupational stress and the strain outcome, such as blood pressure, and cardiovascular heart disease. Kawakami, Shimizu, Haratani et al. (2000) used the demand-control model to understand the relationship between stress and strain on health-related outcomes. The authors found that high strain and low social support working environments are associated with an increased concentration of glycosylated hemoglobin (HbA1c), which can eventually lead to coronary heart disease. Social support was also found to play a key role in reducing the risk of myocardial infarction and stroke for women; notably, low social support combined with passive work conditions was found to be the most detrimental combination for employees' health (Andre-Peterson, Engstrom, Hedblad, Janzon, & Rosvall, 2007).

Social support is therefore an important dimension to add to the job-demand control model. Social support has added value to this model and to the way that we view and study occupational stress. Not only is it important to understand the work characteristics (stressors) that can lead to strain, but also coping mechanisms used by employees, this further understanding can help in the development of interventions which can be put in place to alleviate the impact (strain). For example, McGowan, Gardner, and Fletcher (2006) found that employees used different coping mechanisms depending if they perceived the demands as a threat or a challenge (task focused vs. emotional focused). The authors found supportive supervisors included their employees in the

decision-making process and their employees perceived the additional demands as a challenge and therefore were better able to cope to the new demands.

Additionally, the social support construct can be further delineated to understand the type of social support (e.g., coworker or supervisor) that can have a significant impact on the stress-strain relationship. The role of supervisory support and coworker support on strain and two vital organizational-related outcomes; that is, perceived physical health and turnover intention can be further expanded to fully understand the relationship. Perceived physical health has been used as a proxy variable for actual physical health in organizational research where the researchers were limited access to actual personnel files (e.g., Reio & Ghosh, 2009). Likewise, because intent has been shown to be the most powerful predictor of behavior (Ajzen, 1991) turnover intent often has been examined as a proxy variable for voluntary turnover in organizational research when personnel files were inaccessible (e.g., Shuck et al., 2014).

Supervisors can have a direct impact on their employees' mental and physical health as a consequence of the control they have on the work environment, job duties, and deadlines (Leiter, Gascon, & Martinez-Jarreta, 2010; Leiter & Harvie, 1998). Actually, supervisors are able to shape employees' perception of their control of demands and therefore impact how they respond to strain (Leiter & Harvie, 1998; Wong & Lin, 2007). In addition, supervisors play an important role in shaping employees' perceptions of their working environment and sense of value to the organization. These perceptions can sway organizational outcomes such as job satisfaction, organizational commitment, job performance, and intentions to turnover, to name a few. Employees who perceive their supervisors as supportive report higher levels of job satisfaction, organizational

commitment, and job performance, as opposed to employees which perceive their supervisors as not being supportive do not report the same levels of satisfaction or organizational commitment (Rooney, Gottlieb & Newby-Clark, 2009). Additionally, employees with supportive supervisors are able to cope with stressful situations to reduce the impact of strain (Harris, Harris, & Harvey, 2008).

The literature reviewed highlighted the relationship between social support and strain (Searle, Bright & Bochner, 2001). Supervisors play an important role in the work life of their direct reports. It is important for the occupational stress literature to identify both the supportive and unsupportive behaviors in which supervisors engage in which can increase or decrease occupational stress (Rooney et al., 2007). In the literature which was reviewed supervisory support emerged as an important factor to the strain relationship (Andre-Petersson et al., 2006; Harris et al. 2008). Control or perceived control has also been found to be an important factor in mitigating the relationship between stressors and strain within this model. Organizations need to provide comprehensive development programs for supervisors, so that they can understand how their actions or lack of actions impact their staff, such as health related issues due to stress (Andre-Petersson et al., 2007). The work environment has also changed from a strict hierarchical work structure, to one in which employees seek more autonomy and value supervisors who trust them and provide support.

Van der Doef and Maes (1999) conducted a review of the job demand-control model literature in the last 20 years, as well as also including studies with the demand-control-support model. The authors found substantial support for the demand-control model and its impact on well-being. Specifically, high strain jobs were associated with

having a negative impact on both physical and mental health. The authors found support in about half the studies which were reviewed for the demand-control-support model. Further support was indicated to the effect of social support on the relationship of stress and strain. Social support was found to mitigate the impact of stress, when the support provided matches the stressor. The insight provides additional information for practitioners on how supervisors can more effectively support their employees.

Leiter et al. (2010) found that employees' perceptions of control played a key role in the stress-burnout relationship. Employees who were able to have some control over their working environment reported a positive perception of their work life. The authors posit that it is the perception of supervisor support and fairness that makes up part of this relationship. Harris, Harris, and Harvey (2008) similarly found that supervisory support reduced the negative impact of job strain and on the employees' intentions to turnover. The authors highlight the three dimensions of LMX (loyalty, contribution, and professional respect), which moderated the relationship between strain and the intentions to turnover; also deal with fairness and control. Furthermore, Dwyer and Ganster (1991) found that employees' perception of control is indicative of employees' tardiness, job satisfaction, and absenteeism.

Workplace Incivility

Workplace incivility has emerged as an important research topic for a variety of reasons. The workforce has become increasingly more diverse, and as employees are continually tasked to do more with less, it has increased the stress they experience at work. The globalization of organizations has created an interesting dynamic, in which employees are interacting with peers from other countries and cultures, adding to the

importance of understanding workplace incivility. In fact, Krebs (1976) found that workplace incivility was more prevalent in the healthcare setting than workplace violence, therefore making it an important concept for healthcare human resources professionals to understand, so that they can mitigate it from occurring before it spirals out of control into workplace violence. HRD researchers have found a link between occupational stress, specifically role stressors, workplace incivility and healthcare professionals, such that in an environment in which workplace incivility is present, it is going to increase the stress-strain relationship for healthcare workers (Gilin, Oore, leblanc, Day, Leiter, Laschinger, Price & Latimer, 2010).

Workplace incivility is defined as "low intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (Andersson & Pearson, 1999, p. 457). Robinson and Bennett (1995) developed a typology of workplace incivility in which the behaviors were separated into different quadrants. The quadrants are divided between organizational and interpersonal deviance. The quadrants within organizational deviance are the following: production and property. The quadrants within interpersonal deviance are the following: political and personal aggression. There are 3 different types or areas of workplace incivility identified in the literature, and they are as follows: experienced, witnessed, and instigated incivility. Experienced incivility refers to the individuals which have been the target of uncivil behaviors, and research in this area focuses on the feelings and outcome behaviors (due to being targets of uncivil behavior) of these individuals. Witnessed incivility refers to individuals who were not targets of uncivil behaviors, but observed uncivil behaviors

being done unto others. The research in this area focuses on how witnessing uncivil behaviors being done onto others impacts the relationship dynamics with all the parties involved. Finally, instigator incivility refers to individuals who engage in uncivil behaviors towards others. The research in this area focuses on trying to identify the precursors to this type of behaviors as well as the outcomes (Schilpzan, De Pater, & Erez, 2014). This study will focus on instigator incivility.

The Workplace Incivility Scale (WIS; Cortina, Magley, Williams, & Langhout, 2001) is a 7-item workplace incivility instrument which has been widely used in the literature. The instrument measures the frequency of the respondents experiencing the incivility with coworkers. Although this is a widely used scale in the literature, for the purposes of this study workplace incivility will be operationalized using Bennett and Robinson's (2000) 7-and- 12-item scales of interpersonal and organizational deviance scales. The scale has been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and has been well tested in the literature.

Bartlett, Bartlett and Reio (2008) explored the antecedents of workplace incivility in their review of the literature. The authors discussed the role of the work environment, expected rewards, and personality to name a few. In work environments in which there are high levels of stress or individuals which have Type A personality, or do not receive the expected rewards, there is a tendency for workplace incivility to occur. The triggers which were identified are also similar to components which elevate the levels of occupational stress. A combination of increased occupational stress along with certain personality characteristics can predispose an individual to engaging in workplace

incivility behaviors. These findings are important, as the combination between stress and incivility have been found to contribute to increase levels of stress which can lead to more incidence of uncivil behavior (Penny & Spector, 2005).

Employees who are not able to cope with occupational stress might express their frustration through workplace incivility behaviors. It is important to understand the relationship between these two constructs, as uncivil behaviors may lead to legal action against the employer because of workplace violence include additional cost to the organization, poor physical health, and loss of productivity. HRD researchers Reio and Sanders-Reio (2011) found that employees who were targets of workplace incivility by their supervisors reported decreased levels of employee engagement. Specifically, they reported decreased levels in safety and availability engagement. Additionally, Reio and Ghosh (2009) found a link between workplace incivility, job satisfaction and physical health in that perpetrator incivility was negatively associated with each. Further, Cortina et al. (2001) found that employees which continually experience incivility at work were less satisfied with all aspects of their job, and reported higher intentions to leave their job.

In addition to the link between workplace incivility and physical health, there is also a link between workplace incivility and mental health, environmental factors, as well as loss of productivity. Lim, Cortina and Magley (2008) found that workplace incivility had a negative impact not only on physical health but the authors also found that there was a relationship between workgroup incivility and mental health. Therefore, demonstrating the importance of the workplace environment and how incivility is an important construct which does not only impact the target but those who work with the target. Johnson and Indvik (2001) provided a background and overview of workplace

incivility and discussed how and why incivility was a function of the workplace environment, which ultimately costs the organization in the loss of productivity.

Hutton and Gates (2008) conducted a study with direct care staff; the authors explored the impact of workplace incivility on the environment of direct staff employees. The authors were specifically seeking to understand the decrease of productivity due to incivility. The authors are also expanded on a previous study, which found a 53% decrease in productivity due to workplace incivility (Pearson, Anderson & Porath, 2000). The authors found the annual estimated cost of workplace incivility is $264, 847 per direct patient care staff member. However, if one was to extrapolate that to all staff members within the organization (not just limited to direct patient staff), the estimated cost of loss productivity could be as high as $1.2 million annually.

Additionally, in Hutton and Gates's (2008) study, the authors found that understanding who the perpetrators were was an important determining factor related to productivity loss. When the perpetrator was the direct supervisor or a patient, there was an impact on the level of productivity, in fact it decrease the level of productivity of those employees. However, when the perpetrator was a physician or other environmental factors, there was no impact on the level of productivity. Furthermore, it is important to understand how to identify potential instigators. Schilpzand, De Pater and Erez (2016) conducted a review of the workplace incivility literature and found only 8 out of 55 studies explored the instigator perspective, while they found 45 out of 55 studies explored either the witnessed or experienced perspective of workplace incivility.

Personality Traits as Moderators

To have a comprehensive understanding of the relationship between occupational stress and workplace incivility, individual differences, such as personality need to be reviewed. Individual differences, such as personality variables, will provide an additional understanding as to why individuals respond/cope to stress through incivility. The Big Five personality variables (Goldberg, 1990, 1992; McRae & Costa, 1987) include the following: imagination/intellect, conscientiousness, extraversion, agreeableness, and neuroticism. These personality variables will guide the discussion in understanding incivility response when encountered with stress. Mount and Barrick (1998) conducted a meta-analysis and found that many researchers are in agreement with the five factor personality model.

Additionally, these five factors of personality span cultural and language differences. Further, the authors found that the five factor model correlated with job performance (conscientiousness), training proficiencies (extraversion), and on the job success (emotional stability, agreeableness, and conscientiousness). Personality will be operationalized using Donnellan, Oswald, Baird and Lucas's (2006) Mini-International Personality Item Pool Inventory. The scale has been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and has been well tested in the literature.

Imagination/intellect, akin to openness to experience (Costa & McCrae, 1992), describes individuals who are creative, adventurous, and have an interest in learning. The characteristics of individuals indicating imagination/intellect might predispose them to view stressful events and encounters from a learning perspective, and therefore less likely

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to respond with uncivil behaviors or aggression (Reio, 2011). Individuals who are extraverts are described as energetic, outgoing and assertive (Strus, Cieciuch, & Rowinski, 2014). Individuals who possess theses characteristic may be more like to engage in uncivil behaviors when experiencing stress. Conscientiousness includes someone who is dependable, disciplined, and dutiful. Individuals who possess these characteristics may be less likely to engage in workplace incivility behaviors, even under conditions of stress. The characteristics demonstrated by individuals high on agreeableness include cooperation, kindness, are less likely to be aggressive and are altruistic (Costa & McCrae, 1992; Goldberg, 1990). Similarly to individuals who are high on conscientiousness, these individuals demonstrate comparable characteristics which are attributed to be less likely to engage in uncivil or aggressive behaviors, even under stress (Salgado, 2002). Finally, individuals who are high in neuroticism can be described as negative, anxious, and inflexible. Individuals who possess these characteristics can be perceived as being reactive and focus on the negative outcomes. Therefore, it is clear to see how these individuals are more likely to respond with uncivil behaviors or aggression in times of stress (Digman, 1990; Reio, 2011).

Research on personality has found that there is a moderator relationship between occupational stress and personality (Begley, 1998; Vollrath & Torgersen, 2000). Grant and Langan-Fox (2006) conducted a study to understand how personality traits play a role in predicting occupational stress; the authors also explored the impact on job satisfaction, which can impact employee's intentions to turnover. The authors found that employees who have a combination of low on conscientiousness and low extraversion are more likely to experience stress, as opposed to employees who have a combination of

high conscientiousness and extraversion personality traits; possibly because those with a combination of high extraversion and conscientiousness use problem-focused coping skills, which help them deal with occupational stress more effectively. Additionally, the authors found a combined effect in terms of personality in predicting stress, such that those which are high in neuroticism and low conscientiousness were more likely to report experiencing stress; while those low in neuroticism and high in extraversion and conscientiousness were less likely to report experiencing stress.

Additionally, it is important to understand how individual differences, such as personality impact both parties when incivility occurs. Milam, Spitzmueller and Penney (2009) found that targets who were rated lower in agreeableness and higher in neuroticism reported experiencing higher incidents of workplace incivility. This study therefore, demonstrates the importance of having a holistic understanding of the relationship between stress, workplace incivility and personality to be able to mitigate the impact of the stress-incivility relationship on individuals.

Perceived Physical Health

Employee health and well-being have been increasingly gaining attention both in the research, as well as in organizations, especially relating the impact on health from occupational stress and workplace incivility (Lim et al., 2008; Smith, Karsh, Carayon, & Conway, 2003). In part, the reason for this new found attention has stemmed from the increasing cost to organizations from having employees reporting poor physical health and therefore driving the healthcare cost up as well as other related expenses to the organization (Miree, 2007).

Spector and Jex (1998) reviewed 18 articles to explore four scales of job stress, as well as exploring the physical symptoms which are related to job stressors, in the development of a physical symptom scale. In the authors' review of the literature they were able to identify three different type of indices, which are the following: (a) the amount of symptoms which require a doctor; (b) the amount of symptoms which do not require a doctor; and (c) total number of doctors. The Physical Symptoms Inventory is an 18-item scale in which respondents indicate the symptoms which they have experienced in the past 30 days. Physical health will be operationalized using Cassidy's (2000) Perceived Physical Health scale. This scale has been demonstrated to be valid for the workplace setting (Reio & Ghosh, 2009), as well as having strong psychometric properties, including predictive validity and has been well tested in the literature.

Nixon, Mazzola, Bauer, Krueger and Spector (2011) conducted a meta-analysis with 79 studies, which reported cross-sectional and longitudinal relationships between occupational stress and physical symptoms. The stressors which were reviewed are similar to the ones which will be reviewed in this study and are the following: organizational constraints, interpersonal constraints, interpersonal conflict, role conflict, role ambiguity, and workload. The authors found a cross-sectional and longitudinal (over time) relationship between occupational stress and physical symptoms, specifically with gastrointestinal problems and sleep issues. These two symptoms have been identified as initial responses to occupational stress, other stressors are viewed as longitudinal which happen over time, such as, backaches, headaches, eye strain, and loss of appetite. The authors also found that the different types of occupational stress were related to different types of physical symptoms. The authors found a relationship between interpersonal

conflicts and sleep issues, dizziness, headache and fatigue. Additionally, there was a relationship between workload and fatigue. Organizational constraints were found to have a relationship with gastrointestinal problems and fatigue.

Intention to Turnover

Tett and Meyer (1993) defined intention to turnover as "… the conscious and deliberate willfulness to leave the organization" (p. 262). Turnover is an important organizational outcome, as there are costs associated to the organization. First, there needs to be an understanding on the concept of turnover. There are two different types of turnover, voluntary (which is the concept of focus for this study) and involuntary. Voluntary turnover is the decision of an employee to leave the organization or quit (Shaw, Delery, Jenkins, & Gupta, 1998). On the other hand, involuntary turnover is when an employee is separated from the organization without their desire to be separated. It is important to differentiate these two concepts as they have different implications on organizational outcomes; for example, some of the employees who are part of involuntary turnover are low performers (Shaw, Delery, Jenkins, & Gupta, 1998).

Intention to turnover has become an important construct to understand as it has been found to be predictive of actual turnover (Griffeth, Hom, & Gaertner, 2000). Further, occupational stress has also been found to lead to voluntary turnover over decreased job satisfaction (Malik, 2011; Parasuraman, 1982). Intentions to turnover will be operationalized using Camman, Fichman, Jenkins and Klesh's (1979) Intentions to Turnover 3-item scale. The scale has been demonstrated to be valid for the workplace setting, as well as having strong psychometric properties, including predictive validity and has been well tested in the literature.

Proposed Comprehensive Occupational Stress and Workplace Incivility Model

There are several examples found in the literature noting the interaction and relationship between occupational stress and workplace incivility (as well as counterproductive workplace behaviors) and personality (Penney & Spector, 2005; Spector, 2011). Bowling and Eschleman (2010) found occupational stress and counterproductive workplace behaviors to be moderated by personality. Specifically, the authors found that employees who are low in conscientiousness or high in negative affectivity were more likely to engage in workplace incivility behaviors. Taylor and Kluemper (2012) had similar findings in their study. The authors explored the relationship between role stress and workplace incivility as moderated by personality. The authors found that neuroticism operated as a first- and second-stage moderator of the relationship between stress and incivility. Additionally, the authors found that low levels of agreeableness and conscientiousness and high levels of neuroticism were related to increased aggressive behaviors.

Additionally Milam, Spitzmueller, and Penney (2009) conducted a study exploring the interaction between workplace incivility and personality. However, the focus of their research was on the personality of the target. In their study they found that targets which are low in agreeableness reported experiencing higher levels of workplace incivility, as well as individuals which were rated high on neuroticism also indicated experiencing higher levels of workplace incivility. The findings of this study indicate that individual differences not only of the instigator, but also of the target play an important role in the dynamics of the relationship between workplace incivility and personality.

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This present study will be guided by Lazarus and Folkman (1984) transactional approach of occupational stress, specifically using the social environmental and the person-environment-fit models (i.e., role ambiguity, role conflict, and organizational constraint). Workplace incivility will be operationalized using Bennett and Robinson's (2000) interpersonal and organizational incivility instigator measures. Finally, the personality moderator variables will be operationalized using Goldberg's (1990, 1992) Lexical Big Five Factor model.

Summary

It is important for organizations to understand the causes and risks of occupational stress. The working environment is changing and work demands are increasing. Employees working demands have increased, staffing has decreased, the number of hours has increased, and due to the advances in technology, the barriers between work and home life are less clearly defined. All these ever-present pressures heighten the importance to study and understand occupational stress. Additionally, occupational stress can cost organizations about $150 billion per year, due to loss of productivity, absences, and other health related costs (Cartwright & Cooper, 1997). Additionally, Miree (2007) estimated the cost of occupational stress in the United States between $200-300 billion annually; this number is representative of the cost created through absenteeism (missed wages), reduced productivity and healthcare cost. The authors also found that this is not just an issue in the United States, but also they found that in Japan the cost of occupational stress is an estimated $232 billion annually; through absenteeism (missed wages), reduced productivity and healthcare cost. Finally in the United Kingdom the cost of occupational stress was estimated between $64.8-66.1 billion annually; through

absenteeism (missed wages), reduced productivity and healthcare cost. As detailed above, occupational stress impacts employees' physical and mental health, as well as their job performance, job satisfaction, and intentions to turnover (Jex, 1998; Shirom, Toker, Berliner & Shapira, 2008).

There has been a shift in the literature towards a holistic approach to studying and understanding occupational stress (Dai, Collins, Yu & Fu, 2008; Peter, Siegrist, Hallqvist, Reuterwall & Theorell, 2002). There are more studies that are being published with an integrative approach of occupational stress models, to better understand the causes, impact (both physical and organizational outcomes), and solutions/interventions of occupational stress. For the purpose of the current study, the researcher will use Lazarus and Folkman's (1984) definition of occupational stress, "a relationship between the person and the environment appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (p. 21)." Their definition encompasses all the aspects of occupational stress which need to be understood for the purposes of this study. Occupational stress is an interaction between the individual and the environments (e.g., environmental characteristics). The two models which this study focused on is the Social Environmental model (French & Kahn, 1962) and the Person-Environment-Fit model (French et al., 1982).

To create a holistic model of occupational stress, the study also explored instigator workplace incivility. Understanding the relationship between occupational stress and workplace incivility (from the instigator perspective), allows for a holistic view of the stress-incivility phenomenon. Workplace incivility is defined as "low intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace

norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (Andersson & Pearson, 1999, p. 457). Therefore, it is clear to realize how individuals might engage in uncivil behaviors in times that they are experiencing stress.

Finally, this proposed holistic model to create further understanding of the stress-incivility relationship is completed through understanding individual differences. Personality variables are explored, in order to further understanding how individual differences moderate the stress-strain relationship. Prior research has demonstrated that there is a link between occupational stress, workplace incivility and individual differences, such as personality variables (Bowling & Eschleman, 2010; Reio, 2011).

CHAPTER III

METHOD

This chapter begins by restating the purpose of the study and research questions, as stated in Chapter 1. Then, the research design is presented; population and sample, instrumentation and data analysis are discussed. The chapter concludes with the summary of the methods presented in this chapter.

Purpose of the Study

The purpose of this study was to explore the relationship between occupational stress and workplace incivility, specifically exploring how this relationship is moderated by personality. Through this research and its findings it will help enrich the research literature by further understanding the link between occupational stress and workplace incivility and how individual difference factors (i.e., personality traits) play a role in this relationship. Additionally, the findings of this study may help guide future practice by furthering understandings of how to implement workplace programs designed to decrease intention to turnover and increase physical health. This study was conducted using a non-experimental, quantitative research design.

Research Question and Hypotheses

Two questions guided this study: (a) What is the relationship between occupational stress and workplace incivility (instigator), as moderated by personality? and, (b) What is the relationship among occupational stress and workplace incivility (instigator) and important organizational outcomes (i.e., perceived physical health and intent to turnover)? To explore these research questions, seven hypotheses were tested. When testing the hypotheses, when incivility is mentioned, the researcher is referring to

instigator incivility, and not onlooker or target incivility, which is beyond the scope of this research.

Research question 1: What is the relationship between occupational stress and workplace incivility (instigator), as moderated by personality?

H_1:   Extraversion moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H_2:   Neuroticism (which is also referred to as emotional stability in the literature) moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H_3:   Conscientiousness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H_4:   Agreeableness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H_5:   Openness to experience moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

Research question 2: What is the relationship among occupational stress and workplace incivility (instigator) and organizational outcomes (i.e., perceived physical health and intent to turnover)?

H_6:   After controlling for occupational stress, workplace incivility will be negatively related to perceived physical health.

H_7:   After controlling for occupational stress, workplace incivility will be positively related to turnover intention.

Research Design

The research design for this study was selected to explore the relationships

between occupational stress and workplace incivility, and important organizational

outcomes (i.e., perceived physical health, turnover intent). The study uses a non-

experimental, quantitative research design. In a non-experimental research design the

variables are not manipulated by the researcher (Johnson, 2001).

There are three different categories of non-experimental research designs, which

are either descriptive, explanatory or predictive (Johnson, 2001). The focus of the

research determines which category will be used as the research design; this in turn will

drive the data collection and data analysis of the study. Descriptive non-experimental

research designs are focused on describing a phenomenon. On the other hand,

explanatory non-experimental research designs are focused on exploring the relationships

among variables, while predictive non-experimental research designs focus on predicting

theoretically or empirically relevant variables (Johnson, 2001). Because the aim of this

study is to investigate the hypothesized relationships among occupational stress and

workplace incivility and two significant organizational outcomes, a predictive, non-

experimental research design will be used.

Population and Sample Size

The population of this study was comprised of working adults in the healthcare

industry. The healthcare industry was selected because of the demonstrated link between

the stressful nature of being healthcare professionals and their propensity to engage in

uncivil behaviors, which have resulted in lost productivity, escalations to physical

violence, and physical health detriments (Felblinger, 2008; Hutton & Gates, 2008).

Amazon's MTurk electronic (Internet-based) survey tool was used to collect data for the study. Using this Internet-based survey tool allowed the researcher to collect data from participants in various health care institutions, therefore increasing the generalizability of the findings of this research study (Chambers, Nimon, & Anthony-McMann, 2016). Participants were asked to review the instructions and complete the self-report surveys online using Amazon's MTurk. The criteria for selection of the participants included the following; 18-years-old or older (adults), working 40 or more hours a week, and healthcare industry workers who were hospital based and who lived in the United States. These criteria were used to afford comparison with prior research examining stress, incivility and organizational outcomes in the healthcare industry (e.g., Felblinger, 2008). There have been several studies that have demonstrated a link between the stressful nature of being healthcare professionals and their propensity to engage in uncivil behaviors, which have resulted in lost productivity, escalations to physical violence, and physical health detriments (e.g., Felblinger, 2008; Hutton & Gates, 2008). Therefore, it is critical to understand the relationship between occupational stress and workplace incivility in the healthcare industry.

The sample size of this study consisted of 206 participants; sample size is an important consideration to be able to make inferences and generalizations of the findings of the study (Tabachnick & Fidell, 1996). The sample size was determined a priori based on the recommendation of at least 5 participants per variable (Tabachnick & Fidell, 1996); as there are 8 variables in the current study; a minimum of 40 participants was needed. For the purposes of having sufficient statistical power to detect differences, defined as the "probability of accepting the null hypothesis when it is false [Type II

error]" (Stevens, 1996, p. 173), and thereby make the correct decision regarding rejecting the null hypothesis, 200 participants were sought (i.e., in plain language, to have less than a 20% chance of saying there was not a statistically significant difference when indeed there was). Stevens (1996) and Tabachnick and Fidell (1996) advised that samples of 100 or more will reduce the likelihood of committing both Type I (rejecting the null hypothesis when it is actually true) and Type II error. The researcher also used directional hypotheses as guided by the literature to increase statistical power (Stevens, 1996). Consequently, for this study a sample size of 200 or more participants was successfully sought to strengthen statistical power and reduce the likelihood of Type II error.

Variables and Instrumentation

Eight self-report measures were used for this study; additionally, demographic variables were also collected. The literature reviewed indicated there were some potential individual differences in the way that workplace incivility was experienced. For example, Cortina et al. (2001) found that women experienced workplace incivility at higher frequencies than men. Further, Antoniou, Polychroni and Vlachakis (2006) found age and gender differences in the level of occupational stress experienced by teachers. In their study, the authors found that female teachers and younger teachers experienced higher levels of stress, as opposed to male teachers and older teachers. Therefore, demographic variables will be reviewed in this study. Each of the research variables was measured by validated instruments for use in organizational research settings like the ones being used in the current study. Role stressors and organizational constraints were the organizational stress variables. The combination of measures was administered as part of an online

survey battery. Physical symptoms (perceived physical health) and intent to turnover were the dependent variables.

Role Stressors

Role stressors were assessed using Abdel-Halim (1978) 10-item scale. The scale includes five items from each of the role stressors; that is, role conflict and role ambiguity. The items are on a 5-point Likert scale ranging from *very false* (1) to *very true* (5). The sample items include "I feel certain about how much authority I have" (role conflict), "I receive incompatible requests from two or more people," and "It seems like I have too much work for one person to do" (role ambiguity). The authors reported reliability coefficients for role conflict was .76 and role ambiguity was .69. For this study, the scales were not combined. For this study the Cronbach's alpha for role conflict was .78 and .80 for role ambiguity.

Organizational Constraint

Spector and Jex's (1998) 11-item organizational constraint (OCS) scale was used to measure the control latitude of each participant. Each item was on a 5-point Likert scale ranging from *less than once per month or never* (1) to *several times per day* (5). A sample item is "Conflicting job demands." The authors reported the coefficient alpha as .85. The Cronbach's alpha for this study was .89.

Workplace Incivility

Bennett and Robinson's (2000) 7-item Likert scale for interpersonal deviance and 12-item Likert organizational deviance scale was used to measure workplace incivility instigation. Each item is on a 7-point scale from *never* (1) to *daily* (7). A sample of an interpersonal deviance item is "Made fun of someone at work," and a sample of an

organizational deviance item is "Put little effort into your work." The authors reported Cronbach's alphas for the interpersonal incivility as .81 and for the organizational incivility as .78. The Cronbach's alpha found in this study for interpersonal deviance was .85 and for the organizational deviance scale it was .84.

Personality

Imagination/intellect, conscientiousness, extraversion, agreeableness, and neuroticism were assessed using the 20-item Mini Big Five Factor Markers of the International Personality Item Pool Assessment (Donnellan, Oswald, Baird, & Lucas, 2006; IPIP; Goldberg et al., 2006; International Personality Item Pool, n.d.; McCrae & Costa, 1987). Each item was on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7). Each subscale consisted of 4 items. A sample imagination/intellect item is "Have a vivid imagination." A sample conscientiousness item is "Make plans and stick to them." A sample extraversion item is "Make friends easily." A sample agreeableness item is "Believe others have good intentions." A sample neuroticism item is "Feel comfortable with myself." The authors reported Cronbach's alpha for each scale as the following: Imagination/intellect .85, Conscientiousness .92, Extraversion .95, Agreeableness .88, and Neuroticism .93. The Cronbach's alphas found in this study are the following: Imagination/intellect (Openness to Experience) .72, Conscientiousness .72, Extraversion .82, Agreeableness .74, and Neuroticism .78.

Physical Symptoms

Cassidy's (2000) 6-item Perceived Physical Health Scale was used to measure participants' perceived physical health. Each item was on a 5-point scale ranging from *never* (1) to *always* (5). The Cronbach's alpha found in this study was .85.

Intention to Turnover

Intentions to turnover were measured using Camman, Fichman, Jenkins, and Klesh's (1979) 3-item scale. The items included: (a) "I often think of leaving the organization," (b) "It is very possible that I will look for a new job in the next year," and (c) "If I could choose again, I would choose to work for the current organization" (reverse scored). The Cronbach's alpha reported for this scale was .77. The Cronbach's alpha found for this study was .72.

Social Desirability

Strahan and Gerbasi's (1972) 10-item social desirability scale was used to measure participant's degree of concern to respond in a manner which demonstrates social desirability. A sample item includes "I would never think of letting someone else be punished for my wrong doing." The reliability coefficient reported in previous research for this scale has ranged from .55-.67 (Reio, 2010). The Cronbach's alpha for this study was .75.

Demographic Variables

Participants' background (i.e., gender, age, race, level of education, current job function (e.g., direct patient care), and years of experience) were also collected using a 6-item demographic questionnaire. Each of the demographic variables has been shown to have significant relationships with both role stressors and incivility, except level of education (see Reio & Ghosh, 2009; Reio & Sanders-Reio, 2011). Level of education, on the other hand, has been linked to social desirability in that it decreases as years of education increases (Heerwig & McCabe, 2009); consequently, it was included also in this research as a control variable.

Procedure

Amazon's MTurk electronic (Internet-based) survey tool was used to collect data for this study. Internet-based surveys are widely used to collect data; in fact, more so than mail-based or paper-based surveys (Dillman et al., 2009). To determine the completion time for the administration of the survey battery, as well as the clarity of the instructions and items, a pilot test was conducted with five individuals (Dillman & Bowker, 2000). Guided by Dillman et al.'s (2009) protocol for conducting internet-based research, the researcher conducted a pilot study with five individuals similar to the population of this study to provide information in terms of the length of time needed to complete the survey, ease of answering questions, and to set the procedures for the survey research. The participants received a link to complete the electronic survey. The participants in the pilot study completed the instrument in about 12-15 minutes. The participants indicated that the instructions to complete the instrument were clear, as well that the questions and answer options were also clear and easy to understand. There were no problems reported through the pilot study, except that two demographic questions were deemed confusing and therefore superfluous (employee status and job title) and the questions were deleted from the final study. Common method variance error bias is a limitation which can occur, particularly in studies which use self-reports. This error can potentially lead to conclusions that are not accurate or valid; for example, finding relationships between variables that are inflated or deflated (Reio, 2010). To minimize the potential of common method variance bias, a number of steps can be taken to reduce its likelihood (Reio). One such approach is to include a social desirability measure in one's study because it can be used to statistically control for possible social desirability bias. Therefore, a social

desirability measure was added to the battery of research instruments to determine if the participants were responding honestly and accurately. The step detailed above is particularly important for this study, as participants' completed self-reports on workplace incivility from the instigator perspective. In the subsequent sections, the researcher reviews the rationale for the use of internet-based surveys and Amazon's MTurk survey tool.

<center>*Internet-Based Self-Report Surveys*</center>

Internet-based self-report surveys consist of a self-administered electronic survey which the participant must complete on a computer. Internet-based surveys can be sent to participants using a variety of formats, including: (a) sending a link via an email, which the participant must click on the link to access the survey on the internet page (i.e., MTurk, Qualtrics and Survey Monkey); (b) sending the survey in an email as an attachment, which the participant must download the attachment to complete the survey; and (c) sending the survey as part of the email message, which the respondent completes on the email and responds to the email message (Shannon, Johnson, Searcy, & Lott, 2002). There are advantages and disadvantages in utilizing internet-based surveys to collect data; the researcher discusses each in the sections that follow.

Advantages of Internet-Based Self-Report Surveys

The advantages of internet-based self-reports include being cost effective, time efficient (i.e., automatic pre- and post-notifications and reminders), and useful for reaching large populations, both in the U.S. and internationally (Shannon et al., 2002). The advantages listed above likely have been a major impetus for the increase in

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researchers using this survey technique (Dillman et al., 2009). However, as with any research method, there are limitations.

Limitations of Internet-Based Self-Report Surveys

The limitations of internet-based self-report surveys include the following: low response rate, technology-related issues, concerns of confidentiality, and authenticity of respondents. Dillman and Bowker (2001) found at times that internet-based surveys yielded lower response rates as compared to mail surveys. Technical issues can also impact the response rate of the survey. There are two main concerns around technical challenges: (a) lack of basic computer skills of the user; and (b) incompatibility of survey coding/complex survey design on the computer of the respondent (Dillman, Tortora, & Bowker, 1999; Shannon et al., 2002). The use of Amazon's MTurk can reduce the likelihood of both of these issues (Chambers et al., 2016). The first area of concern can be addressed through targeting a population which is already familiar with basic computer skills (e.g., Amazon's MTurk participants); since Amazon MTurk participants are familiar with basic computer skills, this should minimize the issue of respondents experiencing difficulty in completing the survey. The second potential issue can be addressed by ensuring that the survey design is sufficiently simple and clear to support most survey respondents' efforts to participate in the study (Smyth, Dillman, Christian, & McBride, 2009; Shannon et al., 2002). Dillman et al.'s (2009) Tailored Design Method for internet surveys was used in this study to reduce what has been coined as the four major sources of error (i.e., coverage, sampling, measurement, and nonresponse error) and therefore increase response rate.

Coverage, Sampling, Measurement, and Nonresponse Error

Coverage error is defined as "the result of all units in a defined population not having a known nonzero probability of being included in the sample drawn to represent the population" (Dillman & Bowker, 2000, p. 54). Sampling error is defined as "the result of surveying a sample of the population rather than the entire population" (Dillman & Bowker, 2000, p. 54). Measurement error is defined as "the result of inaccurate responses that stem from poor question wording, poor interviewing, survey mode effects and/or some aspect of the respondent's behavior" (Dillman & Bowker, 2000, p. 54). Finally, nonresponse error is defined as "the result of nonresponse from people in the sample, who, if they had responded, would have provided different answers to the survey questions than those who did respond to the survey" (Dillman & Bowker, 2000, p.54).

The likelihood of coverage and sampling errors was reduced by first creating an avenue for participants to have an equal chance of having access to the survey (Dillman et al., 2009; Shannon et al., 2002). Measurement error likelihood was reduced through pilot testing of the survey for appropriateness of questions and wording (Dillman, 2007). Researchers have found that nonresponse error can be reduced through personalized pre-notifications and interval follow-ups from the initial email, which was also done in this research. For example, Cook, Heath, and Thompson (2000) conducted a meta-analysis and found that internet survey research where personalized survey pre-notifications were sent to participants was associated with higher response rates.

Internet-Based Survey Research and MTurk

The access to participants and the cost effectiveness to conduct internet-based surveys has made this technique one that is utilized increasingly by researchers (Dillman

& Bowker, 2000; Shannon et al., 2002). There are many data collection techniques and using a survey is but one such technique. Within this data collection technique there are also several options; for example, telephone, mail, and internet surveys (email and web-based). Internet-based surveys provide cost-effective solutions for the researcher, both monetary (i.e., postage charges and printing) and time (i.e., sending the survey, pre and post notifications, and reminders) (Chambers et al., 2016).

There are several internet-based survey tools, including Amazon's MTurk, Survey Monkey and Qualtrics. While all three of these tools provide the same functionality in terms of providing the survey tool, participant pool, capability of screening participants and dissemination of the electronic survey, MTurk provides a more cost-effective process (in the compensation for participation) than the other tools; the average hourly rate for the completion of a survey on MTurk is $2.25, while on Qualtrics it is $5.00 and Survey Monkey ranges from $3.00-$4.00 (Chambers et al., 2016). Amazon's Mechanical Turk (MTurk) is a survey tool that allows researchers to connect with survey respondents within Amazon's online marketplace. By allowing researchers to be able to select their own criteria for survey participants, like making the survey available only to those meeting the desired criteria, as well as deciding the financial contribution for the completion of the survey, MTurk can be particularly useful as a research tool (Chambers et al., 2016). To increase data quality, which was also done as part of this research, researchers also have the option to set criteria around the Human Intelligence Task (HIT) feature, which minimizes the potential of duplicate participation, as well as selection of participants with a certain percentage approval rate (meaning they complete the surveys and produce quality responses (Chambers et al., 2016).

Sampling Procedures

To conduct the study, permission was requested and granted from the Florida International Institutional Review Board (IRB) and Florida International University Graduate School. Following the Dillman et al. (2009) protocol, participants received a pre-notification email as an invitation to participate in the research study. Three days after the pre-notification email was sent, another email notification with a welcome message, instructions and confidentiality information were sent to the participants for a total of three times at 1-week intervals. The survey was sent using Amazon's MTurk and participants received $1.50 compensation each for their participation.

The four steps included in the Dillman et al. (2009) Tailored Design Method were implemented as follows: (a) review of survey content from knowledgeable colleagues to ensure that the survey questions met the study objectives; (b) conduct interviews to ensure that the questions were in the appropriate order; (c) conduct a pilot study; this step tested the actual procedures of survey administration and question clarity, as well as assessing the time to complete the survey; and (d) conduct a final check of the survey and survey administration process; the purpose of this last step was to ensure that all changes have been implemented in the survey and survey administration process.

The distribution of the survey also included reminders following the Dillman et al. (2009) interval scheduling framework, which included: (a) making the initial contact with survey participants; which included the confidentiality notice to participants, a statement that participation would be compensated, as well as survey completion instructions; (b) survey administration; and (c) sending follow-up reminders to survey

participants (beginning 3 days post initial survey and then following at 1-week intervals until the conclusion of the survey).

A unique URL link was created from the survey administration site, and the link was subsequently sent to the participants. Utilizing a unique URL link prevented duplicate responses from participants; additionally, personal identifiers were not collected and therefore participant confidentially could be realistically secured. Once the survey administration was concluded, the data was downloaded and saved on an external hard drive and has been kept in a secured and locked cabinet in the researcher's home office.

Data Analysis

The data for this study was entered into SPSS 20.0 and analyzed for statistical significance using moderated and hierarchical regression analyses. Moderated regression analysis was used to understand the role of personality (i.e., imagination/intellect [openness to experience], conscientiousness, extraversion, agreeableness, and neuroticism) in the relationship between occupational stress and workplace incivility. Moderated regression analysis was used to tease out the unique contributions of theoretically-relevant interactions between the research variables. In the current study, personality traits were hypothesized to moderate the association between organizational stress and incivility, such that they could dampen or strengthen the organizational stress-incivility relationship, as predicted by theory and prior empirical research. To properly interpret the significant moderation (interaction) effects, separate regression lines were computed and plotted for individuals using the PROCESS macro directly installed to SPSS created by Hayes (2012, 2013). PROCESS is an add-on tool for SPSS which uses ordinary least squares regression to estimate direct and indirect effects in mediation and

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moderation models. PROCESS was used to create the interaction plots for all the relationship for each of the moderator variables which yielded a signification interaction in the regression analysis. The computed regression lines were one standard deviation below the mean on each centered predictor, the mean of the centered predictor, and one standard deviation above the mean of the centered predictor (Aiken & West, 1991; Cohen, Cohen, West & Aiken, 2003).

Hierarchical regression analysis was used to explore the hypothesized links between workplace incivility and the outcome variables (i.e., physical health and intentions to turnover), after statistically controlling for social desirability, role stressors and organizational constraints. Although a simultaneous regression approach would have computed unstandardized and standardized beta weights, thereby providing a measure of the relative contributions of each variable in the regression equation, an R^2 value could not be computed for each separate variable or sets of variables; rather, an overall R^2 value would have been possible only. The hierarchical regression analytic approach, on the other hand, is useful and appropriate for entering variables or sets of variables, guided by theory and research as to the order of variable entry, to determine the unique amount of variance explained by each step in the regression analysis (Tabachnick & Fidell, 1996). The approach described above is superior to multiple regression in that, after controlling for theoretically and empirically relevant variables (e.g., social desirability) or sets of variables (e.g., incivility, occupational stress), unique variance can be explained in the regression model. Cohen et al. (2003) averred that hierarchical regressions were the most theoretically and empirically enriching of the common regression approaches (i.e., simultaneous, stepwise, hierarchical).

H_1: *Extraversion moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.*

To test H_1, a moderated regression analysis was conducted to examine the hypothesized moderation effect of extraversion on the relationship between occupational stress and workplace incivility.

H_2: N*euroticism moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.*

To test H_2, a moderated regression analysis was conducted to examine the hypothesized moderation effect of neuroticism on the relationship between occupational stress and workplace incivility.

H_3: *Conscientiousness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.*

To test H_3, a moderated regression analysis was conducted to examine the hypothesized moderation effect of conscientiousness on the relationship between occupational stress and workplace incivility.

H_4: *Agreeableness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.*

To test H_4, a moderated regression analysis was conducted to examine the hypothesized moderation effect of agreeableness on the relationship between occupational stress and workplace incivility.

H_5: *Imagination/intellect moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.*

To test H_5, a moderated regression analysis was conducted to examine the hypothesized moderation effect of imagination/intellect on the relationship between occupational stress and workplace incivility.

H_6: *After controlling for occupational stress, workplace incivility will be negatively related to perceived physical health.*

To test H_6, a hierarchical regression analysis was conducted to explore the degree to which workplace incivility predicts perceived health.

H_7: *After controlling for occupational stress, workplace incivility will be positively related to turnover intention.*

To test H_7, a hierarchical regression analysis was conducted to explore the degree to which workplace incivility predicts turnover intentions.

Summary

Chapter 3 detailed the participant selection and data collection processes for this research. The process included the: participant selection and sample size, research design that guided the data collection, data-analytic procedures for testing the hypotheses and finally information about the research instruments used. The advantages and limitations of internet-based survey technique were also discussed.

CHAPTER IV

RESULTS

In this chapter the results of the data analysis are presented. This chapter begins

discussing the background of the sample, the examination of the hypotheses and it

concludes with the summary of the chapter. Instigator incivility and not onlooker or

target incivility was examined. Moderated regression analyses were conducted to

examine the first five hypotheses. Additionally, hierarchical regression analyses were

conducted to test the final two hypotheses and predict the two dependent variables

(perceived physical health and intent to turnover) of this study.

Background of the Sample

Two hundred and six respondents participated in this study. The participants'

background (i.e., gender, age, race/ethnicity, highest level of education completed, years

of experience, and job function) are examined in the following sections.

Gender

A frequency analysis of gender indicated that 55.3% ($n = 114$) of the sample was

female and 44.7% ($n = 92$) of the sample was male.

Age

A frequency analysis of age level indicated that 24.8% ($n = 51$) of the sample was

in the 21-19 group, 50.0% ($n = 103$) of the sample was in the 30-39 group, 17.0% ($n =$

35) of the sample was in the 40-49 group, 4.9% ($n = 10$) of the sample was in the 50-59

group, and finally 3.4% ($n = 7$) of the sample was in the 60 and over age group.

Race/Ethnicity

A frequency analysis of race/ethnicity indicated that 7.8% ($n = 16$) of the sample

was Asian, 10.2% ($n = 21$) of the sample was Black, 8.3% ($n = 17$) of the sample was

Hispanic, 70.9% ($n = 146$) of the sample were White, and finally 2.9% ($n = 6$) of the sample selected "other."

<center>*Highest Level of Education Completed*</center>

A frequency analysis of highest level of education completed indicated that 5.8% ($n = 12$) of the sample's highest level of education attained was a high school diploma or GED, 24.3% ($n = 50$) of the respondents indicated they had completed some college, 49% ($n = 101$) of the sample's highest level of education attained was a bachelor's degree, 2.9% ($n = 6$) of the of the respondents indicated they had completed some graduate school, 16.5% ($n = 34$) of the sample's highest level of education attained a master's degree of professional school, and finally 1.5% ($n = 3$) of the sample's highest level of education attained a doctoral degree.

<center>*Job Function*</center>

A frequency analysis of job function indicated that 34.0% ($n = 70$) of the respondents indicated that their job function was direct patient care, 17.5% ($n = 36$) of the respondents indicated that their job function was indirect patient care, and finally 48.5% ($n = 100$) of the sample indicated that their job function was administrative.

<center>*Years of Work Experience*</center>

A frequency analysis of years of work experience indicated that 25.7% ($n = 53$) of the respondents indicated they have 0 to two years of experience, 24.3% ($n = 50$) of the respondents indicated they have three to five years of work experience, 20.9% ($n = 43$) of the respondents indicated they have six to nine years of work experience, 22.8% ($n = 47$) of the respondents indicated they have ten to nineteen years of work experience, and finally 6.3% ($n = 13$) indicated they have 20 to 30years of work experience.

Table 1 provides a frequency table for the demographic variables.

Table 1

Frequency Table of Demographic Variables

Category	Variable	*f*	Percent
Gender	Male	92	44.7
	Female	114	55.3
	Total	206	100.0
Age	21-29	51	24.8
	30-39	103	50.0
	40-49	35	17.0
	50-59	10	4.9
	60 and Over	7	3.4
	Total	206	100.0
Race/Ethnicity	Asian	16	7.8
	Black	21	10.2
	Hispanic	17	8.3
	White	146	70.9
	Other	6	2.9
	Total	206	100.0
Education	High School Diploma or GED	12	5.8
	Some College	50	24.3
	Bachelor's Degree	101	49.0
	Some Graduate School	6	2.9
	Master's Degree or	34	16.5
	Professional School	0	0.0
	Doctoral Degree	3	1.5
	Total	206	100.0
Job Function	Direct Patient Care	70	34.0
	Indirect Patient Care	36	17.5
	Administrative	100	48.5
	Total	206	100.0
Years of Work Experience	0-2	53	25.7
	3-5	50	24.3
	6-9	43	20.9
	10-19	47	22.8
	20-30	13	6.3

Intercorrelations among the Research Variables

As a preliminary step in the analyses, the researcher investigated the zero-order correlations among the research variables to determine in a preliminary sense their strength and direction of relationships. In general, the magnitude and direction of significant relationships were as predicted by theory and research. For example, interpersonal deviance was positively related to neuroticism, but negatively related to conscientiousness. Likewise, organizational deviance was positively related to neuroticism, yet negatively related to conscientiousness. Turnover intent demonstrated a negative relationship with conscientiousness, but strong positive relationships with role conflict, organizational constraints, and organizational deviance. Moreover, perceived physical health demonstrated positive relationships with extraversion and conscientiousness, but negative ones with neuroticism, and interpersonal and organizational deviance. Interestingly, the social desirability variable was associated with extraversion only (weakly and positively), and the association with the incivility variables (incivility can be a "sensitive" subject in organizational studies; see Reio & Ghosh, 2009) was not statistically significant. Still, the social desirability variable was included in the hierarchical regressions (H_6 and H_7) to statistically control for introducing possible common method variance bias in the study, as recommended by Reio (2010). The correlations are presented below in Table 2.

Table 2

Zero-Order Correlations among the Research Variables

Variables	RC	RA	OC	ID	OD	EXT	AGR	CON	NEU	IMG	PH	TI	SD
RC	_												
RA	-.40**	_											
OC	.56**	-.55**	_										
ID	.19**	-.10	.32**	_									
OD	.24**	-.30**	.30**	.51**	_								
EXT	.04	.15*	-.01	.14*	.12	_							
AGR	-.00	.08	.02	-.15*	-.11	.22**	_						
CON	-.06	.07	-.12	-.26**	-.38**	.01	.18**	_					
NEU	.11	-.07	.16*	.31**	.21**	-.22**	-.11	-.33**	_				
IMG	.05	.06	-.08	-.17*	-.15*	.30**	.37**	.23**	-.28**	_			
PH	-.00	.10	-.14*	-.16*	-.18**	.41**	.09	.25**	-.45**	.29**	_		
TI	.41**	-.49**	.45**	.17*	.31**	-.02	-.08	-.24**	.11	-.03	-.21**	_	
SD	-.07	.05	.03	.12	-.09	.13	-.04	.02	.04	-.01	-.04	-.02	_

Note. $N = 206$. *$p < .05$; **$p < .01$; ***$p < .001$

RC = Role Conflict; RA = Role Ambiguity; OC = Organizational Constraints; ID = Interpersonal Deviance; OD = Organizational Deviance; EXT = Extraversion; AGR = Agreeableness; CON = Conscientiousness; NEU = Neuroticism; IMG = Imagination/Intellect; PH = Physical Health; TI = Turnover Intention; SD = Social Desirability

Testing the Research Hypotheses

This study examined a hypothesized model of occupational stress and workplace incivility (instigator) using moderated regression and hierarchical regression analysis. The model hypothesized that the relationship between occupational stress and workplace incivility (instigator perspective) will be moderated by personality (five traits), and

perceived physical health and intentions to turnover will be related to occupational stress

and workplace incivility. To avoid multicollinearity with the interaction term, the

variables were centered by subtracting the mean value of all the scores on each predictor

from each score on that predictor (Howell, 2002). To interpret the interactions, separate

regression lines were computed and plotted for participants one standard deviation below

the mean on each centered predictor (i.e., the organizational stress variables; role

ambiguity, role conflict, organizational constraint), the mean of the centered predictor,

and one standard deviation above the mean of the centered predictor (Aiken & West,

1991; Cohen et al., 2003). The plots were then consulted to make final determination if

the respective hypotheses were supported.

Moderated Regression Analysis for Testing H$_1$

H$_1$ stated that extraversion moderates the relationship between occupational stress

and incivility, such that the stress-incivility relationship will be strengthened. The data for

this study demonstrated partial support for this hypothesis. Two sets of moderated

hierarchical regressions were conducted to account for each workplace incivility

(interpersonal deviance and organizational deviance) variable. In the first step of all the

moderated regressions for the workplace incivility variables of interpersonal and

organizational deviance, one variable was included: social desirability to control for the

possibility of impression management as the respondents completed the self-assessment.

Interpersonal Deviance Models

For step one to predict interpersonal deviance with role ambiguity and the

personality interactions, social desirability was added, $R^2 = .015$, $F(1, 204) = 3.147$, $p >$

.05. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .012$,

$F(1, 203) = 2.500$, $p < .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 9.441$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .15$, $p < .05$) on interpersonal deviance in the third model. This suggests that role ambiguity has a unique positive effect on interpersonal deviance in that greater role ambiguity was associated with more interpersonal deviance. The interaction between role ambiguity and extraversion was significant ($B = .040$, $SE = .01$, $\beta = .28$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role ambiguity was entered as the independent variable, extraversion was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the role ambiguity-interpersonal deviance relationship was stronger when extraversion was high; thus, supporting the first hypothesis (see Figure 2). The overall $R^2 = .214$ or 21.4% of the variance in interpersonal deviance was explained. Results for the moderated regression between role ambiguity, extraversion and interpersonal deviance can be found in Table 3.

In the first step to predict interpersonal deviance with role conflict and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .038$, $F(1, 203) = 8.129$, $p < .01$. The third and last step added the interaction variables of

the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .156$, $F(5, 198) = 7.78$, $p < .001$. The findings indicated that there was a positive main effect for participants' role conflict ($\beta = .20$, $p < .01$) on interpersonal deviance in the third model. This suggests that role conflict has a unique positive effect on interpersonal deviance in that greater role conflict was associated with more interpersonal deviance. The interaction between role conflict and extraversion was also significant ($B = .022$, $SE = .01$, $\beta = .21$, $p < .01$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role conflict was entered as the independent variable, extraversion was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the role conflict-interpersonal deviance relationship was stronger when extraversion was high; thus, supporting the first hypothesis (see Figure 3). The overall $R^2 = .209$ or 20.9% of the variance in interpersonal deviance was explained. Results for the moderated regression between role conflict, extraversion and interpersonal deviance can be found in Table 4.

In step one to predict interpersonal deviance with organizational constraint and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of organizational constraint, $\Delta R^2 = .10$, $F(1, 203) = 22.940$, $p < .001$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant

proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $\Delta F(5, 198) = 10.59$, $p <$ .001. The findings indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on interpersonal deviance in the third model. This suggests that organizational constraint has a unique positive effect on interpersonal deviance in that greater organizational constraint was associated with more interpersonal deviance. The interaction between organizational constraint and extraversion was also significant ($B = .017$, $SE = .00$, $\beta = .25$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Organizational constraint was entered as the independent variable, extraversion was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the organizational constraint-interpersonal deviance relationship was stronger when extraversion was high; thus, supporting the first hypothesis (see Figure 4). The overall $R^2 = .302$ or 30.2% of the variance in interpersonal deviance was explained. Results of the moderated hierarchical regression analysis between organizational constraint, extraversion and interpersonal deviance are presented in Table 5.

Organizational Deviance Models

In the first step of all the moderated regressions for the workplace incivility variable of organizational deviance one variable was included: social desirability to

control for the possibility of impression management as the respondents completed the self-assessment.

When predicting organizational deviance with role ambiguity and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .096$, $F(1, 203) = 19.447$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .141$, $F(5, 198) = 7.31$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .30$, $p < .001$) on organizational deviance in the third model. This suggests that role ambiguity has a unique positive effect on organizational deviance in that greater role ambiguity was associated with more organizational deviance. The interaction between role ambiguity and extraversion was not significant ($B = -.01$, $SE = .02$, $\beta = -.05$, $p > .05$); thus, not supporting the first hypothesis. The overall $R^2 = .236$ or 23.6% of the variance in organizational deviance was explained. The results are presented in Table 6.

When predicting organizational deviance with role conflict and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .053$, $F(1, 203) = 11.44$, $p < .01$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .143$, $F(5, 198) = 7.098$, $p < .001$. The results indicated that there was a positive main effect for participants' role conflict ($\beta = .24$, $p < .001$) on organizational deviance in the third model. This suggests that role conflict has a unique

positive effect on organizational deviance in that greater role conflict was associated with more organizational deviance. The interaction between role conflict and extraversion was not significant ($B = -.02$, $SE = .01$, $\beta = -.10$, $p > .05$); thus, not supporting the first hypothesis. The overall $R^2 = .204$ or 20.4% of the variance in organizational deviance was explained. The results are presented in Table 7.

When predicting organizational deviance with organizational constraint and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .092$, $F(1, 203) = 20.70$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .137$, $F(5, 198) = 7.118$, $p < .001$. The results indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on organizational deviance in the third model. This suggests that organizational constraint has a unique positive effect on organizational deviance in that greater organizational constraint was associated with more organizational deviance. The interaction between organizational constraint and extraversion was not significant ($B = -.01$, $SE = .01$, $\beta = -.06$, $p > .05$); thus, not supporting the first hypothesis. The overall $R^2 = .238$ or 23.8% of the variance in organizational deviance was explained. The results are presented in Table 8.

Moderated Regression Analysis for Testing H$_2$

H$_2$ stated that neuroticism moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened. The data for this study demonstrate that there was partial support for this hypothesis. The workplace

incivility interpersonal deviance variable produced significant interactions, while the organizational deviance did not yield significant interactions. Two sets of moderated hierarchical regressions were conducted to account for each workplace incivility (interpersonal deviance and organizational deviance) variable. In the first step of all the moderated regressions for the workplace incivility variables of interpersonal and organizational deviance, one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

Interpersonal Deviance Models

In step one to predict individual deviance with role ambiguity and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .012$, $F(1, 203) = 2.500$, $p > .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 9.441$, $p < .001$. The findings indicated that there was a positive main effect for participants' role ambiguity ($\beta = .15$, $p < .05$) on interpersonal deviance in the third model. This suggests that role ambiguity has a unique positive effect on interpersonal deviance in that greater role ambiguity was associated with more interpersonal deviance. The interaction between role ambiguity and neuroticism was also significant ($B = .05$, $SE = .01$, $\beta = .29$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role ambiguity was entered as the independent variable, neuroticism was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each

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centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the role ambiguity-interpersonal deviance relationship was stronger when neuroticism was high; thus, supporting the second hypothesis (see Figure 5). The overall $R^2 = .214$ or 21.4% of the variance in interpersonal deviance was explained.

In step one to predict interpersonal deviance with role conflict and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .038$, $F(1, 203) = 8.129$, $p < .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .156$, $F(5, 198) = 7.782$, $p < .001$. The findings indicated that there was a positive main effect for participants' role conflict ($\beta = .20$, $p < .01$) on interpersonal deviance in the third model. This suggests that role conflict has a unique positive effect on interpersonal deviance in that greater role conflict was associated with more interpersonal deviance. The interaction between role conflict and neuroticism was significant ($B = .03$, $SE = .01$, $\beta = .25$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role conflict was entered as the independent variable, neuroticism was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes,

2013; Howell, 2002), the role conflict-interpersonal deviance relationship was stronger when neuroticism was high supporting; thus supporting the second hypothesis (see Figure 6). The overall $R^2 = .209$ or 20.9% of the variance in interpersonal deviance was explained. The results are presented in Table 4.

In step one to predict interpersonal deviance with organizational constraint and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of organizational constraint, $\Delta R^2 = .10$, $F(1, 203) = 22.94$, $p < .001$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 10.59$, $p < .001$. The findings indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on interpersonal deviance in the third model. This suggests that organizational constraint has a unique positive effect on interpersonal deviance in that greater organizational constraint was associated with more interpersonal deviance. The interaction between organizational constraint and neuroticism was also significant ($B = .02$, $SE = .00$, $\beta = .28$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Organizational constraint was entered as the independent variable, neuroticism was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the organizational constraint-interpersonal deviance

relationship was stronger when neuroticism was high; thus supporting the second hypothesis (see Figure 7). The overall $R^2 = .302$ or 30.2% of the variance in interpersonal deviance was explained. The results are presented in Table 5.

Organizational Deviance Models

In the first step of all the moderated regressions for the workplace incivility variable of organizational deviance one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

When predicting organizational deviance with role ambiguity and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .087$, $F(1, 203) = 19.447$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .141$, $F(5, 198) = 7.037$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .30$, $p < .001$) on organizational deviance in the third model. This suggests that role ambiguity has a unique positive effect on organizational deviance in that greater role ambiguity was associated with more organizational deviance. The interaction between role ambiguity and neuroticism was not significant ($B = .02$, $SE = .02$, $\beta = .09$, $p > .05$); thus, not supporting the second hypothesis. The overall $R^2 = .236$ or 23.6% of the variance in organizational deviance was explained. The results are presented in Table 6.

When predicting organizational deviance with role conflict and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) =$

1.826, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .053$, $F(1, 203) = 11.44$, $p < .01$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .143$, $F(5, 198) = 7.098$, $p < .001$. The results indicated that there was a positive main effect for participants' role conflict ($\beta = .24$, $p < .001$) on organizational deviance in the third model. This suggests that role conflict has a unique positive effect on organizational deviance in that greater role conflict was associated with more organizational deviance. The interaction between role conflict and neuroticism was not significant ($B = .01$, $SE = .01$, $\beta = .04$, $p > .05$); thus, not supporting the second hypothesis. The overall $R^2 = .204$ or 20.4% of the variance in organizational deviance was explained. The results are presented in Table 7.

When predicting organizational deviance with organizational constraint and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .092$, $F(1, 203) = 20.70$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .137$, $F(5, 198) = 7.118$, $p < .001$. The results indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on organizational deviance in the third model. This suggests that organizational constraint has a unique positive effect on organizational deviance in that greater organizational constraint was associated with more organizational deviance. The interaction between organizational constraint and neuroticism was not significant ($B = .01$, $SE = .01$, $\beta = .05$, $p > .05$); thus, not supporting the second hypothesis. The overall R^2

= .238 or 23.8% of the variance in organizational deviance was explained. The results are presented in Table 8.

Moderated Regression Analysis for Testing H₃

H$_3$ stated that conscientiousness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened. Both the workplace incivility interpersonal deviance and organizational deviance variables produced significant interactions, partially supporting the third hypothesis. Two sets of moderated hierarchical regressions were conducted to account for each workplace incivility (interpersonal deviance and organizational deviance) variable. In the first step of all the moderated regressions for the workplace incivility variables of interpersonal and organizational deviance, one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

Interpersonal Deviance Models

In step one to predict interpersonal deviance with role ambiguity and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .012$, $F(1, 203) = 2.500$, $p > .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 9.441$, $p < .001$. The findings indicated that there was a positive main effect for participants' role ambiguity ($\beta = .15$, $p < .05$) on interpersonal deviance in the third model. This suggests that role ambiguity has a unique positive effect on interpersonal deviance in that greater role ambiguity was associated

with more interpersonal deviance. The interaction between role ambiguity and

conscientiousness was not significant ($B = -.02$, $SE = .01$, $\beta = -.12$, $p > .05$). The overall

$R^2 = .214$ or 21.4% of the variance in interpersonal deviance was explained.

In step one to predict interpersonal deviance with role conflict and the personality

trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$.

The second step added the occupational stress variable of role conflict, $\Delta R^2 = .038$, $F(1,$

$203) = 8.129$, $p < .05$. The third and last step added the interaction variables of the five

personality traits, which accounted for a significant proportion of the variance in

workplace incivility, $\Delta R^2 = .156$, $F(5, 198) = 7.782$, $p < .001$. The findings indicated that

there was a positive main effect for participants' role conflict ($\beta = .20$, $p < .01$) on

interpersonal deviance in the third model. This suggests that role conflict has a unique

positive effect on interpersonal deviance in that greater role conflict was associated with

more interpersonal deviance. The interaction between role conflict and conscientiousness

was not significant ($B = -.02$, $SE = .01$, $\beta = -.13$, $p = .05$); thus, not supporting the third

hypothesis. The overall $R^2 = .209$ or 20.9% of the variance in interpersonal deviance was

explained. The results are presented in Table 4.

In step one to predict interpersonal deviance with organizational constraint and

the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) =$

3.147, $p > .05$. The second step added the occupational stress variable of organizational

constraint, $\Delta R^2 = .10$, $F(1, 203) = 22.94$, $p < .001$. The third and last step added the

interaction variables of the five personality traits, which accounted for a significant

proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 10.59$, $p <$

$.001$. The findings indicated that there was a positive main effect for participants'

organizational constraint ($\beta = .28$, $p < .001$) on interpersonal deviance in the third model. This suggests that organizational constraint has a unique positive effect on interpersonal deviance in that greater organizational constraint was associated with more interpersonal deviance. The interaction between organizational constraint and conscientiousness was not significant ($B = -.01$, $SE = .00$, $\beta = -.11$, $p > .05$); thus, not supporting the third hypothesis. The overall $R^2 = .302$ or 30.2% of the variance in interpersonal deviance was explained. The results are presented in Table 5.

Organizational Deviance Models

In the first step of all the moderated regressions for the workplace incivility variable of organizational deviance one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

When predicting organizational deviance with role ambiguity and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .096$, $F(1, 203) = 19.447$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .141$, $F(5, 198) = 7.307$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .30$, $p < .001$) on organizational deviance in the third model. This suggests that role ambiguity has a unique positive effect on organizational deviance in that greater role ambiguity was associated with more organizational deviance. The interaction between role ambiguity and conscientiousness was significant ($B = -.09$, $SE = .02$, $\beta = -.32$, $p < .001$). Using

PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role ambiguity was entered as the independent variable, conscientiousness was entered as the moderator and organizational deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the role ambiguity-organizational deviance relationship was weaker when conscientiousness was high supporting the third hypothesis (see Figure 8). The overall $R^2 = .236$ or 23.6% of the variance in organizational deviance was explained. The results are presented in Table 6.

When predicting organizational deviance with role conflict and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .053$, $F(1, 203) = 11.44$, $p < .01$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .143$, $F(5, 198) = 7.098$, $p < .001$. The results indicated that there was a positive main effect for participants' role conflict ($\beta = .24$, $p < .001$) on organizational deviance in the third model. This suggests that role conflict has a unique positive effect on organizational deviance in that greater role conflict was associated with more organizational deviance. The interaction between role conflict and conscientiousness was significant ($B = -.07$, $SE = .01$, $\beta = -.33$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Role conflict was entered as the independent variable,

conscientiousness was entered as the moderator and organizational deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the role conflict-organizational deviance relationship was weaker when conscientiousness was high supporting the third hypothesis (see Figure 9). The overall $R^2 = .204$ or 20.4% of the variance in organizational deviance was explained. The results are presented in Table 7.

When predicting organizational deviance with organizational constraint and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .092$, $F(1, 203) = 20.70$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .137$, $F(5, 198) = 7.118$, $p < .001$. The results indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on organizational deviance in the third model. This suggests that organizational constraint has a unique positive effect on organizational deviance in that greater organizational constraint was associated with more organizational deviance. The interaction between organizational constraint and conscientiousness was significant ($B = -.04$, $SE = .01$, $\beta = -.31$, $p < .001$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted to interpret the interaction effects. Organizational constraint was entered as the independent variable, conscientiousness was entered as the moderator and organizational deviance was entered as the outcome variable in PROCESS. The

interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the organizational constraint-organizational deviance relationship was weaker when conscientiousness was high supporting the third hypothesis (see Figure 10). The overall $R^2 = .238$ or 23.8% of the variance in organizational deviance was explained. The results are presented in Table 8.

Moderated Regression Analysis for Testing H$_4$

H$_4$ stated that agreeableness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened. Overall, there was partial support for the fourth hypothesis; interpersonal deviance, but not organizational deviance demonstrated significant interactions with agreeableness. Two sets of moderated hierarchical regressions were conducted to account for each workplace incivility (interpersonal deviance and organizational deviance) variable. In the first step of all the moderated regressions for the workplace incivility variables of interpersonal and organizational deviance, one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

Interpersonal Deviance Models

In step one to predict interpersonal deviance with role ambiguity and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .012$, $F(1, 203) = 2.500$, $p > .05$. The third and last step added the interaction variables of

the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 9.441$, $p < .001$. The findings indicated that there was a positive main effect for participants' role ambiguity ($\beta = .15$, $p < .05$) on interpersonal deviance in the third model. This suggests that role ambiguity has a unique positive effect on interpersonal deviance in that greater role ambiguity was associated with more interpersonal deviance. The interaction between role ambiguity and agreeableness was not significant ($B = -.02$, $SE = .01$, $\beta = -.11$, $p > .05$); thus, not supporting the fourth hypothesis. The overall $R^2 = .214$ or 21.4% of the variance in interpersonal deviance was explained.

In step one to predict interpersonal deviance with role conflict and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .038$, $F(1, 203) = 8.129$, $p < .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .156$, $F(5, 198) = 7.782$, $p < .001$. The findings indicated that there was a positive main effect for participants' role conflict ($\beta = .20$, $p < .01$) on interpersonal deviance in the third model. This suggests that role conflict has a unique positive effect on interpersonal deviance in that greater role conflict was associated with more interpersonal deviance. The interaction between role conflict and agreeableness was not significant ($B = -.01$, $SE = .01$, $\beta = -.09$, $p > .05$); thus, not supporting the fourth hypothesis. The overall $R^2 = .209$ or 20.9% of the variance in interpersonal deviance was explained. The results are presented in Table 4.

In step one to predict interpersonal deviance with organizational constraint and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of organizational constraint, $\Delta R^2 = .10$, $F(1, 203) = 22.94$, $p < .001$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 10.59$, $p < .001$. The findings indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on interpersonal deviance in the third model. This suggests that organizational constraint has a unique positive effect on interpersonal deviance in that greater organizational constraint was associated with more interpersonal deviance. The interaction between organizational constraint and agreeableness was significant ($B = -.01$, $SE = .01$, $\beta = -.14$, $p < .05$). Using PROCESS for SPSS (Hayes, 2012), separate regression lines were plotted interpret the interaction effects. Organizational constraint was entered as the independent variable, agreeableness was entered as the moderator and individual deviance was entered as the outcome variable in PROCESS. The interaction plot reflects one standard deviation below the mean on each centered predictor, and one standard deviation above the mean of each centered predictor (Hayes, 2013). After consulting with the plot generated to interpret the interaction effect (Hayes, 2013; Howell, 2002), the organizational constraint-interpersonal deviance relationship was weaker when agreeableness was high supporting the fourth hypothesis (see Figure 11). The overall $R^2 = .302$ or 30.2% of the variance in interpersonal deviance was explained. The results are presented in Table 5.

Organizational Deviance Models

When predicting organizational deviance with role ambiguity and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .087$, $F(1, 203) = 19.447$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .141$, $F(5, 198) = 7.307$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .30$, $p < .001$) on organizational deviance in the third model. This suggests that role ambiguity has a unique positive effect on organizational deviance in that greater role ambiguity was associated with more organizational deviance. The interaction between role ambiguity and agreeableness was not significant ($B = -.00$, $SE = .02$, $\beta = -.01$, $p > .05$); thus, not supporting the fourth hypothesis. The overall $R^2 = .236$ or 23.6% of the variance in organizational deviance was explained. The results are presented in Table 6.

When predicting organizational deviance with role conflict and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .053$, $F(1, 203) = 11.44$, $p < .01$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .143$, $F(5, 198) = 7.098$, $p < .001$. The results indicated that there was a positive main effect for participants' role conflict ($\beta = .24$, $p < .001$) on organizational deviance in the third model. This suggests that role conflict has a unique positive effect on organizational deviance in that greater role conflict was associated with more organizational deviance. The interaction between role conflict and agreeableness

was not significant ($B = -.01$, $SE = .01$, $\beta = -.03$, $p > .05$); thus, not supporting the fourth hypothesis. The overall $R^2 = .204$ or 20.4% of the variance in organizational deviance was explained. The results are presented in Table 7.

When predicting organizational deviance with organizational constraint and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .092$, $F(1, 203) = 20.70$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .137$, $F(5, 198) = 7.118$, $p < .001$. The results indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on organizational deviance in the third model. This suggests that organizational constraint has a unique positive effect on organizational deviance in that greater organizational constraint was associated with more organizational deviance. The interaction between organizational constraint and agreeableness was not significant ($B = -.01$, $SE = .01$, $\beta = -.07$, $p > .05$); thus, not supporting the fourth hypothesis. The overall $R^2 = .238$ or 23.8% of the variance in organizational deviance was explained. The results are presented in Table 8.

Moderated Regression Analysis for Testing H₅

H_5 stated that imagination/intellect (openness to experience) moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened. The analyses did not support the hypothesis for both interpersonal and organizational deviance. Two sets of moderated hierarchical regressions were conducted to account for each workplace incivility (interpersonal

deviance and organizational deviance) variable. In the first step of all the moderated regressions for the workplace incivility variables of interpersonal and organizational deviance, one variable was included: social desirability to control for the possibility of impression management as the respondents completed the self-assessment.

Interpersonal Deviance Models

In step one to predict interpersonal deviance with role ambiguity and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .012$, $F(1, 203) = 2.500$, $p > .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 9.441$, $p < .001$. The findings indicated that there was a positive main effect for participants' role ambiguity ($\beta = .15$, $p < .05$) on interpersonal deviance in the third model. This suggests that role ambiguity has a unique positive effect on interpersonal deviance in that greater role ambiguity was associated with more interpersonal deviance. The interaction between role ambiguity and imagination/intellect was not significant ($B = -.02$, $SE = .01$, $\beta = -.01$, $p > .05$); thus, not supporting the fifth hypothesis. The overall $R^2 = .214$ or 21.4% of the variance in interpersonal deviance was explained.

In step one to predict interpersonal deviance with role conflict and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .038$, $F(1, 203) = 8.129$, $p < .05$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in

workplace incivility, $\Delta R^2 = .156$, $F(5, 198) = 7.782$, $p < .001$. The findings indicated that there was a positive main effect for participants' role conflict ($\beta = .20$, $p < .01$) on interpersonal deviance in the third model. This suggests that role conflict has a unique positive effect on interpersonal deviance in that greater role conflict was associated with more interpersonal deviance. The interaction between role conflict and imagination/intellect was not significant ($B = -.01$, $SE = .01$, $\beta = -.10$, $p > .05$); thus, not supporting the fifth hypothesis. The overall $R^2 = .209$ or 20.9% of the variance in interpersonal deviance was explained. The results are presented in Table 4.

In step one to predict interpersonal deviance with organizational constraint and the personality trait interactions, social desirability was entered, $R^2 = .015$, $F(1, 204) = 3.147$, $p > .05$. The second step added the occupational stress variable of organizational constraint, $\Delta R^2 = .10$, $F(1, 203) = 22.94$, $p < .001$. The third and last step added the interaction variables of the five personality traits, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .187$, $F(5, 198) = 10.59$, $p < .001$. The findings indicated that there was a positive main effect for participants' organizational constraint ($\beta = .28$, $p < .001$) on interpersonal deviance in the third model. This suggests that organizational constraint has a unique positive effect on interpersonal deviance in that greater organizational constraint was associated with more interpersonal deviance. The interaction between organizational constraint and openness was not significant ($B = -.01$, $SE = .01$, $\beta = -.01$, $p < .05$); thus, not supporting the fifth hypothesis. The overall $R^2 = .302$ or 30.2% of the variance in interpersonal deviance was explained. The results are presented in Table 5.

Organizational Deviance Models

When predicting organizational deviance with role ambiguity and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role ambiguity, $\Delta R^2 = .087$, $F(1, 203) = 19.447$, $p < .001$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .141$, $F(5, 198) = 7.307$, $p < .001$. The results indicated that there was a positive main effect for participants' role ambiguity ($\beta = .30$, $p < .001$) on organizational deviance in the third model. This suggests that role ambiguity has a unique positive effect on organizational deviance in that greater role ambiguity was associated with more organizational deviance. The interaction between role ambiguity and imagination/intellect was not significant ($B = -.01$, $SE = .02$, $\beta = -.04$, $p > .05$); thus, not supporting the fifth hypothesis. The overall $R^2 = .236$ or 23.6% of the variance in organizational deviance was explained. The results are presented in Table 6.

When predicting organizational deviance with role conflict and the personality trait interactions, social desirability in the first step explained $R^2 = .009$, $F(1, 204) = 1.826$, $p > .05$. The second step added the occupational stress variable of role conflict, $\Delta R^2 = .053$, $F(1, 203) = 11.44$, $p < .01$. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, $\Delta R^2 = .143$, $F(5, 198) = 7.098$, $p < .001$. The results indicated that there was a positive main effect for participants' role conflict ($\beta = .24$, $p < .001$) on organizational deviance in the third model. This suggests that role conflict has a unique positive effect on organizational deviance in that greater role conflict was associated with more organizational deviance. The interaction between role conflict and

imagination/intellect was not significant (B = -.01, SE = .02, β = -.04, p > .05); thus, not supporting the fifth hypothesis. The overall R^2 = .204 or 20.4% of the variance in organizational deviance was explained. The results are presented in Table 7.

When predicting organizational deviance with organizational constraint and the personality trait interactions, social desirability in the first step explained R^2 = .009, F(1, 204) = 1.826, p > .05. The second step added the occupational stress variable of role conflict, ΔR^2 = .092, F(1, 203) = 20.70, p < .001. The third and last step added the interaction variables of personality, which accounted for a significant proportion of the variance in workplace incivility, ΔR^2 = .137, F(5, 198) = 7.118, p < .001. The results indicated that there was a positive main effect for participants' organizational constraint (β = .28, p < .001) on organizational deviance in the third model. This suggests that organizational constraint has a unique positive effect on organizational deviance in that greater organizational constraint was associated with more organizational deviance. The interaction between organizational constraint and imagination/intellect was not significant (B = -.01, SE = .01, β = -.04, p > .05); thus, not supporting the fifth hypothesis. The overall R^2 = .238 or 23.8% of the variance in organizational deviance was explained. The results are presented in Table 8.

Table 3

Moderated Hierarchical Regression Results on Interaction Effects of Interpersonal Deviance and

Occupational Stress (Role Ambiguity)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.02	3.147	1,204					
(Constant)					8.29		2.45	3.39**
Social Desirability					0.30	0.123	0.17	1.77
Model 2	0.03	2.500	1,203	0.01				
(Constant)					5.64		2.96	1.91
Social Desirability					0.31	0.13	0.17	1.85
Role Ambiguity					0.21	0.11	0.13	1.58
Model 3	0.21	9.411	5,198	0.19***				
(Constant)					5.86		2.70	2.17
Social Desirability					0.23	0.09	0.15	1.48
Role Ambiguity					0.29	0.15	0.12	2.40
Role Ambiguity x Extraversion					0.04	0.28	0.01	4.07***
Role Ambiguity x Agreeableness					-0.02	-0.11	0.01	-1.53
Role Ambiguity x Conscientiousness					-0.21	-0.12	0.01	-1.72
Role Ambiguity x Neuroticism					0.47	0.29	0.01	4.20***
Role Ambiguity x Imagination					-0.02	-0.01	0.01	-1.34

Note. N = 206. *p < .05; **p < .01; ***p < .001

Table 4

Moderated Hierarchical Regression Results on Interaction Effects of Interpersonal Deviance and

Occupational Stress (Role Conflict)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.015	3.147	1,204					
(Constant)					8.29		2.45	3.38**
Social Desirability					0.30	0.12	0.17	1.77
Model 2	0.053	8.129	1,203	0.04*				
(Constant)					2.22		3.22	0.69
Social Desirability					0.33	0.14	0.16	2.01*
Role Conflict					0.33	0.20	0.12	2.85*
Model 3	0.209	7.782	5,198	0.16***				
(Constant)					3.73		3.01	1.24
Social Desirability					0.23	0.10	0.15	1.51
Role Conflict					0.32	0.20	0.11	2.97**
Role Conflict x Extraversion					0.02	0.21	0.01	3.12**
Role Conflict x Agreeableness					-0.01	-0.09	0.01	-1.27
Role Conflict x Conscientiousness					-0.02	-0.13	0.01	-1.96
Role Conflict x Neuroticism					0.03	0.25	0.01	3.59***
Role Conflict x Imagination					-0.01	-0.10	0.01	-1.44

Note. N = 206. *p < .05; **p < .01; ***p < .001

Table 5

Moderated Hierarchical Regression Results on Interaction Effects of Interpersonal Deviance and

Occupational Stress (Occupational Constraint)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.015	3.147	1,204					
(Constant)					8.29		2.45	3.39**
Social Desirability					0.30	0.12	0.17	1.77
Model 2	0.115	22.94	1,203	0.10***				
(Constant)					2.29		2.65	0.86
Social Desirability					0.27	0.11	0.16	1.72
Organizational Constraint					0.25	0.32	0.06	4.79***
Model 3	0.302	10.59	5,198	0.19***				
(Constant)					5.62		2.43	2.31*
Social Desirability					0.08	0.03	0.15	0.55
Organizational Constraint					0.22	0.28	0.05	4.65***
Organizational Constraint x Extraversion					0.02	0.25	0.00	4.04***
Organizational Constraint x Agreeableness					-0.01	-0.14	0.01	-2.11*
Organizational Constraint x Conscientiousness					-0.01	-0.11	0.01	-1.74
Organizational Constraint x Neuroticism					0.02	0.28	0.00	4.32***
Organizational Constraint x Imagination					-0.01	-0.10	0.01	-1.49

Note. $N = 206$. *$p < .05$; **$p < .01$; ***$p < .001$

Table 6

Moderated Hierarchical Regression Results on Interaction Effects of Organizational Deviance

and Occupational Stress (Role Ambiguity)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.009	1.826	1,204					
(Constant)					30.16		3.77	7.99***
Social Desirability					-0.35	-0.09	0.26	-1.35
Model 2	0.096	19.447	1,203	0.09***				
(Constant)					19.21		4.39	4.38***
Social Desirability					-0.30	-0.08	0.25	-1.20
Role Ambiguity					0.87	0.30	0.20	4.41***
Model 3	0.236	7.307	5,198	0.14***				
(Constant)					18.73		4.09	4.58***
Social Desirability					-0.29	-0.08	0.23	-1.25
Role Ambiguity					0.89	0.30	0.18	4.81***
Role Ambiguity x Extraversion					-0.01	-0.05	0.02	-0.74
Role Ambiguity x Agreeableness					-0.00	-0.01	0.02	-0.09
Role Ambiguity x Conscientiousness					-0.09	-0.32	0.02	-4.70***
Role Ambiguity x Neuroticism					0.02	0.09	0.02	1.38
Role Ambiguity x Imagination					-0.01	-0.04	0.02	-0.62

Note. $N = 206$. *$p < .05$; **$p < .01$; ***$p < .001$

Table 7

Moderated Hierarchical Regression Results on Interaction Effects of Organizational Deviance

and Occupational Stress (Role Conflict)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.009	1.826	1,204					
(Constant)					30.16		3.77	7.99***
Social Desirability					-0.35	-0.09	0.26	-1.35
Model 2	0.062	11.44	1,203	0.05**				
(Constant)					19.15		4.91	3.90***
Social Desirability					-0.29	-0.77	0.25	-1.13
Role Conflict					0.60	0.23	0.18	3.38**
Model 3	0.204	7.098	5,198	0.14***				
(Constant)					17.99		4.64	3.88***
Social Desirability					-0.24	-0.07	0.24	-1.01
Role Conflict					0.63	0.24	0.17	3.76***
Role Conflict x Extraversion					-0.02	-0.10	0.01	-1.42
Role Conflict x Agreeableness					-0.01	-0.03	0.01	-0.44
Role Conflict x Conscientiousness					-0.07	-0.33	0.01	-4.84***
Role Conflict x Neuroticism					0.01	0.04	0.01	0.53
Role Conflict x Imagination					-0.01	-0.04	0.02	-0.51

*Note. N = 206. *p < .05; **p < .01; ***p < .001*

Table 8

Moderated Hierarchical Regression Results on Interaction Effects of Organizational Deviance

and Occupational Stress (Organizational Constraint)

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.009	1.826	1,204					
(Constant)					30.16		3.77	7.99***
Social Desirability					-0.35	-0.09	0.26	-1.35
Model 2	0.101	20.70	1,203	0.09***				
(Constant)					21.32		4.09	5.21***
Social Desirability					-0.38	-0.10	0.25	-1.56
Organizational Constraint					0.36	0.30	0.08	4.55***
Model 3	0.238	7.118	5,198	0.14***				
(Constant)					22.67		3.90	5.81***
Social Desirability					-0.45	-0.12	0.23	-1.90
Organizational Constraint					0.34	0.28	0.08	4.50***
Organizational Constraint x Extraversion					-0.01	-0.06	0.01	-0.84
Organizational Constraint x Agreeableness					-0.01	-0.07	0.01	-1.07
Organizational Constraint x Conscientiousness					-0.04	-0.31	0.01	-4.71***
Organizational Constraint x Neuroticism					0.01	0.05	0.01	0.70
Organizational Constraint x Imagination					-0.01	-0.04	0.01	-0.53

*Note. N = 206. *p < .05; **p < .01; ***p < .001*

Figure 2

The Interaction Effect of Occupational Stress (Role Ambiguity) and Personality

(Extraversion) on Workplace Incivility (Individual Deviance)

Figure 3

The Interaction Effect of Occupational Stress (Role Conflict) and Personality

(Extraversion) on Workplace Incivility (Individual Deviance)

Figure 4

The Interaction Effect of Occupational Stress (Organizational Constraint) and

Personality (Extraversion) on Workplace Incivility (Individual Deviance)
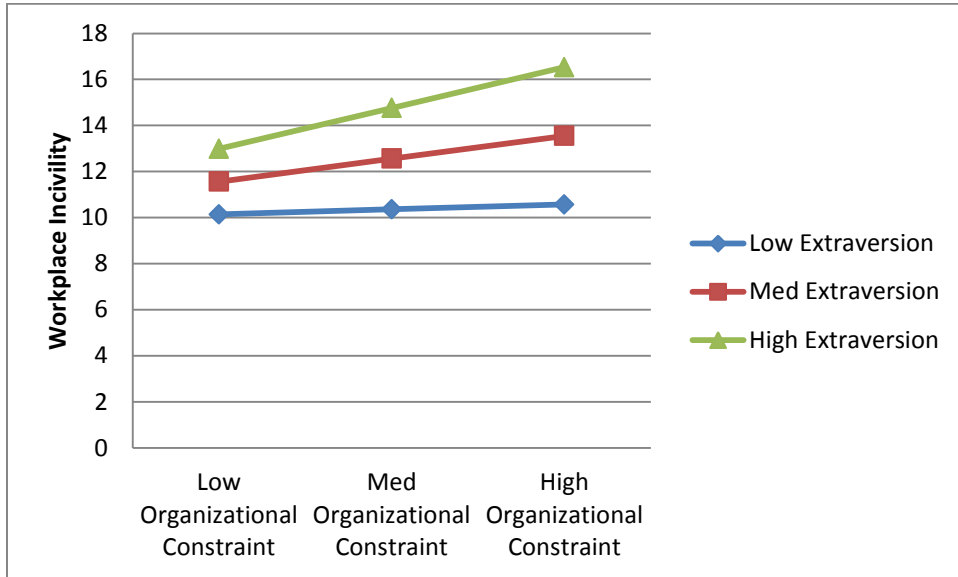
Figure 5

The Interaction Effect of Occupational Stress (Role Ambiguity) and Personality

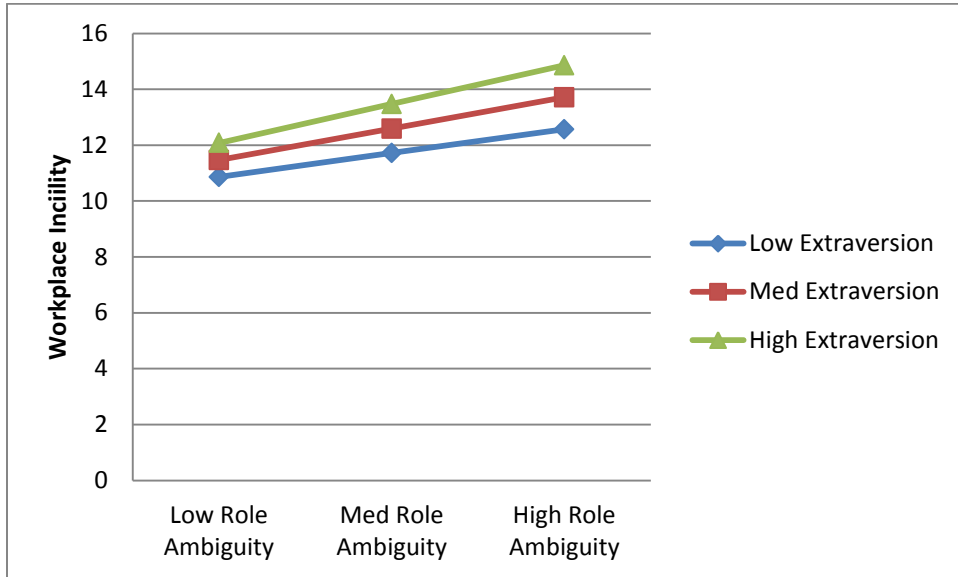*(Neuroticism) on Workplace Incivility (Individual Deviance)*
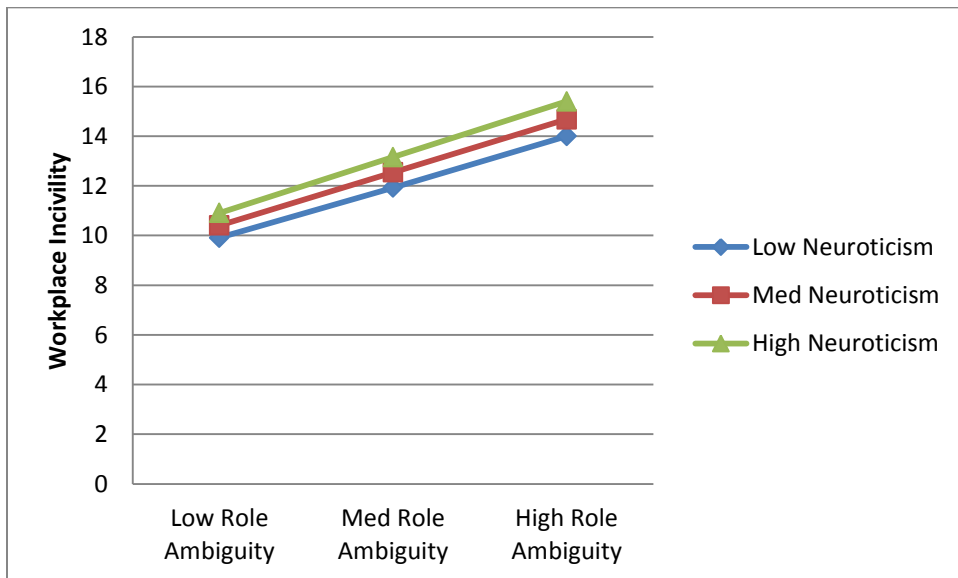
Figure 6

The Interaction Effect of Occupational Stress (Role Conflict) and Personality

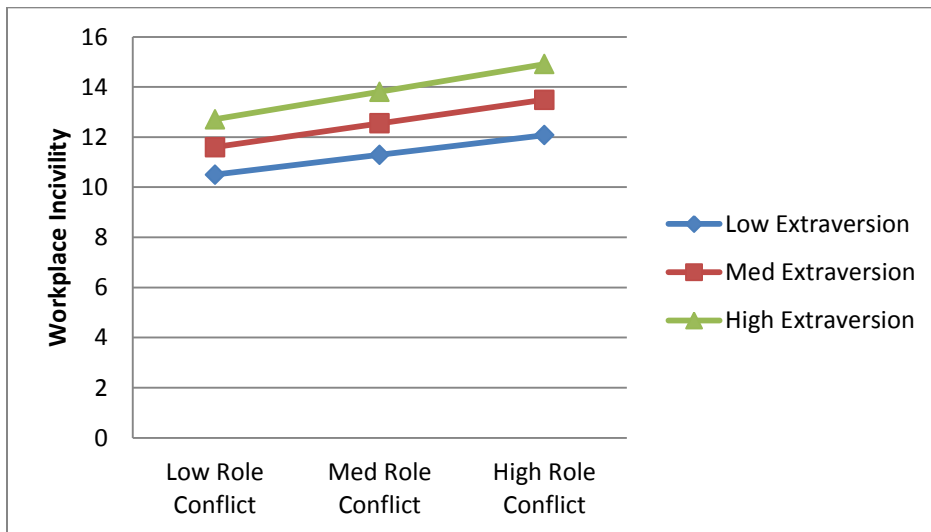*(Neuroticism) on Workplace Incivility (Individual Deviance)*

Figure 7

The Interaction Effect of Occupational Stress (Organizational Constraint) and

Personality (Neuroticism) on Workplace Incivility (Individual Deviance)
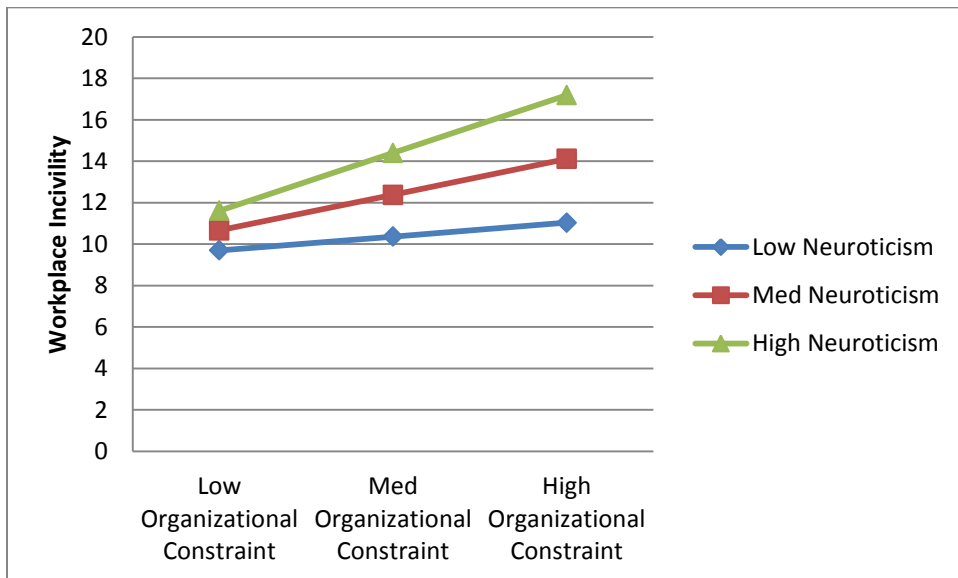
Figure 8

The Interaction Effect of Occupational Stress (Role Ambiguity) and Personality

(Conscientiousness) on Workplace Incivility (Organizational Deviance)
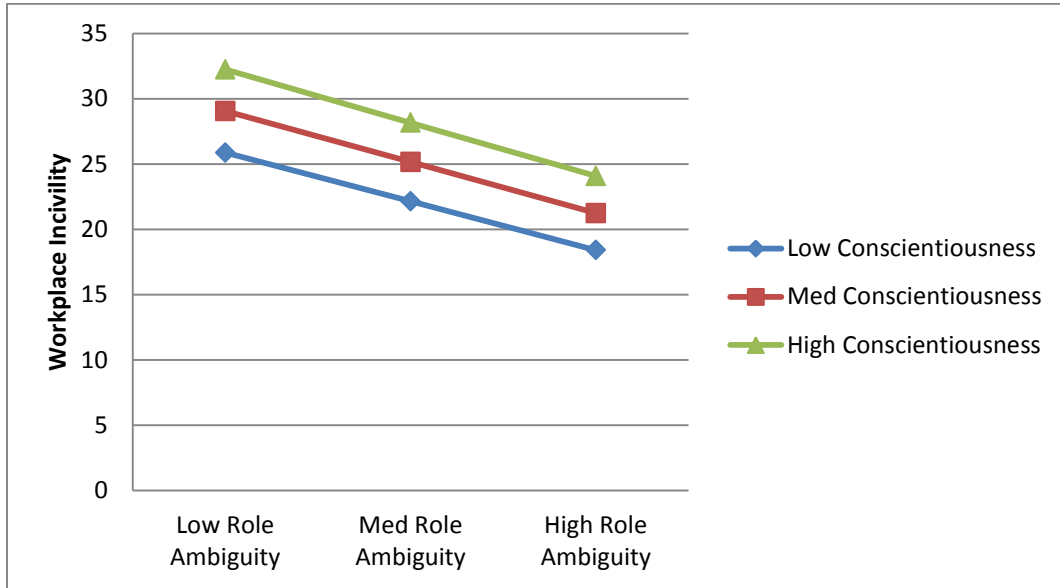
Figure 9

The Interaction Effect of Occupational Stress (Role Conflict) and Personality

(Conscientiousness) on Workplace Incivility (Organizational Deviance)
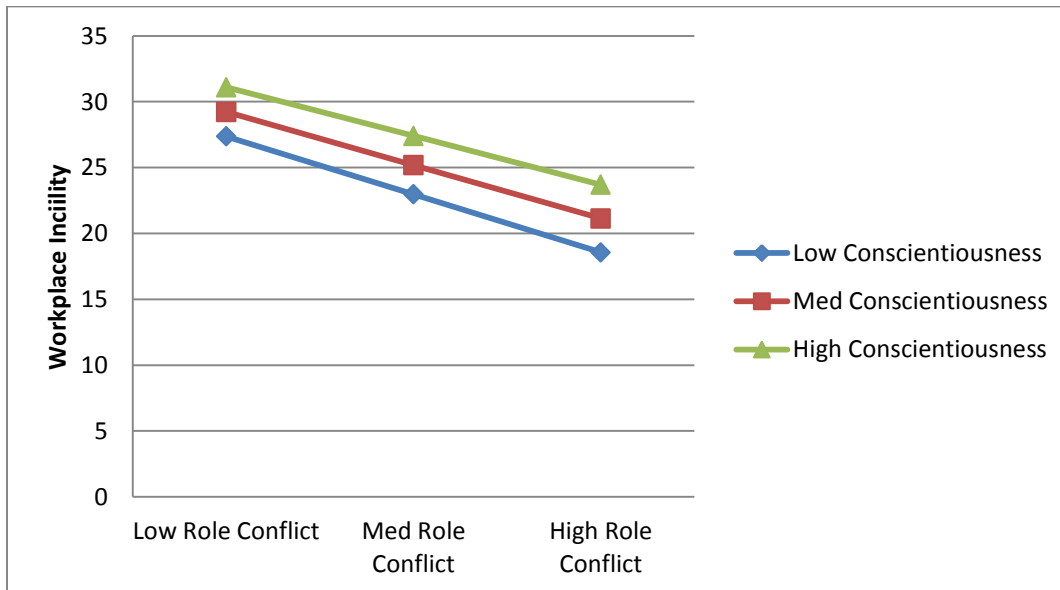
Figure 10

The Interaction Effect of Occupational Stress (Organizational Constraint) and

Personality (Conscientiousness) on Workplace Incivility (Organizational Deviance)
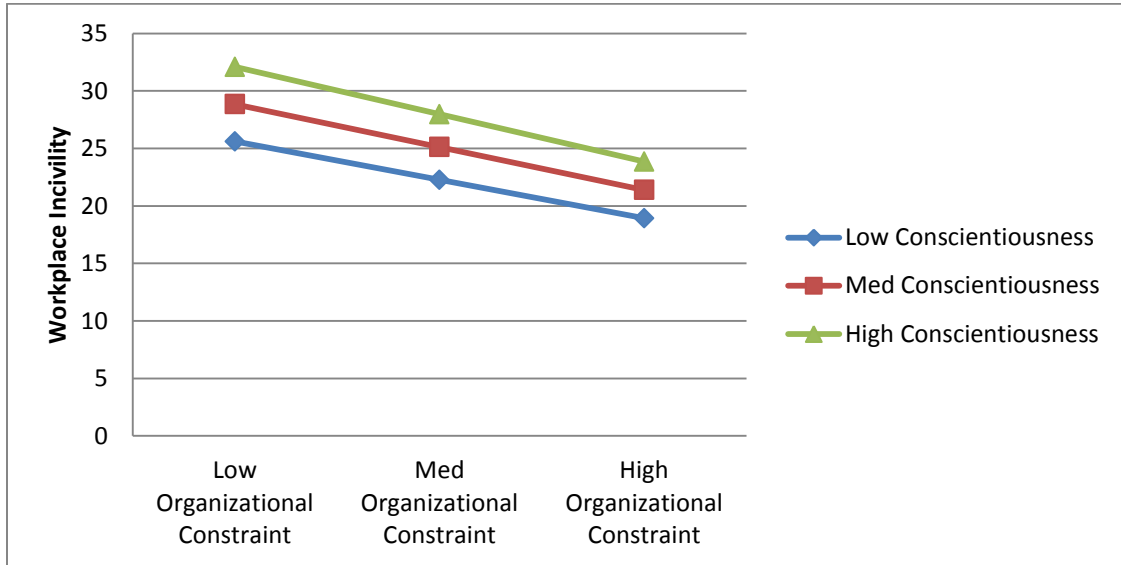
Figure 11

The Interaction Effect of Occupational Stress (Organizational Constraint) and

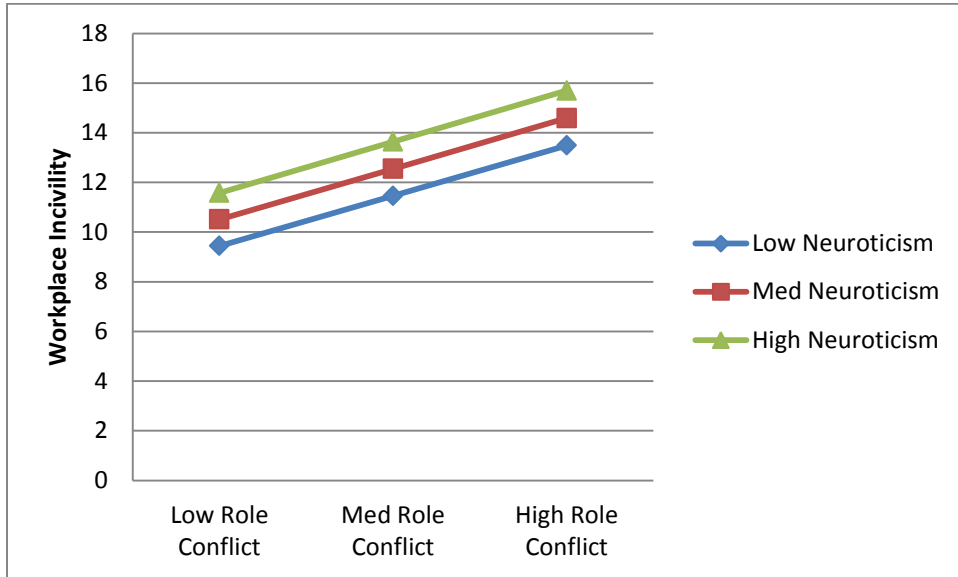*Personality (Agreeableness) on Workplace Incivility (Individual Deviance)*
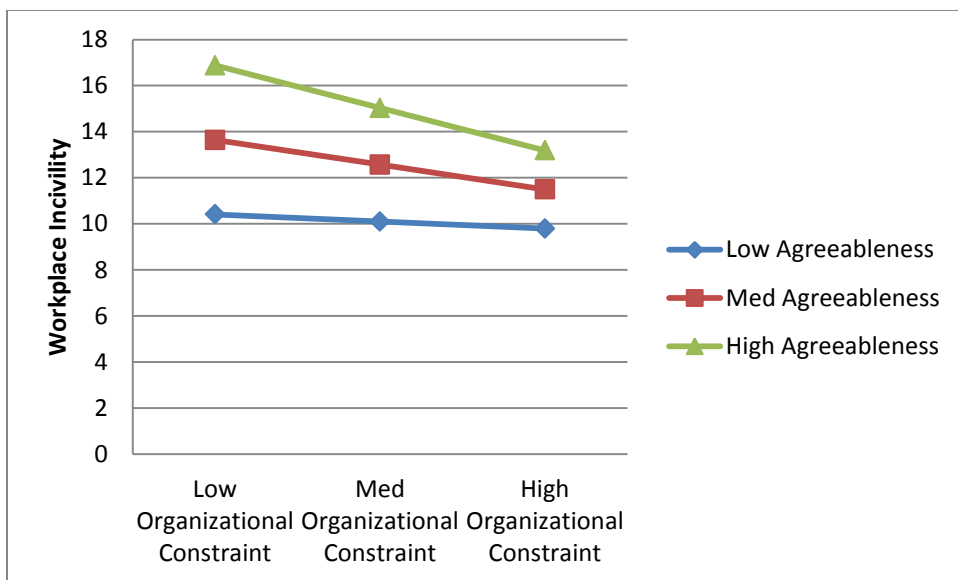
Regression Analysis for Testing H$_6$

H$_6$ stated that after controlling for occupational stress, workplace incivility will predict perceived physical health. The hypothesis was not supported. The outcome variable which was examined is perceived physical health. In the first step social desirability was entered, $R^2 = .001$, $F(1, 204) = .298$, $p = .586$. In the second step, the three occupational stress variables entered into the model were: organizational constraint, role ambiguity and role conflict, $\Delta R^2 = .029$, $F(3, 201) = 1.992$, $p = .116$. In the third step, the two workplace incivility variables entered were: interpersonal deviance and organizational deviance, $\Delta R^2 = .027$, $F(2, 199) = 2.832$, $p < .061$. The data did not support hypothesis 6, meaning that after controlling for social desirability, neither the organizational stress nor incivility variables predicted perceived physical health significantly. The overall $R^2 = .057$ or 5.7% of the variance in physical health was explained. Results of the hierarchical regression analysis on perceived physical health are presented in Table 9.

Table 9

Summary of Hierarchical Regression Results Where Organizational Stress and

Workplace Incivility Were Used to Predict Perceived Physical Health

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.001	0.298	1,204					
(Constant)					20.64		1.54	13.40***
Social Desirability					-0.06	-0.04	0.11	-0.55
Model 2	0.030	1.992	3,201	0.029				
(Constant)					21.24		2.13	9.99***
Social Desirability					-0.04	-0.03	0.11	-0.38
Role Ambiguity					-0.06	-0.05	0.10	-0.60
Role Conflict					0.12	0.12	0.09	1.36
Organizational Constraint					-0.09	-0.18	0.05	-1.88
Model 3	0.057	2.832	2,199	0.027				
(Constant)					22.21		2.16	10.28***
Social Desirability					-0.05	-0.03	0.11	-0.44
Role Ambiguity					-0.04	-0.03	0.10	-0.39
Role Conflict					0.13	0.13	0.09	1.49
Organizational Constraint					-0.06	-0.13	0.05	-1.35
Interpersonal Deviance					-0.04	-0.07	0.05	-0.78
Organizational Deviance					-0.05	-0.13	0.03	-1.58

Note. N = 206. *p < .05; **p < .01; ***p < .001

Regression Analysis for Testing H₇

H$_7$ stated that after controlling for occupational stress, workplace incivility will

predict intention to turnover. The hypothesis was partially supported. The outcome

variable which was examined is intention to turnover. In the first step, social desirability

was entered R^2= .000, $F(1, 204)$ = .048, p = .826. In the second step, the three

occupational stress variables entered into the model were: organizational constraint, role

ambiguity and role conflict, ΔR^2= .307, $F(3, 201)$ = 29.698, $p < .001$. In the third step, the

two workplace incivility variables entered were: interpersonal deviance and

organizational deviance, ΔR^2= .017, $F(2, 199)$ = 2.507, p = .042. Organizational deviance

was a positive predictor of turnover intention after controlling for social desirability and

organizational stress, suggesting that that the more one engages in organizational

deviance behaviors, the more likely his or her turnover intention will increase. The

interpersonal deviance variable was not a significant predictor in the regression equation.

Therefore, the analyses demonstrated partial support for hypothesis 7. The overall $R^2 =$

.324 or 32.4% of the variance in intention to turnover was explained. Results of the

hierarchical regression analysis on intention to turnover are indicated in Table 10.

Table 10

Summary of Hierarchical Regression Results Where Organizational Stress and

Workplace Incivility Were Used to Predict Intention to Turnover

Variables entered	R^2	F	df	R^2 change	B	β	SE	t
Model 1	0.000	0.048	1,204					
(Constant)					8.47		1.13	7.52***
Social Desirability					-0.02	-0.02	0.08	-0.22
Model 2	0.307	29.70	3,201	0.307***				
(Constant)					0.83		1.31	0.64
Social Desirability					0.01	0.01	0.07	0.14
Role Ambiguity					0.28	0.33	0.06	4.59***
Role Conflict					0.14	0.18	0.06	2.56*
Organizational Constraint					0.06	0.17	0.03	2.09*
Model 3	0.324	2.507	2,199	0.017*				
(Constant)					0.18		1.34	0.13
Social Desirability					0.03	0.02	0.07	0.39
Role Ambiguity					0.26	0.30	0.06	4.09***
Role Conflict					0.14	0.18	0.06	2.45*
Organizational Constraint					0.05	0.15	0.03	1.82
Interpersonal Deviance					-0.01	-0.02	0.03	-0.33
Organizational Deviance					0.04	0.15	0.02	2.09*

Note. $N = 206$. *$p < .05$; **$p < .01$; ***$p < .001$

Summary

The analyses presented in this chapter demonstrate that there is partial support for

most of the hypotheses proposed in this study. Extraversion, neuroticism,

conscientiousness and agreeableness all partially moderated the relationship between

occupational stress and workplace incivility (instigator). The data did not find support for

the personality variable of imagination/intellect (openness to experience) in moderating

the relationship between occupational stress and workplace incivility. Further, after

controlling for occupational stress, organizational deviance predicted unique variance in

intention to turnover, but not in perceived physical health.

CHAPTER V

DISCUSSION

Chapter 5 provides a summary of the research, reports the conclusions and recommendations that resulted from the data. The findings of the study are discussed and interpreted. The chapter then concludes with the limitations and recommendations for future research.

Summary of the Study

The 21st century workplace has been rapidly changing. The introduction of new technologies such as smartphones and portable computers has caused the line between home and work to be blurred. Globalization and organizational restructuring has also caused additional strain on employees, due to the increase demands and expectations to perform, as well creating additional pressure on the organization itself. Additionally, the demographics of the workplace have also changed; for example, there are more women and older workers in the workforce today as opposed to four decades ago (Sparks, Faragher & Cooper, 2001). Due to the changing workplace environment and landscape, employee wellness has been a topic which has garnered increased attention, both in the general media as well as from researchers.

Organizations and researchers have taken notice of the detrimental outcomes of occupational stress to employees' wellbeing, health, work environment, and to the organization's bottom line through loss of productivity, lack of employee retention and days lost due to absenteeism, as well as the high healthcare costs due to more employees seeking medical care.

The purpose of this study was to explore the relationship between occupational stress and instigator workplace incivility as moderated by personality, and their links to perceived physical health and turnover intent. The theoretical framework of this study was guided by the Lazarus and Folkman (1984) transactional approach of occupational stress, which focuses on the transaction between the environment and the individual. This interaction is a process that can ultimately lead to stress and therefore how the individual subsequently responds to the stress that they have now experienced. Specifically, within the transactional approach of occupational stress, The Social Environment model also referred to as the Institute of Social Research in the literature (French & Kahn, 1962) was used to explore the occupational stress component of this study. This model focused on the characteristics or environmental factors, such as role ambiguity and role conflict which may lead to experiencing stress. Additionally, this model was the foundation for the Person-Environment fit model (French et al., 1982) which explores the mismatch between the person and the environment and how this mismatch may lead to stress. This model explores two potential mismatches; one mismatch specifically relevant for this study is the experienced mismatch between the individual's goals and the supplies/equipment accessible in the work environment, which is described in the literature as organizational constraint.

Two research questions guided this study: (a) What is the relationship between occupational stress and workplace incivility (instigator), as moderated by personality? and (b) What is the relationship among occupational stress and workplace incivility (instigator) and organizational outcomes (i.e., perceived physical health and intent to turnover)? Seven research hypotheses were tested to examine these questions:

H$_1$:   Extraversion moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H$_2$:   Neuroticism moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be strengthened.

H$_3$:   Conscientiousness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H$_4$:   Agreeableness moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H$_5$:   Imagination/intellect moderates the relationship between occupational stress and incivility, such that the stress-incivility relationship will be dampened.

H$_6$:   After controlling for occupational stress, workplace incivility will be negatively related to perceived physical health.

H$_7$:   After controlling for occupational stress, workplace incivility will be positively related to turnover intention.

Eight instruments were used to explore the relationship between occupational stress, workplace incivility and personality. Moderated hierarchical regression and hierarchical regression analyses were conducted to test the model and the outcome variables.

Discussion of the Results

This study was guided by the conceptual framework exploring the transactional approach of occupational stress and understanding the relationship between occupational stress and workplace incivility as moderated by personality. The results from this study demonstrated partial support for the relationships among the variables. First H$_{1-5}$ will be

reviewed, followed by H_6 and H_7, followed by a brief summary which will close the section.

Hypotheses 1-5

The first five hypotheses indicated that there will be a relationship between occupational stress and instigator workplace incivility, which will be moderated by personality. Specifically, this study hypothesized that conscientiousness, agreeableness, and imagination/intellect will dampen the relationship. On the other hand, extraversion and neuroticism were hypothesized to strengthen the relationship between the two variables.

Extraversion

The following section discusses the moderating variable of extraversion and its relationship to occupational stress and workplace incivility. The first hypothesis stated that extraversion moderates the relationship between occupational stress and workplace incivility, such that the stress-incivility relationship will be strengthened. Results from the moderated hierarchical regression analysis indicated that extraversion does strengthen the stress-incivility relationship, specifically with the individual deviance variable; however, not with organization deviance. Therefore, the results indicated partial support for H_1.

People who score high on the personality variable of extraversion may be described as active, energetic, bold and assertive. On the other hand, individuals who score low may be described as reserved, introverts and quiet (Strus et al., 2014). It was hypothesized that individuals scoring high on extraversion would strengthen the stress-incivility relationship; such that as the individual experiences higher levels of stress will

be more likely to instigate workplace incivility behaviors. Individuals scoring high on extraversion might feel more comfortable overtly expressing their dissatisfaction in light of increased occupational stress; similarly, these individuals might feel comfortable with speaking up, in light of circumstances in which they are faced with a mismatch in their needs and resources provided by the organization, therefore increasing their levels of stress or when they experience role stressors. Consequently, people who are extroverts might be more likely to engage in workplace incivility behaviors when they are experiencing high levels of stress, due to the nature of their personality being more outspoken and assertive.

Neuroticism

  The following section discusses the moderating variable of neuroticism and its relationship to occupational stress and instigator workplace incivility. The second hypothesis stated that neuroticism moderates the relationship between occupational stress and workplace incivility, such that the stress-incivility relationship will be strengthened. Results from the moderated hierarchical regression analysis indicated that neuroticism does strengthen the stress-incivility relationship, specifically the individual deviance variable. The results further indicate the impact of neuroticism on the stress-incivility relationship will strengthen the relationship. The results did not indicate significant interactions between neuroticism, occupational stress and the organization deviance variable of workplace incivility.

  Individuals who score low on neuroticism are characterized as calm and relaxed, on the other hand individuals who score high are described as nervous, moody, anxious, and inclined to anger easily (Strus et al., 2014). The results of this study indicate that

individuals are more likely to engage in uncivil behaviors with their peers (individual deviance) when they are faced with environmental stressors (i.e., role ambiguity, role conflict) and a mismatch in their needs and the resources/equipment/organizational policies provided by the organization (i.e., organizational constraint).

Conscientiousness

The following section discusses the moderating variable of conscientiousness and its relationship to occupational stress and instigator workplace incivility. The third hypothesis stated that conscientiousness moderates the relationship between occupational stress and workplace incivility, such that the stress-incivility relationship will be dampened. Results from the moderated hierarchical regression analysis indicated that conscientiousness does impact the stress-incivility relationship, specifically the organizational deviance variable. The results further indicate the association of conscientiousness with the stress-incivility relationship; will dampen the relationship, these results echo Salgado's (2002) results exploring the role of personality on the stress incivility relationship. The findings suggest that individuals who score high on conscientiousness and experience high levels of role and environmental stress may be less likely to engage in organizational level uncivil behaviors. This may be due to the notion that individuals who are described as conscientious tend to engage in behaviors that demonstrate loyalty and dutifulness. The results of this study are consistent with prior research, indicating that individuals who score high on conscientiousness were better able to handle stress and were less likely to instigate uncivil behaviors (Grant & Langan-Fox, 2006). The results did not indicate significant interactions between

conscientiousness, occupational stress and the individual deviance variable of workplace incivility.

Agreeableness

The following section discusses the moderating variable of agreeableness and its relationship to occupational stress and instigator workplace incivility. The fourth hypothesis stated that agreeableness moderates the relationship between occupational stress and workplace incivility, such that the stress-incivility relationship will be dampened. Results from the moderated hierarchical regression analysis indicated that agreeableness does impact the stress-incivility relationship, specifically the organizational constraint variable of occupational stress and the individual deviance variable of workplace incivility. The results further indicate the impact of agreeableness on the stress-incivility relationship, will dampen the relationship. Specifically, indicating that individuals high on agreeableness who are experiencing environmental stress (i.e., organizational constraint) may be less likely to engage in workplace incivility behaviors at the individual level (Taylor & Kluemper, 2012). The results of this study are consistent with prior research, indicating that individuals who score high on agreeableness are less likely to instigate workplace incivility behaviors, even when faced with stressful environmental characteristics (Bowling & Eschleman, 2010). Individuals scoring high on agreeableness are described as focusing on the positive side of people as opposed to the negative, and this might help to dampen their need for engaging in workplace uncivility behaviors. The results did not indicate significant interactions between agreeableness, occupational stress and the organizational deviance variable of workplace incivility.

Imagination/Intellect

The following section discusses the moderating variable of imagination/intellect and its relationship to occupational stress and instigator workplace incivility. The fifth hypothesis stated the imagination/intellect moderates the relationship between occupational stress and workplace incivility, such that the stress-incivility relationship will be dampened. Results from the moderated hierarchical regression analysis did not yield any significant relationships between imagination/intellect, occupational stress and workplace incivility.

The literature reviewed supported the relationships which have emerged in this study, as well as the organizational outcomes; this study has found that these moderator variables can either strengthen or weaken the relationship between the two variables. Individual difference variables, such as personality traits, may be critical moderators of the stress-incivility relationship. Emotional stability, for example, has been shown to be linked to both stress and incivility (Reio, 2011), but not tested as a moderator between the two variables. Additionally, both conscientiousness and agreeableness have been found to have a negative relationship to stress and counterproductive work behaviors (Bowling & Eschleman, 2010). However, negative affectivity has been found to have a positive relationship with stress and counterproductive workplace behavior (Bowling & Eschleman, 2010).

Hypothesis 6

The sixth hypothesis stated that after controlling for occupational stress, instigator workplace incivility will be negatively related to perceived physical health. Results from the hierarchical regression indicated that there is not a significant relationship between

workplace incivility and perceived physical health. The results of this study therefore did

not support H_6. The results of this study are not consistent with the literature. The results

of this study might be inconsistent due to the instrument that was used. The physical

health instrument for this study focused on the participant indicating current perception of

physical health, as opposed to questions focused on specific physical health symptoms

the participant might be experiencing during a specified time period.

Hypothesis 7

The seventh hypothesis stated that after controlling for occupational stress,

instigator workplace incivility will be positively related to intentions to turnover. Results

from the hierarchical regression indicated that there is a positive relationship between

intentions to turnover and workplace incivility. Specifically, the data indicated there was

a positive relationship between workplace incivility and intention to turnover. The

hierarchical regression analysis provided evidence that after controlling for occupational

stress, workplace incivility predicted unique variance in the outcome variable intention to

turnover. The results of this study support H_7. The results demonstrate that when

employees are in an environment in which they are disgruntled and therefore may initiate

workplace incivility behaviors, they are also more likely to want to leave the

organization. The results of this study are consistent with previous research, by linking

the increase perception of stress with workplace incivility relationship and the

organizational with increased intention to turnover (Grant & Langan-Fox, 2006).

Implications for Practice

The results of this study partially support the hypotheses indicating that

personality moderates the relationship between occupational stress and workplace

incivility. Additionally, the results demonstrated that there is partial support for the moderating relationship of personality in the association between occupational stress and workplace incivility. It seems clear that organizations need to take notice of the level of occupational stress their employees are under, as well creating a roadmap to decrease the levels of stress.

The participants of this study all worked in the healthcare industry and represented both direct and indirect patient care job functions. The literature has indicated that healthcare professionals work in a high stress environment, due to the nature of their profession, especially those that are direct patient care professionals (e.g., Felblinger, 2008; Hutton & Gates, 2008). The job function for healthcare professionals, especially direct patient care staff is imperative in ensuring patient safety and quality care. Therefore, this study's finding has even more critical implications for managers to create and maintain a positive and reduced stress work environment for these professionals. HRD professionals in conjunction with managers need to find ways of implementing proactive programs that might create positive environments focused on reducing uncivil behavior that would, in turn, increase employee well-being (Babatunde, 2013). Employee participation in such programs have been demonstrated to be effective in reducing the likelihood of the increased occupational stress manifesting in uncivil behaviors that are associated with increased turnover intentions and voluntary turnover (Avey, Luthans & Jensen, 2009; Reio & Ghosh, 2009; Shuck et al., 2014).

Jones and Jonson (2000) found that stress management interventions led to increase job satisfaction and decrease stress among staff nurses. Therefore, HRD professionals can develop training programs to address stress management, increase

positive emotions and employee's wellbeing. Siu, Cooper and Phillips (2013) conducted an intervention study with healthcare employees aimed at increasing stress management skills, increased employee wellbeing and positive emotions. The 2-day stress management intervention included the following topics: being able to identify the stressor, developing coping strategies, emotion management, and other relaxation and stress management techniques. The authors found that employee's wellbeing improved post training, therefore creating a viable suggestion for HRD practitioners.

The literature and the findings of this study suggest that role ambiguity and role conflict are possible conduits of occupational stress, which can possibly lead to individuals to instigate workplace incivility behaviors. Consequently, including communication workshops to improve the communication between the manager and the employee is an important area to highlight in thinking of the stress-incivility relationship (NIOSH, 2008; Sparks, Faragher, & Cooper, 2001). Additionally, managers should implement specific workplace procedures and standard operating process, in order to possibly reduce role ambiguity and role conflict and subsequently instigator workplace incivility (Taylor & Kluemper, 2012). Finally, just-in-time mindfulness workshops have also been found to reduce occupational stress and increase job satisfaction in direct patient care staff (Shapiro, Astin, Bishop, & Cordova, 2005).

This study focused on workplace incivility from the instigator perspective. The results indicated that personality moderates the stress-incivility relationship. Hence, it would benefit HRD practitioners and managers to implement methods to develop methods to identify warning signs of an employee who might be susceptible to engage in uncivil behaviors (Reio & Ghosh, 2009). Managers in conjunction with HRD

professionals within their organization can work together to conduct personality assessments. The personality assessments could be administered as part of the onboarding to the organization/department, for instance. The managers will then have further information about their new hire which can also guide in creating specific onboarding program which includes teaching stress management techniques which are customized and tailored to each employee, in accordance with that individual's personality. Having a clear understanding of how personality moderates an employee's response to occupational stress can assist both the manager and HRD professionals on designing the most effective customized stress management programs. HRD practitioners in agreement with managers can implement workplace conduct guidelines and training as part of the onboarding process to create clear standards of behavior in the workplace (NIOSH, 2008; Pearson & Porath, 2005). Further, setting clear and specific expectations in terms of role and work demands from the employee's start in the organization can also potentially alleviate the level of stress which the employee experiences (Taylor & Kluemper, 2012).

Additionally, knowing how employees score on a personality assessment, therefore becoming aware of the personality variables which they score high and low can create insights into employees' susceptibility to engaging in negative coping behaviors due to occupational stress. Being able to identify these employees early on might aid in reducing the number of incidents of workplace incivility. Finally, HRD professionals within the organization can periodically conduct a stress audit to proactively identify the areas in which higher levels of occupational stress might be experienced (Gilbreath & Montesino, 2006).

Implications for Theory

The finding of this study partially support the proposed holistic model of occupational stress and workplace incivility, as moderated by personality. The literature has found clear relationships between occupational stress, workplace incivility and personality. Prior to this study, research exploring the stress-incivility relationship focused on only three personality variables: conscientiousness, agreeableness and neuroticism. The majority of prior research has also focused on utilizing a specific occupational stress model, as opposed to using an integrated occupational stress model.

This study's findings demonstrate that personality does play a role in moderating the occupational stress and workplace incivility relationship for healthcare workers; specifically, this study found that individuals who scored high on extraversion and high on neuroticism, while experiencing role and environmental stress (i.e., role ambiguity, role conflict, organizational constraint), would be more likely to engage in instigator workplace incivility behaviors at the individual level (i.e., peers, coworkers), but not at the organizational level. On the other hand, individuals who scored high on conscientiousness, while experiencing role and environmental stress (i.e., role ambiguity, role conflict, and organizational constraint), would be less likely to engage in instigator workplace incivility behaviors at the organizational level, but not at the individual level.

Finally, individuals who scored high on agreeableness, while experiencing environmental stress (i.e., organizational constraint), would be less likely to engage in instigator workplace incivility behaviors at the individual level, but not at the organizational level. The new information the results of this study provides further insights into organizational stress theory in that stress is not only directly linked to

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workplace incivility, but also moderated by select personality traits. For example, the results of this study are similar to Alias, Rasdi, Ismail and Samah's (2013) research where they found that conscientiousness and agreeableness played a role in the stress-incivility relationship, such that employees who are high in these 2 personality variables were less likely to engage in uncivil behaviors even while experiencing occupational stress.

Additionally, the findings of this study supported prior research findings (e.g., Babatunde, 2013; Malik, 2011; Sparks, Faragher, & Cooper, 2001), specifically that individuals working in mismatched environments (i.e., role ambiguity, role conflict, and organizational constraint) are going to be more likely to have increased intention to turnover, which research has demonstrated to be a strong predictor of actual turnover. The results of this study were not consistent with prior research (e.g. Malik, 2011) in terms of perceived physical health. It may be that more objective measures of health should be included in future research to expand the stress-incivility-health relationship. This study continues to enrich the field of HRD by highlighting the important role of specific environmental factors in creating heighten level of stress among employees in the healthcare setting (NIOSH, 2008).

This study contributes to incivility theory by addressing the need to explore the precursors of workplace incivility through an instigator perspective (Reio & Ghosh, 2009; Schilpzand et al., 2016); based on the findings of this research, stress is one such precursor. This research also supports incivility theory (Andersson & Pearson, 1999) in that the theory predicts that stress would elicit uncivil behaviors, which, in turn, would be linked to negative organizational outcomes. In this study, intention to turnover was that

important negative outcome. In this study, individuals who experienced higher levels of role or environmental and instigated workplace incivility behaviors were more likely to have increased intention to turnover. This particular finding of this study can help HRD researchers look deeper at intention to turnover from a different perspective.

Limitations and Recommendations for Future Research

The aim of this study was to create a more holistic model of occupational stress, through a better understanding of the relationship between occupational stress and workplace instigator incivility, as moderated by personality variables. The first limitation of this study is the use of a convenience sample of workers on Amazon Mechanical Turk. Whereas the use of a heterogeneous convenience sample is common in HRD research, (e.g., Reio & Ghosh, 2009; Yaghi, Goodman, Holton, & Bates, 2008), there should be caution in generalizing the results beyond this study.

The second limitation is the concern around generalizability. The findings of this study are limited to U.S. employees who were healthcare industry workers. Prior literature has illustrated the degree of occupational stress that healthcare industry working adults face (e.g., Felblinger, 2008; Hutton & Gates, 2008). Although this study focused on U.S. employees in the healthcare industry and the results of this study are consistent with the results in prior research, the reader should be cautious in generalizing the results to other countries and industries.

The third limitation is the use of self-report measures for this study. The participants of this study completed self-report instruments. While there are many benefits of using self-reports; such as, being inexpensive, easy to use, and relatively easy to distribute, these type of measures may increase the possibility for introducing common

source method variance producing inflated or deflated correlations among the variables of interest (Crampton & Wagner, 1994; Reio, 2010). Common method variance is a potential problem whenever data are collected from a single source, which is the case for this study. There were several procedural and statistical steps taken to reduce the possibility of common method variance. First, procedurally, participants were assured of their anonymity (Podsakoff et al., 2003). Second, Dillman et al.'s (2009) Tailored Design Method for internet surveying was followed to reduce the likelihood of coverage, sampling, measurement and nonresponse error. Moreover, in accordance with Dillman et al.'s (2009) direction, a pilot study was conducted which aided in creating clear instructions and procedures. As a statistical remedy, potential social desirability bias was statistically controlled to lessen the likelihood of introducing common method bias into the study. Future research could include other common method bias control remedies like using multiple sources of data or employing affect as a statistical control variable (see Podsakoff et al., 2003.)

Another potential limitation in this study involved asking participants to report their level of workplace incivility as the instigator. As such, social desirability bias can play a role in the participants' responses, since they have to indicate that they were the instigator of uncivil behavior. A social desirability scale was utilized to statistically control for this potential bias and the analyses demonstrated that this bias was not likely in this research study. The findings of this study are consistent with prior workplace incivility research (e.g., Reio & Ghosh, 2009).

The final limitation of this study was not being able to assess non-response rate. Amazon Mechanical Turk (MTurk) was used to disseminate the instrument battery. The

researcher set the criteria for the population that they are trying to reach; MTurk then posts the survey to the profiles of all the users meeting the set criteria (i.e., adults, working full time, and so on). Therefore, non-response rate is not able to be calculated as one does not know how many individuals actually received the survey link.

Researchers need to continue looking further into stress-incivility relationship to understand the interaction of the relationship with different personality variables. Researchers can continue to further test this model and include a physical symptom scale, as opposed to a perceived physical health scale to further understand the linkages between stress, incivility and health.

The previous literature on workplace incivility has focused primarily on the onlooker and target perspective of workplace incivility. This creates a reactive approach to deal with workplace incivility and leaves a gap in the literature in terms to understand why individuals engage in workplace incivility behaviors and which types of individuals would be predisposed to engage in these types of uncivil behaviors. As with this study, future research on workplace incivility should focus on the proactive approach to addressing workplace incivility by exploring further the instigator perspective and creating a deeper level of understanding in the engagement of workplace incivility behaviors.

Additionally, research exploring the occupational stress and workplace incivility relationship can benefit from continuing to explore individual difference and other work variables, such as individual differences (i.e. gender, age, race/ethnicity), all of the Big Five personality variables and job function. In this study the data did not indicate any difference in the relationship between occupational stress and instigator workplace

incivility; however, this might be due to the industry (there are typically more women than men working in the healthcare industry), as well as the participants in this age were close in their age range. Future study should explore individual differences and their role in the relationship between occupational stress and instigator workplace incivility. Conscientiousness, agreeableness, and neuroticism have been the three personality variables most commonly examined. The current study addressed a gap in the literature by expanding to examining all five of the Big Five personality variables, including extraversion and imagination/intellect. Examining these two extra personality variables helps with refining our understanding of the stress-incivility relationship. As demonstrated by the results of this study, including extraversion in future research related to the model tested in this study will make a contribution to the literature by creating a better understanding of under-researched antecedents to workplace incivility instigation when faced with increased levels of stress as created by toxic work settings. Finally, understanding if job function (e.g., direct patient care staff, indirect patient care staff, and administration) plays a role in the stress-incivility relationship can enrich the literature in stress and incivility. Clark, Olender, Cardoni and Kenski (2011) found that different groups (e.g., nursing executives and nurse managers) within a hospital environment reported different perspectives on creating a healthy environment. However, both groups identified that occupational stress leads to incivility. Their study indicates the importance of exploring further the role of job function in the stress-incivility relationship, so that hospital leaders can align their strategies in creating a healthy and positive working environment for all staff.

Conclusions

The overriding purpose of this study was to further explore the relationship between occupational stress and workplace incivility as moderated by personality, while understanding the outcomes of this relationship with perceived physical health and intention to turnover. The findings suggest that personality does play a role in the stress-incivility relationship, whereas conscientiousness and agreeableness dampen the relationship and neuroticism and extraversion strengthen the relationship. Further, this study found that intention to turnover increases as workplace incivility also increases. The findings of this study are consistent with prior research on occupational stress, workplace incivility, and personality.

Future research should continue to test this model of occupational stress and workplace incivility, among different industries and testing all of the Big Five personality variables to be able to further understand the stress-incivility relationship and also to create addition knowledge around the instigator perspective concerning workplace incivility.

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Role Stressor (Role Constraint and Role Ambiguity): Abdel-Halim (1978)
Instructions: On a scale of 1 to 7, with 1 being very false and 5 being very true, please rate: the extent to which each item is descriptive of your work situation?

	Very False	**False**	**Neither False or True**	**True**	**Very True**
1. I have to do things that should be done differently.					
2. I work with two or more groups who operate quite differently.					
3. I receive incompatible requests from two or more people.					
4. I do things that are apt to be accepted by one person and not accepted by others.					
5. I work on unnecessary things.					
6. I feel certain about how much authority I have.					
7. I have clear, planned goals and objectives for my job.					
8. I know I have divided my time properly.					
9. I know exactly what is expected of me.					
10. Explanation is clear of what has to be done.					

Organizational Constraint: Spector and Jex (1998)

Instructions: On a scale of 1 to 5, with 1 being less than once per month and 5 being several times per day, please rate: during the last six months, how often do you find it difficult or impossible to do your job because of the following:

	Less than once per month	Once or twice per month	Once or twice per week	Once or twice per day	Several times per day
1. Poor equipment or supplies.					
2. Organizational rules and procedures.					
3. Other employees.					
4. Your supervisor.					
5. Lack of equipment or supplies.					
6. Inadequate training.					
7. Interruptions by other people.					
8. Lack of necessary information about what to do or how to do it.					
9. Conflicting job demands.					
10. Inadequate help from others.					
11. Incorrect instructions.					

Interpersonal Deviance Scale: Bennett and Robinson (2000)

Instructions: On a scale of 1 to 7, with 1 being never and 7 being daily, please rate: during your employment over the last year, have you ever?

	Never	Once a year	Twice a year	Several times a year	Monthly	Weekly	Daily
1. Made fun of someone at work							
2. Said something hurtful to someone at work							
3. Made an ethnic, religious, or racial remark at work							
4. Cursed at someone at work							
5. Played a mean prank on someone at work							
6. Acted rudely toward someone at work							
7. Publicly embarrassed someone at work							

Organizational Deviance Scale: Bennett and Robinson (2000)

Instructions: On a scale of 1 to 7, with 1 being never and 7 being daily, please rate: during your employment over the last year, have you ever?

	Never	Once a year	Twice a year	Several times a year	Monthly	Weekly	Daily
1. Taken property from work without permission							
2. Spent too much time fantasizing or daydreaming instead of working							
3. Falsified a receipt to get reimbursed for more money than you spent on business expenses							
4. Taken an additional or longer break than is acceptable at your workplace							
5. Come in late to work without permission							
6. Littered your work environment							
7. Neglected to follow your boss's instructions							
8. Intentionally worked slower than you could have worked							
9. Discussed confidential company information with an unauthorized person							
10. Used an illegal drug or consumed alcohol on the job							
11. Put little effort into your work							
12. Dragged out work in order to get overtime							

Personality: Donnellan, Oswald, Baird and Lucas (2006)

Instructions: On a scale of 1 to 5, with 1 being strongly disagree and 5 strongly agree, please rate your level of agreement with the following statements

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Am the life of the party					
2. Sympathize with others' feelings					
3. Get chores done right away					
4. Have frequent mood swings					
5. Have a vivid imagination					
6. Don't talk a lot					
7. Am not interested in other people's problems					
8. Often forget to put things back in their proper place					
9. Am relaxed most of the time					
10. Am not interested in abstract ideas					
11. Talk to a lot of different people at parties					
12. Feel others' emotions					
13. Like order					
14. Get upset easily					
15. Have difficulty understanding abstract ideas					
16. Keep in the background					
17. Am not really interested in others					
18. Make a mess of things					
19. Seldom feel blue					
20. Do not have a good imagination					

Perceived Physical Health: Cassidy (2000)

Instructions: On a scale of 1 to 5, with 1 being never and 5 being always. Please rate: based on the response that most closely matches your feeling about <u>each</u> one of the following questions.

	Never	Seldom	About half the time	Often	Always
1. Do you generally feel healthy?					
2. Do you generally feel physically fit?					
3. Do you generally feel full of energy?					
4. Do you take good care of your health?					
5. Do people remark on how fit you appear?					
6. Is your general lifestyle healthy?					

Intentions to Turnover: Camman, Fichman, Jenkins and Klesh (1979)

Instructions: On a scale of 1 to 5, with 1 being strongly disagree to 5 being strongly agree, please rate: during the last six months, what is your agreement to the following statements?

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1. I often think of leaving the organization.					
2. It is very possible that I will look for a new job next year.					
3. If I could choose again, I would choose to work for the current organization.					

Social Desirability Scale: Strahan and Gerbasi (1972)

Instructions: The questions below are statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. I never hesitate to go out of my way to help someone in trouble.
_ True
_ False

2. I have never intensely disliked anyone.
_ True
_ False

3. There have been times when I was quite jealous of the good fortune of others.
_ True
_ False

4. I would never think of letting someone else be punished for my wrong doing.
_ True
_ False

5. I sometimes think of letting someone else be punished for my wrong doings.
_ True
_ False

6. There have been times when I feel like rebelling against people in authority even though I know they are right.
_ True
_ False

7. I am always courteous, even to people who are disagreeable.
_ True
_ False

8. When I don't know something I don't mind at all admitting it.
_ True
_ False

9. I can remember "playing sick" to get out of something.
_ True
_ False

10. I am sometimes irritated by people who ask favors of me.
_ True
_ False

General Information
Please select the appropriate letter for each of your answers.

1. Your age at your last birthday:
a) less than 21   e) 50-59
b) 21-29   f) 60-69
c) 30-39   g) 70 and over
d) 40-49

2. Your gender is: a)Male   b)Female

3. What was the highest level of education you achieved in school?
a) Less than high school diploma
b) High school diploma or GED
c) Some college
d) Bachelor's degree
e) Some graduate school
f) Master's degree or professional school
g) Doctoral degree

4. Your race/national origin is:
a) Asian   b) Black   c) Hispanic   d) White   e) Other

5. When did you begin your current job? Month _____ Year _____

6. How many years of previous work experience is related to your current job?
_____

7. What is your job function?
a) Direct patient care
b) Indirect patient care

8. What is your job title? _____

VITA

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2001	Research Programs Coordinator, Florida International University, Infant Development Research Lab, Miami, FL
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2009	Talent Development & Management, Director Florida International University, Division of Human Resources, Miami, FL
2011	Graduate Certificate, Conflict Resolution & Consensus Building Florida International University, Miami, FL
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