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Psychological Uncertainty, Stress, Frustration and their Relationship with Counterproductive Workplace Behavior

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Walden University
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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Organizational Psychology

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Abstract

The overall problem this research addresses is the costly impact of counterproductive work behaviors. The purpose of this study was to examine whether uncertainty, stress, or frustration are related to variability, or in predicting counterproductive work behaviors. Wavering economic conditions have steadily altered work environments, and with continuous work changes are growing feelings of uncertainty, concerns of employee and organizational safety, performance, and overall wellbeing. The social exchange theory and the workplace social exchange network were used in this study to better understand employee relationships and response behaviors. Research questions compared the relationships among perceived uncertainty, stress, frustration, and levels of counterproductive work behaviors. For this study, a sample of 180 volunteers completed the Psychological Uncertainty Scale, the Perceived Stress Scale-10, the Frustration Scale, and the Counterproductive Work Behavior Checklist-10. Volunteers were recruited via invitation by Findparticipants.com. and SurveyMonkey® hosted the data collection. This non-experimental, quantitative study employed a survey design, and multiple linear regression analysis were used to test the hypotheses. Regression analyses indicated a significant relationship between frustration and counterproductive work behaviors ($t = 4.269$, $p < .001$); however, the relationship of uncertainty and stress with counterproductive behaviors was not statistically significant. Predicting employee negative behaviors and gaining a better understanding of factors with negative influences on work behavior allows leadership the opportunity to develop more sustainable strategies designed to influence and encourage positive social change.

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Dedication

I dedicate this study first to God, who through faith and prayer guided me through this arduous and monumental task, to my husband for his patience, dedication, love and encouragement, to my parents who both passed away during my journey and although bittersweet, I know are very proud. I would also like to thank my children and family for their understanding and support. I thank you all for motivating me throughout this entire process!

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A journey of this magnitude could not be accomplished without the assistance and guidance from others. I thank Dr. Etchegaray for providing a supportive learning environment, encouraging me to excel, to endeavor to persevere, and in helping me to reach this point in my academic career. I would also like to acknowledge my doctoral committee members Dr. LaCivita and Dr. James Brown for steering in the right direction, a big thank-you all for inspiring me to become a better scholar!

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Chapter 1: Introduction to the Study

Introduction

Counterproductive work behaviors (CWBs) are detrimental to organizational functioning and individual wellbeing. Studies such as this dissertation are needed to further aid in predicting employee negative behaviors and allow for gaining a better understanding of factors which may have negative influences on individuals' while at work. Researchers found that employee CWBs are costly and can harm organizations and stakeholders (Fox & Spector, 2005; Ramshida & Manikandan, 2013). Increases in stress levels, frustration, rising health issues, frequently redesigned work responsibilities, and changes in pay may shape work behaviors. Organizational leaders and human resource professionals can benefit from research such as this by implementing programs and strategies that help to change an employee's behavior (Stephan, Patterson, & Kelly, 2013). For example, organizations can facilitate positive behavior through social change mechanisms such as motivation, opportunity, and capability (Stephan et al., 2013). The potential positive social change implications of this study are to help in providing leadership a mechanism by which they can further develop more sustainable strategies designed to influence and encourage positive work behavior.

Cohen (2016) notes that various factors may contribute to CWBs which are directed toward organizations (e.g., purposely doing work incorrectly and destroying organization's property), or toward other people (e.g., insulting others, or shouting at someone). There is a gap in knowledge and clarity in negative psychological influences on American workers impacted by a decline in the economic climate, and related

behaviors. Waves of uncertainty concerning job security have impacted relationships between supervisors and subordinates, between peer coworkers, and between employees and their organizations (Probst, 2005). The prospect of unemployment, underemployment, and job insecurity have created an atmosphere of added anxiety for many Americans (Probst, 2005). These are not new phenomena; they were of concern in the past and continue to pose similar challenges for many (Probst, 2005).

Researchers found that when employees experience job insecurity, or changes in job status, and job loss, the end results are likely to be serious, negative, and widespread (Probst, 2005). During the initial appraisal phase employees make an assessment of the situation to determine its importance for their personal well-being (Richtner, Näswall, DeCuyper, Sverke, Witte, & Hellgren, 2013). Job insecurity consequences include those which primarily affect the individual such as decreased health, and those that influence organizational functioning including decreased performance (Richtner et al., 2013).

More recently researchers investigated the role of self-identity (e.g., how employees define themselves in relation to others) in relations between interpersonal unfairness, and CWBs (Yang, Johnson, Zhang, Spector, & Xu, 2013). Self-identity "an important self-regulatory and resource variable, was proposed to moderate unfairness-CWB relations" (Yang et al., 2013, p. 189). Judge and Hulin (1993) noted in earlier studies that an enduring characteristic of the American perspective, is that they view work as an important feature in the process of creating a personal identity. Interpersonal unfairness constitutes a job demand that overburdens employees' affective, cognitive, and physical resources (Yang et al., 2013). When employees are exposed to interpersonal

unfairness it greatly reduces their resources as they try to cope with the affective and cognitive ramifications of the unfair exchange (Yang et al., 2013). “One of the consequences of being exposed to job demands and the resource depletion that accompanies it is a greater likelihood of counterproductive behavior” (Yang et al., 2013, p. 191). Yang et al. (2013) further examined identity as a person-based resource that could aid in offsetting the demands created by interpersonal unfairness, thus minimizing the likelihood that CWB is elicited.

Organizational restructuring generates increased feelings of job insecurity among today’s employees (Karkoulian, Mukaddam, McCarthy, & Messarra, 2013). Researchers have shown increasing interest in workers’ psychological hazard exposures and work-related stress with the onset of groundbreaking severe economic recession (Houdmont, Kerr, & Addley, 2012). Houdmount et al. (2012) further noted that not much is known about changes in psychological hazard exposures and work-related stress and the start of grave economic recession.

Researchers have suggested that “job insecurity, underemployment, and unemployment all seem to indicate that economic stressors have negative implications for the psychological and physical health and wellbeing of affected workers” (Probst, 2005, p. 279). The unpredictability of economic conditions has created increased acquisitions, mergers, downsizing, and other modifications that induce feelings of job insecurity among employees (Karkoulian et al., 2013). Extending investigations can help in the effort to identify and minimize negative influences, and costly negative outcomes for individuals and organizations, as well as for their families and communities. CWBs have

become a well-recognized issue among organizational researchers and the public; the examination of various factors (e.g., stressors, gender) and their influence on work behaviors extend our knowledge base (Spector & Zhou, 2014).

Researchers have characterized CWBs as a set of distinguishable acts that are volitional in nature and cause harm or are intended to harm organizations and their stakeholders (Spector & Fox, 2005). More recently researchers identify CWBs as negative forms of outcome behaviors that are discretionary in nature, and that detract from organizational functioning (Reynolds, Shoss, & Jundt, 2015). Negative outcome behaviors include interpersonal aggression/conflict, increased workloads for others, destruction/loss of property, and diminished organizational performance, among others (Reynolds et al., 2015)

Researchers who set some of the groundwork in organizational behaviors adopted the Robinson and Bennett (1995) typology differentiating between behaviors that target the organization, and those which target people (Bennett & Robinson, 2000; Fox & Spector, 1999; Fox et al., 2001). The prevalence of workplace deviance (e.g., physical violence, sabotage of equipment) pose a significant threat to organizations (Bennett & Robinson, 2000). The scope of contributing conditions has increased to include a broader range of job stressors that stimulate the occurrence of a variety of negative emotions (Chen & Spector, 1992; Fox et al., 2001).

Interestingly, much of the investigations on CWBs are based in the study of human aggression (Spector et al., 2006). Researchers in various branches of psychology such as personality, clinical psychology, and organizational psychology investigate

aggressiveness because of its many social implications (Antei, Birău, Chraif, Burtăverde, & Mihăilă, 2013). Researchers seek to better understand these phenomena by investigating various forms of aggression such as hostile aggression and instrumental aggression, and across different contexts such as work (Antei et al., 2013). Deviant behavior is an umbrella heading that describes CWBs under various labels such as aggression, unethical behavior, delinquency, retaliation, revenge, violence, emotional abuse, bullying, and misconduct (Fida, Paciello, Tramontano, & Fontane, 2015). Deviant behaviors at work are harmful to organizations and their stakeholders (Fida et al., 2015). Spector and Fox (2005) note in their stressor-emotion model of CWB that these behaviors can emerge from various precipitating conditions in the perpetrator and situation. Organizations continue to face ongoing challenges and concerns including how uncertainty in the work environment impacts employees' behaviors and satisfaction (Kamel & Hashish, 2015).

Uncertainty

Most organizational leaders seek strategies which minimize employee perceived uncertainty and increases job satisfaction (Kamel & Hashish, 2015). "There is speculation, promoting the basic needs for autonomy, competence, and relatedness and decreasing uncertainty at work determine the extent to which employees are satisfied with their job" (Kamel & Hashish, 2015, p.8). Researchers found that uncertainty during change leads workers to wonder about their futures (Schweiger & DeNisi, 1991).

Uncertainty related to change can have harmful effects on the employees' work experience, as well as their attitudes and work performance (Cullen, Edwards, Casper, &

Gue, 2014). Additionally, change-related communication has an influence on the success of workplace change (Cullen et al., 2014). Cullen et al. (2014) further argued that individuals' perceptions of work environment and predispositions are crucial for understanding how employees perceive organizational support that have an influence on their job attitudes and performance. Individuals who are uncertain about how change will affect their opportunities feel added stress (Bordia, Hunt, Paulsen, Tourish, & DiFonzo, 2004). Change may also affect advancement opportunities, chances for much needed training, or job loss when the process is completed, and this period of not knowing can be very stressful (Bordia et al., 2004). Uncertainty created by the rapid pace of change increases stress at work, and this poses a major challenge to workers' health and to the success of organizations (Velciu, Drăgoiu, & Mladen, 2010).

Stress

Stress during current organizational change creates considerable strains on organizations, workers and families, as well as communities (Sinclair, Sears, Zajack, & Probst, 2010). Sert, Elci, Uslu, & Sener (2014) stated that understanding stress and its relationship with other variables is important because of the negative consequences for employees and organizations. Probst (2005) outlined predictors of economic stress at work that described four categories: organizational change characteristics, worker characteristics, employment characteristics, and economic factors.

Probst (2005) further discussed the role that individual differences moderators and organizational level moderators have in either mitigating or exacerbating the consequences of economic stress. The existing turbulent state that persists has had a

profound impact on employee well-being. Employees who face the prospect of job cuts can experience a spike in symptoms of poor psychological health including anxiety, and depression the longer the situation continues (Weinberg & Cooper, 2012). When viewed from a psychological perspective, the prospect of uncertainty is challenging one to face (Weinberg & Cooper, 2012). As the process of job cuts continues, the pressure created by losing coworkers increases the workload for those that remain which in turn can increase stress, and strain impacting health (Weinberg & Cooper, 2012). Individuals who experience something opposite to her or his wants or desires can lead to deep frustration (Andalib, Darun, & Azizan, 2013). Andalib et al. stated that frustration is also experienced whenever an individual is forced to respond to something the individual wishes to avoid.

Organizational Frustration

Palmer (2010) identified five key organizational frustrations that have a negative impact: waste of time meetings, mis-leadership, blurred vision, silo mentality, and unfairness. Researchers exploring how job embeddedness in the context of abusive supervision can impact frustration, found that employees with abusive supervisors were more inclined to be frustrated with their jobs, and engaged in more deviant behavior (Avey, Wu, & Holley, 2015). Spector broadly defined organizational frustration as "both interference with goal attainment or goal-oriented activity and the interference with goal maintenance (Spector, 1978, p. 816). Spector (1978) noted that behavioral reactions have been attributed to frustrations, these are not new phenomena, and they continue to plague organizations. "Other people's reactions exert a strong impact on people's thoughts,

emotions, motives, and behavior, as well as their physical and psychological well-being" (Richman & Leary, 2009, p. 365). Additionally, the economic crisis might change job attitudes such as job satisfaction, and organizational commitment (Markovits, Boer, & Van Dick, 2014). "Economic crisis is a threatening contextual circumstance that influences individuals' approaches in life and evaluations of their work situations" (Markovits et al., 2014, p. 413).

Economic Factors

The lack of secure employment increased doubling between 2004 and 2011 (Overell, 2013). Antecedents of economic stress include rates of unemployment which appear to be unrelenting and employee perceptions of job insecurity continues to rise (Probst, 2005). Work conditions will continue to evolve as will empirical investigations which seek ways to help improve the social change challenges that organizations and individuals will face through the coming years. Voydanoff (1990) investigated economic distress and family relations. Voydanoff identified four components as sources of economic distress in families, and they include employment instability, employment uncertainty, economic deprivation, and economic strain.

The economic climate and tentative recovery have sparked revolutionary changes and modifications in work environments. The changes have undoubtedly affected organizations (e.g. downsizing), and employees (e.g. unemployment) in a variety of ways and have caused employees to become increasingly more skeptical and less trusting (Tesvich & Morrow, 2010). Employee layoffs and hiring freezes create an atmosphere in which some employees are increasingly more disillusioned and dissatisfied (Tesvich &

Morrow, 2010).

As organizations continue to transition, so will traditional business practices that undergo substantial transformations with consequences and rippling effects (Weinberg & Cooper, 2012). Work environments that become increasingly uncertain, stressful and frustrating, significantly influence how employees perceive change initiatives (Weinberg & Cooper, 2012). It is quite apparent that individuals need to work to pay for everyday living expense such as food, shelter, medical, transportation, bills, and other necessities (Weinberg & Cooper, 2012). During transformational change, relative stress, frustrations, and uncertainty can bring out some unhealthy attitudes and related behaviors (Weinberg & Cooper, 2012). Negative behaviors can spill over to all social environments including family and communities with escalating consequences. An opportunity exists for extending literature which examines influences on employee's work behaviors, and strategies which can help eliminate debilitating and costly negative effects (Weinberg & Cooper, 2012).

Background of the Study

CWBs are comprised of actions that harm or are intended to harm organizations or people in organizations (Fox & Spector, 2005). Some observed problems include deviance (Robinson & Bennett, 1995); workplace incivility (Anderson & Pearson, 1999); aggression (Newman & Baron, 2005); and bullying (Weinberg & Cooper, 2012). This study focused on uncertainty (Schweiger & DeNisi, 1991); stress (Sinclair, Sears, Zajack, & Probst, 2010); and frustration (Spector, 1978) as antecedents of CWBs in automotive organizations throughout the United States. "Workplace deviant behavior is pervasive

and brings harmful implications to individuals, groups, and organizations" (Alias, Rasdi, Ismail, & Samah, 2013, p. 161). A gap exists in studies which investigate predictors that contribute to deviant behaviors in the workplace. Researchers have encouraged future investigations that consider predictors which contribute to deviant behavior in private organizations as well as public organizations (Alia et al., 2013). This study is needed so that leadership and human resource professionals can be in a better position to understand and develop appropriate policies and procedures to eradicate deviant behavior (Alias et al., 2013).

Problem Statement

The overall problem this research study investigated was CWBs that harm employees and the organizations with harmful consequences and related costs (Sulea, 2010). The research problem that was addressed is the need to better understand the reasons for CWBs in work environments, and to identify predictors (Sulea, 2010). Researchers describe, analyzed, and provided examples of CWBs in various conceptual forms (Fox et al., 2001; Martinko, Gundlach, & Douglas, 2002). Studies on the predictors of CWBs include responses from individuals to frustration. This area of research has received strong empirical support maintaining the position that employee deviance is an emotional reaction to the experience of job related frustration stress (Fox et al., 2001). Bennett and Robinson also found a strong correlation between frustration and interpersonal CWBs.

Studies such as this one can provide valuable information to organizational leadership who can then develop more consistent and sustainable strategies designed to

minimize negative occurrences (Alias et al., 2013). I focused on a broader approach by investigating two dimensions of counterproductive work behaviors: interpersonal and organizational (Bennett & Robinson, 2000), and related categories (Spector et al., 2006). Much of research on workplace behavior has concentrated on factors which pave the way to effective employee functioning; ineffective or destructive actions are ubiquitous in present day organizations (Spector & Fox, 2005).

Assessing additional predictors such as employee uncertainty, stress, and frustration and their relationship with different types of CWBs is an important aspect of organizational performance studies (Alias et al., 2013). Data that is collected from self-reported rationalizations and justifications for engaging in CWBs provides valuable insight (Wanek, 1999). Work performance is of interest to organizations worldwide, and a topic of great interest to researchers in various fields of study such as those in management, occupational health, and work and organizational psychology (Koopmans et al. 2011).

A meaningful gap exists in research that investigate predictors that contribute to deviant behaviors in the workplace (Alias et al., 2013). Future investigations should consider more predictors that contribute to deviant behavior in private organizations as well as public organizations (Alias et al., 2013). This study is needed to gain more insight of organizational climate, and factors such as uncertainty, stress, and frustration that have an association with levels of CWBs in the United States during economic undulations. This investigation allows organizational leaders the opportunity to develop sustainable initiatives and strategies that influence and encourage positive social change.

Purpose of the Study

The purpose of this study was to quantitatively examine the correlation among the independent variables of perceived uncertainty, stress, and/or frustration, and the dependent variable CWBs. This study investigated negative influences on workplace behavior and expanded our understanding of CWB and its costly impact on organizations and individuals (Alias et al., 2013).

Research Questions and Hypotheses

The research questions for this study were derived from the review of existing literature on workplace psychological uncertainty, perceived stress, frustration and CWBs. Is there a correlation between the independent variables (IV's) of psychological uncertainty, as measured by Rafferty, Alannah, and Griggin's (2006) psychological uncertainty scale; perceived stress, as measured by Cohen, Kamarack, and Mermelstein's (1983) perceived stress scale; and frustration, as measured by Peters, O'Connor, and Rudolph's (1980) frustration scale; with the dependent variable (DV) of CWB, as measured by Spector, Bauer, and Fox's (2010) counterproductive work behavior checklist?

Reacher Question 1: Does perceived employee uncertainty, stress, and/or frustration predict CWBs during periods of organizational transformations, and throughout their work careers?

*H*o1: Perceived employee uncertainty, stress, and/or frustration does not predict their CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*1: Perceived employee uncertainty, stress, and/or frustration predicts their CWBs during periods of organizational transformations, and throughout their work careers.

Research Question 2: Are perceived employee uncertainty, stress, and/or frustration scores useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers?

*H*o2: Perceived employee uncertainty, stress, and/or frustration scores are not useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*2: Perceived employee uncertainty, stress, and/or frustration scores are useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

Theoretical Framework

The theoretical framework for this dissertation is based in social exchange, and the process of interpersonal relationships in organizations. The social exchange framework (SET) is used in this study to better understand employee interactions, and response behaviors. It is a platform from which to build a better understanding of how organizational practices influence employee attitudes. Homans's (1958) social exchange theory (SET) which influenced the study of human relationships (Treviño, 2006) is the theoretical framework used in this study. The social exchange theory is utilized in many organizational studies to gain a better understanding of factors that have an impact on social relationships and behaviors in work environments (Cropanzano & Mitchell, 2005;

Cohen-Charach & Muller, 2007; Colquitt et al., 2013; Chernyak-Hai & Tziner, 2014). Additionally, the SET influenced the thinking of social scientists, Blau for example, acknowledged the influence that George C. Homans had on his work despite some fundamental differences in approach (Blau, 1986).

In the context of this study, SET allows an understanding of different forms of exchange, and how individual perceptions of exchange orientations such as positive or negative treatment influence work related behaviors (Cropanzano & Mitchell, 2005). Furthermore, this framework serves as a guideline to better understand work behaviors that have a negative impact on organizations, and their stakeholders. Key elements in the conceptual frame work of this study focuses on the work relationships and the correlation among independent variables of uncertainty, stress, and frustration, and levels of CWBs the dependent variable. The SET framework is a relevant paradigm that can be referenced when organizational leaders and human resource professionals are developing strategies to enhance positive work relationships, behaviors, and organizational outcomes.

The rationale for carrying out this research project rests on studies and well documented findings on workplace behaviors, and the costly impact that CWBs have on organizations and individuals (e.g., Spector, Fox, Penny, Bruursema, Goh, & Kessler, 2006; Vickers, 2013; Porath, Gerbasi, & Schorch, 2015). “Counterproductive work behavior may be understood within the framework of Social Exchange Theory” (Chernyak-Hai & Tziner, 2014, p. 2). SET is being used in this study to gain a better understanding of workplace behavior. The tools chosen in this study are informed by SET to examine the interaction between employees and their employer (Cropanzano &

Mitchell, 2005). Colquitt et al. (2013) in a more recent meta-analysis notes that the past decade has seen a surge of social exchange theory as the main medium for examining reactions to justice in many organizational research studies. Of interest and worthy of mention is Schneider's (1987) seminal work in which he presented an alternative model for understanding the etiology of organizational behavior. The attraction, selection, attrition (ASA) framework suggests that organizations are dependent on the people in them for its existence, and that the people are functions of an ASA cycle. Schneider (1987) argued that it is the attributes of people as opposed to the nature of the external environment, or organizational technology, or organizational structure that are the core determinants of organizational behavior.

Nature of the Study

This quantitative study was guided by the research question and hypotheses based on a review of existing literature. A web-based survey design was used. Surveys were self- administered, and close-ended questionaries' were administered to participants who were recruited from FindParticipants.com, and SurveyMonkey was used to collect and provided quantitative descriptions of the variables for statistical analysis. Survey design allowed for a quantitative or numeric description of trends, attitudes, or opinions of the population; and from sample results, researchers can generalize or make assertions about the population (Creswell, 2003).

Data were collected from a sample of automotive industry workers across the United States after Instructional Review Board (IRB) approval was received. Correlations were computed to examine the relationships between the predictor variables of

uncertainty, stress, and frustration, and the criterion variable of CWB. The choice of statistical analysis rested in the purpose of this study, which is to investigate the relationships between the variables, and investigate whether each of the predictor variables explained variances in the criterion variable (Mertler & Vannatta, 2010). Demographic variables included as control variables in the study were: gender, age, employment status, race/ethnicity, position, tenure, and race/ethnicity (see Appendix F). Data analysis was conducted utilizing the statistical package for social sciences (SPSS) version 21.0.

Operational Definitions

The constructs described in this study encompass a range of feelings, attitudes and responses associated with work related behavior. The operational definitions are as follows:

Counterproductive Workplace Behavior

Describes any negative overlapping work behaviors which impinge on others in the work environment (Fox & Spector, 2005), and for the present study this term is used to describe a broad range of negative behaviors in the workplace such as aggression/abuse, deviance, sabotage, theft, and withdrawal.

Frustration

Describes circumstances in which individuals make an appraisal of the situation they are in and conditions which block important goal attainment (Spector, 1999), and it is in this sense that it is used in this present study.

Stress

Stress describes as emotional responses depending on perspective, for some it may have a more harmful and emotional impact than on others, and in turbulent times it can bring out unhealthy extremes in human's attitudes and behavior (Weinberg & Cooper, 2012), for the present study this term is used to describe emotional response.

Uncertainty

Uncertainty is defined as "an individual's perceived inability to predict something accurately" (Milliken, 1987, p. 136), for the present study this term is used to describe individual unpredictability of change events.

Assumptions, Scope and Delimitations, and Limitations

Assumptions

Assumptions in research are statements that the researcher believes to be valid, but proof of the statements does not exist (Silverman, 2000). The assumptions relevant to this study included: (a) internet accessibility, (b) participant honesty, and (c) that the research method is appropriate for designated variables.

The first assumption was that all participants have computer knowledge. Participants had internet access. Participants answered the survey questions using a computer with internet access.

Second, this study assumed that the participants completed the questionnaires truthfully and to the best of their ability. The assumption is that the participants were forthcoming and honest in their responses. Participant honesty is a pivotal aspect of this

study because measures are designed to tap individuals' appraisals of CWBs. FindParticipants.com® collection methods allowed for collecting responses anonymously and notified participants of their anonymity. Because of this collection method participants had no incentive for responding dishonestly supporting this assumption. The final assumption is that the quantitative method is an appropriate method to measure the variables related to this study. Some of the variables frequently measured in studies include gender, age, and attitudes or behaviors (Creswell, 2003). The purpose for using variables quantitatively is either to relate variables as in a survey, or to compare samples or groups in terms of outcome (Creswell, 2003).

Scope and Delimitations

Delimitations are defining boundaries of the study and are used to narrow the scope of a study (Creswell, 2003; Silverman, 2000). Specific aspects of the research problem that were addressed in this study were employee perceptions of uncertainty, stress, and frustration, and their relationship with CWBs. The focus of this study was chosen because of the high cost to organizations and individuals. The population for this study was restricted to employed automotive workers residing within the United States without regard to specific position in the industry.

Limitations

Limitations are provided to identify potential weaknesses of the study at the proposal stage (Creswell, 2003). Limitations of this study that may have exerted a potential impact on findings, can be explained from the perspective of internal and external validity. External validity addresses concerns with the inferences and

generalizations that can be made beyond the study itself. This study as with most survey research is not without limitations. The true demographics of the population in this study are unknown. A convenience sampling strategy rather than a scientifically derived random selection of the population was used. However, even though the results may not be generalizable, they should indicate some potential problems and areas that need further study. Second, with self-report measures there is a risk that transient mood state may contribute a consistent but artificial bias across measures (Podsakoff & Organ, 1986).

The reliance on cross-sectional, self-report methodology can be problematic, as stated in prior studies (Fox, Spector, & Miles, 2001). Fox et al. (2001) noted it is a continuous concern in organizational research that the use of a single source of data, such as self-report questionnaires, may reflect an overstatement of relationships among variables. However, in line with Fox, Spector, and Miles' research, and because my focus was on affective and behavioral responses to perceived rather than objective environment, the arduous task of obtaining uncontaminated measures of CWB, coupled with ethical concerns with the potential of putting participants at risk in the collection of evidence of CWB, this study followed guidelines set in prior studies, and utilized anonymous self-reports which provided the nearest available approximation of these relations.

Internal validity concerns the validity of results internal to study, it concerns causality. No causal claims were made in this descriptive study. Taken into perspective, the results add to the knowledge base of research on workplace behavior. Future research

on CWB should include more cross-sectional and longitudinal studies in the effort to gain additional insight on the relationship of variables and the direction of effects (Meier & Spector, 2013).

Significance of the Study

CWB can be damaging to organizations. The hypothesized correlation between employee perceptions of uncertainty, stress, and frustration with overall levels of CWB aid in identifying developing patterns throughout the work force within the United States. In the wake of the financial crisis which began in 2007 U.S. unemployment increased from 4.7% to 10 % (Goodwin, Harris, Nelson, Roach, & Torras, 2013). Predicting factors correlated with CWB provides human resource departments a resource to tap into when executing strategies to better manage employees. If supported, extending research on the work behaviors of the population can inform human resource professionals and organizational leaders when implementing human resource strategies. This study provides information on the way uncertainty, stress, frustration relate to CWB. The value of tools to predict job performance in personnel selection are well established; however, a gap exists for tools used to predict counterproductive work behaviors because these have been less well researched (Fine, 2012).

Contribution to Organizational Practice

CWBs can be widespread and are problematic for organizations (Ramshida & Manikandan, 2013). The significance of this study is to identify what role if any employee's uncertainty, stress, and frustration have with levels of CWB. This information can aid in the advancement of strategies designed to encourage more

positive and productive employee behavior. Organizations that experience problems with employee behavior can benefit from extending research predictions (Sulea, 2010).

Implications for Social Change

The current research study supports positive social change directed at extending the understanding of negative psychological influences on work behaviors, and implications for practice through reduction of uncertainty, stress, frustration, and CWB. Organizational leaders and human resource professionals can employ programs and strategies that help change people's behaviors thus improving society (Stephan, Patterson, & Kelly, 2013). Businesses can facilitate positive behavior through social change mechanisms such as: motivation, opportunity, and capability (Stephan et al., 2013). Organizational leaders can motivate individuals to change by communicating and incentivizing capability (Stephan et al., 2013). Organizational leaders can create opportunities, create transparency, and set up empowering structures and resources, and enable individuals to change by building confidence, educating, and by providing training (Stephan et al., 2013). Social change is for the most part a long-term uncertain process (Stephan, et al., 2013). Therefore, to be successful at achieving goals change strategies need to set in motion sufficient funding and personnel (Stephan et al., 2013). Researchers suggest that implementing intervention strategies needs to involve timing, and steps that should be taken to create positive social change (Stephan et al., 2013). First, organizations should prepare by building motivation, capability, and opportunity on both the project level and the individual level (Stephan et al, 2013.). Second, organizations should create change by sustaining and energizing motivation, and developing capability

and opportunity (Stephan et al., 2013). And lastly, organizations should maintain behavior change by sustaining motivation to "keep" with the new behavior, and by supporting capabilities and institutionalizing opportunities (Stephan et al., 2013, p. 75).

Summary and Transition

The purpose of this study was to assist in predicting CWB and provide additional insight as to the relationships among factors and their influence on questionable work behaviors. The economic climate and tentative recovery have sparked revolutionary changes and modifications in work environments. Changes have undoubtedly affected organizations and employees in a variety of ways prompting employees to become increasingly more skeptical, and less trusting (Tesvich & Morrow, 2010). Never-ending work changes, growing concerns of uncertainty, concerns of employee and organizational safety all impact employee performance and overall wellbeing. Self-reports were gathered from a cross section of employees in the automotive industry to gain clarity of the influences on employee behaviors during change. It has been established that negative psychological influences can impact work environments (Tesvich Morrow, 2010). Improving proactive strategies, revitalizing strategies that are already in place, and goodwill community relationships can help encourage more positive work behaviors, and more positive community interactions.

Chapter 2 addresses a review of existing literature on perceived uncertainty, work related stress, frustration and CWBs. The chapter commences with a description of the social exchange theory which is the theoretical foundation for this study with discussions of psychological, and psychosocial responses, and their role in perceived uncertainty,

stress related responses, as well as the role of frustration and associations with levels of CWBs. Chapter 2 includes studies with opposing views as well as implications of past research and influences on this investigation. Major sections of Chapter 2 include: the social exchange theory framework, CWB, perceptions of uncertainty, work related stress, work frustration, subjective wellbeing, organizational outcomes, and economic decline.

Chapter 3 describes the methodology and design utilized to study the research questions. This chapter reviews the use of regression analysis as a valid measure in analyzing the relationships between perceived uncertainty, work stress, frustration, and counterproductive work behavior. The chapter also includes a description of the sample population, the process and procedures, the measures used, ethical considerations, and analysis of data collected. Chapter 4 presents the results and calculations of the descriptive statistics and multiple regression analyses used to address the research questions and hypotheses. Chapter 5 concludes this study, and contains the interpretations of the findings, the limitations of study, recommendations, implications and conclusions.

Chapter 2: Literature Review

Introduction

The research problem addressed is the need to gain more insight on questionable work behaviors and to identify predictors (Sulea, 2010). This information can then help organizational leaders and human resource professionals develop strategies that help lessen occurrences. The purpose of the current research was to quantitatively examine the correlation among the IV's: perceived uncertainty, stress, and/or frustration, and the DV: CWBs. This study investigated negative influences on workplace behavior and expand our understanding of CWB and its costly impact on organizations and individuals (Alias et al., 2013).

This chapter discusses the evolution of the social exchange theory, the workplace social exchange network, and perceived organizational support. A discussion of CWBs includes: role conflict and ambiguity, emotional abuse in the workplace, workplace exclusion, employee deviance, and sabotage. Retrospective studies on CWBs were reviewed. Perceptions of psychological uncertainty work related stress, and work frustrations were reviewed and their relationship with CWBs. Research which investigate the psychological and psychosocial responses in work environments and their role in related behaviors were integrated into this chapter. A discussion of opposing research which challenge some of the results of research in this area were included in order to have an objective discussion. The chapter concludes a review of how prior research has influenced this current investigation. Researchers identified a number of macroeconomic influences some direct such as individual responses to the economic situation, and others

indirect such as changes within organizations due to the economy that impact workers (Sinclair, Sears, Probst, & Zajack, 2010). As global economic fluctuations continue the potential risks for workers and organizations may increase even more (Sinclair et al., 2010). Researchers have reported increases in workplace stress, and related violence in the workplace and campuses in the past few decades (Hunt, Hugley, & Burke, 2012).

Literature related to the scope of the study topic include: uncertainty in the workplace (Schweiger & Denise, 1991; Kamel & Hashish, 2015); economic stress, stressors and strains (Beehr & Glazer, 2005; Weinberg & Cooper, 2012; Sert, Elci, Uslu, & Sener, 2014); work frustrations (Schaufeli, Leiter, & Maslach, 2008; Avey, Wu, & Holley, 2015); and CWB (Fox & Spector, 2005; Reynolds, Shoss, & Jundt, 2015). Publications regarding waning economic conditions and the American worker as well as economic stress and employee well-being, and perceived organizational support, have all contributed to organizational research (Pew research, 2010; Sinclair, Sears, Probst, & Zajack, 2010; Shore, Coyle-Shapiro, & Tetrick, 2012). Additional studies on social exchange, communication climate, change communication, and relationships with employee perception have also made valuable contributions in organizational behavior (McMillan & Albrecht, 2010).

Stress which is a worldwide problem can adversely affect the bottom line of organizations in all industries (Hunt, Hugley, & Burke, 2012). As stress levels increase employee burnout also increases dramatically, and productivity levels deteriorates (Dobson, 2010). Such things as hiring freezes, salary freezes, furloughs, and layoffs exacerbate stress levels in companies, and on campuses worldwide (Dobson). Frustration

levels at work, and effects on work behaviors are of interest to organizational leaders and researchers. Additionally, researchers suggest a relationship between job insecurity and impaired work-related well-being because it frustrates employees' psychological needs (Vander Elst, Van den Broeck, DeWitte, & DeCuyper, 2012). Job security may also be considered as a demotivating factor frustrating various needs (Vander Elst et al., 2012).

Keenan and Newton (1984) demonstrated in earlier studies that self-reported frustration at work was associated with the dependent variables of anger reactions, latent hostility, job dissatisfaction, and work-related anxiety. Keenan and Newton also found that frustration mostly consisted of interference with an individual's ability to carry out his or her day-to-day duties effectively. Keenan and Newton further suggested that organizational climate, role stress, and social support all contributed to the levels of environmental frustration felt.

Today's businesses need to better understand factors that influence employees, and employee-orientated work outcomes (Kanten & Ülker, 2013). Employee perceptions of work environments has significant implications for both individuals and organizations (Kanten & Ülker, 2013). Employees who perceive that the organization is non-supportive, or unwelcoming are more likely to exhibit negative or CWB (Wolf, Dulmus, & Maguin, 2012).

CWB include acts of aggression, hostility, sabotage, theft, and withdrawal (Spector & Fox, 2005). Studies conducted during organizational change provide additional understanding and insight. Studies further provide the clarity needed to revitalize and improve areas of human resource strategies as well as employee

interactions in different contexts, and ultimately make way for improved organizational and social wellbeing. Researchers argued that a sustainable workforce is developed and nurtured through employment practices that encourage a relationship between work-life balance and wellbeing to employment experiences (Kossek, Valcour, & Lirio, 2014).

"Employment practices that sustain work-life balance and wellbeing in workplace experiences are critical pathways to long term workforce effectiveness" (Kossek et al., 2014, p. 296). Organizations should promote work-life balance by encouraging employees to take time off and keep their hours under control (Kossek et al., 2014). Organizations should also encourage employees' professional and personal development (Kossek et al.). And organizations should support the local community (Kossek et al., 2014).

Strategy for Literature Review

This literature review includes empirical studies of employee perceptions and influences on work behaviors which are located both in peer reviewed journals, and in medical journals. A search of literature was conducted via digital technology which included several databases such as PsycARTICLES, CINAHL Plus, ERIC, SocINDEX, SAGE Premier, Google Scholar, and Business Source Complete. Additionally, print versions of articles, and several related books were also referenced. Terms used in the literature search included: *psychological uncertainty, economic stress, work stress, frustration, organizational change, counterproductive work behaviors, social exchange theory, employee deviance, workplace incivility, and aggression* among others. Experts in the field were also contacted via e-mail for permission to use instruments. This study also

includes past research as well as current research conducted between 2009-2016. Literature was chosen based on significance and relationship to research design, and current relation to the topic.

Theoretical Framework

Social Exchange Theory

McMillan and Albrecht (2010) stated that the social exchange theory (SET) framework is frequently referenced in employee-organization investigations, but a better understanding is also needed of the important roles that communication climate and change communication hold in organizational research. Researchers more recently investigated perceived organizational politics and employee morale, and the mediating role of social exchange perceptions (Bodla, Afza, & Danish, 2015). Researchers proposed that "if employees feel that behavior of their supervisor and organization is unfair, politicized and based on favoritism, their social exchange perceptions are disturbed which results in the reduction of their commitment and job satisfaction" (Bodla et al., 2015, p. 67).

Eisenberger, Huntington, Hutchison, and Sowa (1986) presented evidence that employees form global beliefs regarding the degree to which organizations values their contribution and cares about their wellbeing. Findings supported the SET view that individuals who were committed to the organization were heavily influenced by their perception of the organizations commitment to them (Eisenberger et al., 1986). In its early stages, the SET had several prominent figures which helped lay the groundwork for this distinct approach to include: George Homans, John Thibaut, Harold Kelley, and

Peter Blau among others (Emerson, 1976). Homans's earlier ideas continue to inspire scholars who have extended studies in the area of social relationships (Treviño, 2006). Treviño noted that major writings of Homans included the Human Group (1950), Social Behavior: Its Elementary Forms (1961, 1974), and Social Behavior as Exchange (1958). Currently several interrelated issues of sociological theory such as structural exchange theory, rational choice theory, network exchange theory, distributive justice, and metatheoretical considerations of deductive reductionism have some origins in Homan's work (Treviño, 2006).

To gain a better understanding of SET a look at its origins is helpful. While studying social behavior as exchange Homans' work focused on rewards and costs between at least two individuals, and he also used propositions to explain behavior in certain given situations (Cook & Rice, 2003). Homans' in 1974 restated his general propositions and titled them (Treviño, 2006, pp. 33-34): (a) the success proposition which suggests that the more frequently certain actions by individuals are rewarded it increases the probability that the same action will be repeated, (b) the stimulus proposition which suggests that if previous occurrences of a given stimulus, or set of stimuli were ones in which an action was rewarded then the more similar present stimuli are to those in the past will increase the probability that individuals will perform the same action or similar ones; (c) the value proposition which suggests that the more value an individual places on the end result, increases the probability that they will repeat the same action; (d) the deprivation-satiation proposition suggests that that the more frequent previous actions are rewarded it diminishes the value of that reward for them; (e) the aggression-approval

proposition has two parts, first it suggests that individuals whose actions were not rewarded as expected, or who received an unexpected punishment may cause them to become angry, and more inclined to behave aggressively the results of which become more valued, and secondly when individuals get the reward they expected or one more than was expected for their action, or is not punished as expected they are more likely to perform approved behavior, and behavior becomes more valuable to them; (f) the rationality proposition suggests that in selecting between alternative actions an individual will choose that one for which they perceive the value, *V,* of the result multiplied by the probability, *p,* of getting the result, is the greater.

Though Blau's work followed in the footsteps of Homan's to a certain extent, for example rewards and costs; his model considers social exchange between groups as well as those between individuals (Cook & Rice, 2003). "Social exchange involves the principle that one person does another a favor, and while there is a general expectation of some future return, its exact nature is definitely not stipulated in advance" (Blau, 2008, p. 93). In the workplace exchange relationships develop gradually and involve a measure of trust. However, trust can be diminished in certain situations when one coworker helps another repeatedly, and help is not reciprocated this can result in the coworker safeguarding themselves from future losses by discontinuing to render assistance (Blau, 2008). On the other hand, if assistance is reciprocated this would be considered a sign of trust ensuring future assistance even possibly increasing favors (Blau, 2008). To strike a balance in social exchange, and key to interactions is a level of trustworthiness, and reciprocation this increases the exchange relationships between individuals (Blau, 2008).

Blau further states that “only social exchange tends to engender feelings of personal obligation, gratitude, and trust; purely economic exchange as such does not” (p. 94). Additionally, other researchers such as Homans made noteworthy contributions to industrial sociology particularly in the area of leadership in organizations, his contribution stemmed out of his fieldwork as a naval officer (Appold, 2006).

Emerson's (1962) work is a combination of both Homan's and Blau's models where the behavioral support of his micro level theory has footings in reinforcement principles (Cook & Rice, 2003). Additionally, Emerson argued that the social exchange theory is "a frame of reference within which many theories, some micro and some more macro, can speak to one another, whether in argument or mutual support" (Emerson, 1976, p. 336). Social exchange embodies a series of interactions with increased associated obligations (Emerson, 1976). According to Emerson, the exchange theory should be viewed instead as a set of ideas or concepts that provides examples of the movement of resources through social process, and whose specified limit is defined by an assumption that the resource will continue to be available as long as there is a valued return contingent upon it; “psychologists call this contingent return reinforcement, economists simply call this reciprocally contingent flow exchange” (Emmerson, 1976, p. 359).

One of the basic principles of SET describes how relationships develop over time into trusting, loyal, and mutual committedness (Cropanzano & Mitchell, 2005). In organizational research, the focus has been on relationships which evolve over time, and the differences involved (Cropanzano & Mitchell, 2005). Social exchange which was

introduced early on by Homans (1958) paved the way for different theories that all still find common ground in the basic tenet that social exchange encompasses actions that are dependent on the rewarding reactions of others, and that evolve for mutually and rewarding transactions, and relationships over time (Cropanzano & Mitchell, 2005). The rational for choosing this theory includes a review of prior organizational studies anchored in social exchange theory which explore various aspects of work relationships some positive such as fair treatment, and some labeled as negative such as workplace exclusion, and the different roles individuals play (Scott, Restubog, & Zagenczyk, 2012).

The SET relates to the present study in that it helps to better understand CWB (Hai & Tziner, 2014). Social exchange helps to explain exchange relationships, and why individuals behave the way they do. Furthermore, the social exchange framework aids researchers by providing additional insight that helps organizational leaders, and human resource professionals develop sustainable strategies that enhance positive work environments that are safer and more productive. Research questions build upon existing theory by providing a medium by which we can view the socialization challenges faced by individuals when organizations undergo changes. Cole, Schaninger jr., and Harris (2002) presented the workplace social exchange network (WSEN) a noteworthy construct to aid in better understanding exchange relationships in the workplace. This is a multilevel theoretical approach integrating three exchanges.

Workplace Social Exchange Network

Researchers in earlier investigations presented the WSEN framework that draws from multiple streams of social exchange research (Cole et al., 2002). The WSEN

framework references information from various studies of social exchange that examine interactions between individuals, and their organization, between individuals and their supervisor, and between individuals and their workgroups (Cole et al., 2002). Cole et al. argued that investigating exchanges simultaneously aids in the effort to better understand the dynamics at work including influences on employee choices to reciprocate with certain behaviors, and attitudes. Exchange relationships that figure prominently in organizational studies include supervisor-employee exchange, better known as leader-member exchange (LMX), and the organization-employee exchange, a concept which encompasses perceived organizational support (POS) both relationships have been associated with performance, and attitudes (Settoon, Bennett, & Linden, 1996). Lastly, the team member exchange (TMX) relationship which figures prominently in organizational studies (Cole et al., 2002).

Researchers described team member exchange as "an employee's willingness to exert extra-role behaviors which helps other team members and the team accomplish goals" (Cole et al., 2002, p. 151). In line with recommendations for a more holistic approach one which incorporates and investigates exchange relationships in work settings the workplace social exchange network approach takes into consideration multilevel employee exchanges (Cole et al., 2002). For example, with their supervisor, with their work team, and with the overall organization. This theoretical approach offers additional insight as to the dynamics at play in organizational settings, and some of the influences on work relationships (Cole et al., 2002). Of the workplace relationships leader-member exchange is reportedly to be the most investigated noting that the relationships

between supervisors and subordinates can have positive influences on work experiences (Gerstner & Day, 1997).

Exchange relationships between workers and their supervisors, and between workers and the organizations have been topics of numerous empirical studies seeking to clarify different relationships at work (Settoon, Bennett, & Linden, 1996). Investigations included the question of whether exchange relationships among workers, and their employer, and their supervisors accounted for differences in employee behaviors. Settoon et al.'s (1996) results indicated that "Structural equation modeling results considered on the combined criteria of fit and parsimony showed that these two exchange relationships were differentially related to employee behaviors" (Settoon et al., 1996, p. 224).

Setton et al. (1996) demonstrated that perceived organizational support was more strongly correlated with organizational commitment than was leader-member exchange, and that leader-member exchange was found to have a higher relationship with citizenship behaviors than perceived organizational support. Investigations such as these underscore the importance of gaining clarity as to the complexity of exchange relationships, and their associations with different employee attitudes and behaviors both of which are broader in scope and meaning than described in an organization's standard operating procedures (Setton et al., 1996).

Perceived Organizational Support

Perceived organizational support (POS) is viewed as a significant social exchange mechanism in an organizational context (Wu & Liu, 2014). POS refers to worldwide beliefs held by employees regarding the degree to which their organization finds their

contributions worthwhile, and cares about their ell-being (Wu & Liu, 2014). Organizational researchers investigate various correlations between perceived organizational support and employee work outcomes. There is evidence that employees who perceive a high level of organizational support believe that their organization cares about their well-being, and this a critical factor in individuals' work attitudes and behaviors (Wu & Liu, 2014).

Eisenberger, Huntington, Hutchison, and Sowa's (1986) earlier research on organizational support theory (OST) demonstrated that individuals tend to "(a) form global beliefs concerning the extent to which the organization values their contributions and cares about their well-being; (b) such perceived organizational support reduces absenteeism; and (c) the relation between organizational support and absenteeism is greater for employees with a strong ideology than those with a weak ideology" (p. 504). Eisenberger et al. (1986) developed the concept of POS early on characterizing an individual's perception regarding the degree to which an organization finds his/her contributions important, and cares about his/her well-being (Eisenberger et al., 1986). Employees may perceive organizational generosity, and form general opinions concerning the organization's favorability of him/her which in turn prompts expectations that it could be advantageous in different situations (Shore, Coyle-Shapiro, & Tetrick, 2012). Employee's form various opinions regarding organizational fairness, and "Organizational fairness is thought to have a cumulative effect on POS, reflecting a concern for the welfare of employees and, in particular, procedural justice" (Shore et al., 2012, p. 6).

A meta-analysis conducted by Rhoades and Eisenberger (2002) suggested three major work-experience antecedents of POS: organizational rewards and working conditions, support received from supervisors, and procedural justice. Individuals make assessments of those who represent the organization and their behavior towards them and develop an opinion about that treatment from this point (LaMastro, 1999). Certain individuals might form their sense of perceived organizational support on such factors as the organization members' willingness to provide them with added assistance, or by being provided with specialized equipment needed to complete a project (LaMastro, 1999). While others might consider additional training in a particular area of interest a sign of organizational support (LaMastro, 1999). Subjective well-being and personality also have important roles in the way individuals evaluate their lives, and how they react to events taking place.

Major sections of Chapter 2 include a discussion of CWBs and various sub categories; for example: role conflict and ambiguity, emotional abuse in the workplace, workplace exclusion, employee deviance, sabotage, and retrospective studies on CWBs. Subsections review various negative behaviors and related consequences. Reviews of CWBs help in better understanding behaviors that are harmful to organizations and individuals. Additional areas include employee health and well-being, work frustration, subjective well-being and personality, organizational outcomes, and economic decline.

Counterproductive Work Behaviors

CWBs are dysfunctional behaviors that are conceptualized in several ways by various researchers (Anjum & Parvez, 2013). A closer look at behaviors labeled as

counterproductive reveals agreement among researchers on how they are defined (Anjum & Parvez, 2013). Fox and Spector (2005) described counterproductive work behaviors CWB as phenomena that prove costly to organizations and its members. These behaviors are comprised of acts that harm or are intended to harm organizations or people in organizations (Spector & Fox, 2005). A number of early investigations on CWBs included those of Spector and Fox's (2005) stressor/emotion model of CWB, and Pearson, Anderson, and Porath's (2005) investigation on workplace incivility. More recent investigations include Aquino and Thau's (2012) study on workplace victimization among others. Chernyak-Hai and Tziner (2014) suggested that by accessing the psychological antecedents of CWBs we may be better able to uncover the motivational aspects of such behavior.

Early on researchers described CWBs in general terms with overlapping characteristics in common, and a number of related but distinct constructs (Spector & Fox, 2005). The primary characteristic of CWB is that the act is purposeful and not accidental, and that the employee makes a conscious decision to behave in such a manner that is intended to inflict harm or harms by purposeful action (Spector & Fox, 2005). "Specific CWBs include abusive behavior against others, aggression (both physical and verbal), purposely doing work incorrectly, sabotage, theft, and withdrawal (e.g., absence, lateness, and turnover)" (Spector & Fox, 2005, p. 152).

A report in *Risk Management* described that "the fastest growing crime in the United States, employee theft and fraud costs U.S. businesses nearly $50 billion annually, costs the average business between 1% and 2 % of annual sales, and is responsible for

nearly 20 % of all business failures" (Coffin, 2003, p. 8). Today's workplace is often viewed unfavorably than in prior years. Different forms of aggressive behaviors and violence that were not being reported as often appear to be on the rise, and are of concern because of the serious nature and impact it has on employees and organizations (Mitchell & Ambrose, 2012).

Aggressive behaviors including forms of violence in work environments are harmful and may result in: "less efficiency, less productivity and profitability; increased absenteeism; increased staff turnover; increased counseling and mediation costs; increased workers' compensation claims; even possible legal action" (Commission for Occupational Safety and Health, 2010, p. 2). Everyone in the workplace is potentially at risk, and it is important for organizations to recognize potential problems and minimize risk for everyone (Commission for Occupational Safety and Health, 2010). Exactly what motivates individuals to react destructively as opposed to constructively is not crystal clear (Mitchell & Ambrose, 2012).

CWBs can arise from various existing conditions either in the perpetrator or situation and can include individual employee characteristics and the characteristics of the workplace (Fox & Spector, 2005). Some investigators study the characteristics of the perpetrator while some focus on the victims, and yet others study the dynamic interplay between the two (Fox & Spector, 2005). Fox and Spector demonstrated that factors associated with job stress such as a lack of control, excessive workloads, poor relations with coworkers and supervisors, and work/family conflicts are linked to harmful behaviors.

Questionable behaviors include acts of aggression which are described by researchers as "form of behavior directed by one or more individuals in a workplace toward the goal of harming one or more others in the workplace" (Newman & Baron, 2005). More recent investigations by Hershcovis, Reich, Parker, and Bozeman's (2012) examined how employees' deviant responses to workplace aggression maybe formed by the social context in which aggressive acts take place. Hershcovis et al. investigated a perpetrator/victim perspective. Participants were recruited from various industries via an on-line recruiting system, and questionnaires were used. Regression analysis was performed to test their hypothesis, and results of their study provided evidence that the perpetrator's power and interdependence with the victim combine to influence when victims retaliate" (Hershcovis et al., 2012, p. 12).

Heacox and Sorenson (2004) found strong relationships between organizational frustration and aggressive behaviors. Variables in the study included both organizational variables and person variables (Heacox & Sorenson, 2004). Organizational variables included such things as work constraints, role conflict and role ambiguity, and organizational warmth and support (Heacox & Sorenson, 2004). Person variables included such things as locus of control and gender which predicted the levels of frustration that participants experienced, that in turn predicted supervisor and self-reported aggression (Heacox & Sorenson, 2004). This multi–level approach used by Heacox and Sorenson included a confidential anonymous survey of the work environment, and multiple regression analyses were conducted to test hypothesis. Results reaffirmed the significant effect of frustration on consequential aggressive behaviors.

Organizations have struggled with employee behaviors that cause harm from the beginning of the industrial revolution to the present day (Klotz & Buckley, 2013). Klotz and Buckley suggested that CWBs aimed at the organization will be a prevalent phenomenon in the workplace for the foreseeable future. A review of CWBs demonstrated that the way employees can cause harm to their organizations is fast becoming more sophisticated as workplaces become more complex (Klotx & Buckley, 2013). In today's technologically advanced workplace employees often possess the technological know-how, and autonomy to harm their employers in more covert ways (Klotz & Buckley, 2013). As organizations continue to become increasingly complex, it is also likely that managers and management researchers will encounter more forms of employee deviance in the coming future (Klotz & Buckley, 2013).

This conceptual framework has been applied and articulated by researchers in prior studies that investigated CWBs' costly effects on individuals and organizations. This current research benefits from this framework in that it extends research that evaluates what the relationship is if any uncertainty, stress, and frustration have with the costly impact of CWBs during change in a flailing economy.

Many variables associated with CWBs have been investigated by organizational researchers to include role conflict and ambiguity, emotional abuse in the workplace, workplace exclusion, employee deviance, and sabotage among others. Role conflict occurs when two or more employees have different interpretations of work responsibilities (Judeh, 2011). Role ambiguity can be experienced by individuals whose position or job is not clearly defined (Judeh, 2011).

Role Conflict and Ambiguity

Role conflict defined earlier by researchers is "dimensions of congruency-incongruency or compatibility-incompatibility in the requirements of the role, where congruency or compatibility is judged relative to a set of standards or conditions which impinge upon role performance" (Rizzo, House, & Lirtzman, 1970, p. 155). Role ambiguity is described "in terms of (a) the predictability of the outcome or responses to one's behavior and (b) the existence or clarity of behavioral requirements, often in terms of inputs from the environment, which would serve to guide behavior that is appropriate" (Rizzo et al., 1970, pp. 155-156). Rizzo et al. found positive relationships between high role conflicts and low job satisfaction, and between high job pressure and high general fatigue. Both role conflict and role ambiguity are suggested to pose limitations for employees.

Another definition of role ambiguity describes the "existence of a lack of clarity in the roles an employee is expected to fulfill" (Judeh, 2011, p. 173). Role ambiguity is the perception that the information necessary to perform one's job is lacking, thus leading the perceiver to feel helpless, or is the result when inadequate information or knowledge to do a job exists (Judeh, 2011). Additionally, role ambiguity was found to be associated with increased tension and indicators of burnout and negative job-related attitudes (Newton & Jimmieson, 2008).

Role conflict exists when two or more employees have different perspectives regarding their job which makes them experience conflicting demands and expectations, and this prompts them to make incompatible decisions resulting in role conflict (Judeh,

2011). Yet conflict can also have a positive effect when it leads to organizational development, but beyond a certain stage conflict can lead to organizational ineffectiveness (Judeh, 2011). Consistent with earlier research findings role conflict was found to increase levels of emotional exhaustion and lower job-related attitudes (Newton & Jimmieson, 2008).

Emotional abuse is another area of concern for organizations and individuals. Emotional abuse in the workplace has steadily gained significant interest in the United States (Carden & Boyd, 2013). Bullying is a form of emotional abuse and is described as: mistreatment serious enough to endanger a targeted individuals' health, risking his or her job and career, and strain relationships with acquaintances and family (Carden & Boyd, 2013).

Emotional Abuse in the Workplace

Researchers described emotional abuse as abusive behavior that targets individuals with "hostile verbal and nonverbal behaviors, excluding physical contact, directed by one or more persons towards another that are aimed at undermining the other to ensure compliance" (Keashly, Trott & Maclean, 1994, p. 342). Mobbing described by researchers in prior studies, is another form of abuse that is the "hostile and unethical communication which is directed in a systematic way by one or a number of persons mainly towards an individual" and can include such situations where one is being ridiculed in front of others, or being snubbed by co-workers (Leymann, 1990, p. 120).Working with individuals whose behaviors are degrading or hostile can be stressful, and ongoing exposure to such behavior on a regular basis can influence reactions that

prove costly to organizations (Keashly et al., 1994). Keashly et al. further stated that the economic climate, and nature of ones' job may restrict employee's option to resign as an alternative for dealing with an abusive workplace.

Workplace bullying has become a significant problem in work environments in the United States (Carden & Boyd, 2013). An online survey conducted by the Workplace Bullying Institute with 1,604 respondents, revealed that 39% of the respondents reported being bullied, and 58% of the respondents reported that they were currently being bullied (Workplace Bullying Institute, 2012). Examples of bullying behavior include unsolicited criticism, unfair treatment, isolation, humiliation, excessive monitoring, and receiver of targeted jokes (Carden & Boyd, 2013). With the potential impact that these behaviors have on employees, and organizations during periods of high stress and anxiety it is important that we continue to seek strategies to minimize their occurrence.

Another form of emotional abuse in the workplace is workplace exclusion. Exclusionary behavior may be a way for some individuals to protect and preserve social functioning (Scott, Restubog, & Zagenczyk, 2013). Exclusionary behavior because of its subtle nature allows individuals the opportunity to express their dissatisfaction with others without having a direct confrontation (Scott et al., 2013). Scott et al. noted that organizational leaders should strive to minimize anti-social behavior, and that they should maintain a culture in which civility and positive communication are the norm.

Workplace Exclusion

Workplace exclusion is associated workplace aggression, and includes bullying, incivility, and social undermining which are "conceptually distinct, but operationally

similar" (Aquino & Thau, 2009; Hershcovis, Reich, Parker, & Bozeman, 2012, p.2). Researchers have had a growing interest in the notion that individuals may play a part in their own mistreatment (Scott, Restubog, & Zagenczyk, 2012). This assertion has been established in victim prescription literature with origins in criminology (Scott et al., 2012). Though Scott et al.'s research focused on incivility as a precursor to exclusion in the workplace, they also noted that there are various other individual-specific variables that could be labeled as unfriendly or detrimental to relationships. For example, one could be perceived as negative, disagreeable, or an unapproachable person (Scott et al., 2012).

Researchers also suggested that this dynamic also exists in work environments, where employees whose aggressive, hostile, and disagreeable behavior is liable to elicit aggressive or retaliatory responses (Aquino & Bradfield, 2000; Hershcovis, Turner, Barling, Arnold, Dupré, Inness, LeBlanc, & Sivanathan, 2007). Furthermore, researchers argued that in situations where individuals display incivility it can lead others to question their willingness to be involved in mutually beneficial social exchange, so resulting in less than favorable outcomes (Scott et al., 2012). Individuals who are disagreeable and who pose a threat to the stability and survival of the group could potentially be excluded (Scott et al., 2012).

Exchange relationships and well-being at work, as well as factors that have influence on work behaviors are important considerations in the process toward minimizing negative influences and promoting more positive work environments. Biggo and Cortese (2013) noted that well-being at work is viewed by several authors to be the

end result of the interaction between individual characteristics and those of the work environment. A theory worthy of mention in the investigation work stressors and CWBs is the affective events theory (AET). Weiss and Cropanzano (1996) "argued that workplace events trigger affective responses which after being accumulated over time will influence workplace attitudes such as job satisfaction, organizational trust, and commitment" (as cited in Glasø, Løkke, Holmdal, & Einarsen, 2011, p. 199). Employees who experience increased negative emotions in relationship to work stressors may react emotionally with anger, frustration, and fatigue thus increasing the chance of their involvement in CWBs (Sprung & Jex, 2012). Sources of pressures at work such as changing environments add to challenges that individuals and organizations face (Weinberg & Cooper, 2012). Employee deviance another form of CWB, describes such acts as theft, withholding effort, and maltreatment of co-workers (O'Neill, Lewis, & Carswell, 2011). All of these acts pose pressing issues for organizations and underscore the significance that identifying antecedents of deviant behaviors hold for organizations (O'Neill, Lewis, & Carswell, 2011).

Employee Deviance

Employee deviance, a form of CWB, has negative impacts on organizational functioning. When employees are first hired, they go through an orientation phase, during the orientation phase employees are made aware of what behaviors are expected, training procedures are outlined, and the organizations' mission statement is stated, so when employees deviate from company policies it creates problems (Bennette, Aquino, Reed II, & Thau, 2005). Employee deviance is described as "the voluntary behavior of

organizational members which has the potential to cause harm to the organization or to those within, and in doing so violates significant performance enhancing norms" (Bennette et al., 2005, p. 111). Krischer, Penney, and Hunter (2010) investigated whether two forms of CWBs: production deviance and withdrawal served as coping mechanisms to mitigate the impact of low distributive and procedural justice on emotional exhaustion. Krischer et al. suggested that some coping behaviors however, can be viewed as counterproductive from an organizational perspective; for example, taking longer breaks or intentionally working slowly.

For organizations whose goal is to reduce production deviance and withdrawal behaviors, a closer look at what drives these behaviors should be a priority (Krischeret al., 2010). Krischer et al. suggested that employees may engage in some CWB because it may help in reducing emotional exhaustion. On one hand, counterproductive work behavior is viewed as harmful to organizations (Krischer et al., 2010). While on the other hand CWB may beneficial for employees, this poses an interesting paradox for practitioners (Krischer et al., 2010). Should organizations provide employees with other ways to cope with such things as perceived injustice, then employees may be less inclined to engage in these forms of counterproductive work behaviors (Krischer et al., 2010). For example, organizations could provide access to venues such as exercise facilities or programs or encourage employees to take breaks if they feel overwhelmed and distressed to reduce negative physiological arousal related to perceived stressors (Krischer et al., 2010).

O'Neill, Lewis, and Carswell (2011) evaluated whether employee personality and

justice perceptions predicted workplace deviance. Their results suggested that personality variables appeared to be slightly more predictive of deviance than were justice variables (O'Neill et al., 2011). These findings are of significance because of the financial costs of developing interventions (O'Neill et al., 2011). For example, individuals could be screened prior to employment for personality traits that reflect an inclination for them to avoid deviant behaviors (O'Neill et al., 2011). Current employees could be identified and sent for remedial training such as personal development and coaching (O'Neill et al., 2011). Identifying antecedents of deviant behaviors in the workplace is an important research priority (O'Neill et al., 2011). Organizations may benefit more from screening applicants for relevant traits than from organizational change involving policies and procedures in their effort to minimize workplace deviance (O'Neill et al., 2011). In addition to workplace deviance is workplace sabotage which is also detrimental to organizational functioning. In Ambrose, Seabright, and Schminke's (2002) study on sabotage, they hypothesized that injustice would be the most common cause of sabotage. Ambrose et al.'s research noted that literature listed five possible motives for sabotage: powerlessness, frustration, facilitation of work, boredom/fun, and injustice. The end goal of sabotage is to restore equity, to make up for an outcome that was deserved and expected but was not received.

Sabotage

Researchers who evaluate employee sabotage have provided valuable insight as to the various forms of such behavior (Harris & Ogbonna, 2012). For example, the motives of employee sabotage in the service industry were investigated to evaluate the variety of

reasons why service workers consciously choose to engage in behaviors designed to harm service (Harris & Ogbonna, 2012). Harris and Ogbonna suggested that the personality traits (e.g., conscientiousness, agreeableness, and emotional stability) are partially responsible for influencing their motive to engage in these behaviors.

Ambrose, Seabright and Schminke (2002) investigated sabotage from different perspectives, for example, some researchers evaluated relationships between perceived unfairness and sabotage, yet others the relationships between organizational justice and workplace deviance. Workplace sabotage is defined as "behavior intended to damage, disrupt, or subvert the organization's operations for the personal purpose of the saboteur by creating unfavorable publicity, embarrassment, delays in production, damage to property, the destruction of working relationships, or the harming of employees or customers" (Crino, 1994, p. 312).

Five possible motives suggested by Ambrose et al. (2002) as to why employees engage in these types of behaviors include, but are not limited to: powerlessness, organizational frustration, facilitation of work, boredom or fun, and injustice. Sabotage resulting from powerlessness involves an effort to achieve a form of control for its own good, and it benefits the individual or the workgroup not the organization (Ambrose et al., 2002). In organizational frustration, it is the emotional state that drives frustration, for example, when goal attainment is blocked (Ambrose et al., 2002). Facilitation of work entails a goal to make the work easier, for example, bending the rules to get the work done (Ambrose et al., 2002). Boredom or fun involves a motive for sabotage such as when engaging in activity for the fun of it, and injustice refers to instances in which

individuals feel that they have been treated unfairly (Ambrose et al., 2002). Among other related CWB is employee withdrawal which includes behaviors such as: unnecessary absenteeism, tardiness, and engaging in non-work-related conversations (Edger & Eisenberger, 2008). Edger and Eisenberger suggested that individuals who perceive that their organizations value their services will not engage in these types of behaviors.

Earlier studies on CWBs included those on aggression (Baron & Newman, 1996, 1998; Baron, Newman, & Geddes, 1999). Additionally, Fox and Spector (2005) investigated various forms of CWBs to include the actions of actors, and individuals who were targeted; they focused on antecedents and consequences of actions. A look at retrospective studies on CWBs aids in better understanding negative behaviors which are steadily rising.

Retrospective Studies on Counterproductive Work Behaviors

Earlier studies on CWBs included various areas of concern such as aggression and emotion in the workplace, and employee deviance (Newman & Baron, 2005; Bennett, Aquino, Reed, & Thau, 2005). Fox and Spector (2005) stated the growing interest in CWBs in past research studies. CWBs have gained renewed interest much of which has been prompted by mass media coverage, given to increases in incidents of workplace violence. Milder forms of workplace violence are reportedly more prevalent, yet experiences of workplace incivility and other forms of CWBs appeared to be increasing with relative frequency (Fox & Spector, 2005).

The umbrella term CWBs are a compilation of various conceptualizations that overlap where slight differences are indistinguishable (Fox & Spector, 2005). CWBs has

been studied both from an actor's perspective and from the targets perspective focusing on antecedents, and consequences of actions (Fox & Spector, 2005). Researchers who studied organizational behavior including investigations of aggression and emotions also looked at the extent that these behaviors involved efforts made by individuals to harm others, or the organizations for which they work (Baron & Neuman, 1996, 1998; Baron, Neuman, & Geddes, 1999). Studies on aggression in the workplace included various forms (e.g., bullying, abusiveness, and harassment, among others) used to identify questionable acts by individuals (Neuman & Baron, 2005).

Additionally, the consequences of supervisors who are aggressive with employees also have negative impacts. These types of experienced behaviors can be very stressful, challenging, and threatening for employees because of the control supervisors have over things that are important to their work lives (Tepper, 2007). Researchers further demonstrated that supervisor aggression has provoked destructive reactions from employees (Inness, Barling, & Turner, 2005; Mitchell & Ambrose, 2007; Tepper, Henle, Lembert, Giacalone, & Duffy, 2008) while a few demonstrated constructive reactions (Keasly, Trott, & MacLean, 1994; Tepper, Duffy, & Shaw, 2001; Tepper, Moss, Lockhart, & Carr, 2007).

The reasons for differences in reactions is not quite crystal clear, yet the significant impact that supervisor aggressions have had in the United States has been estimated to cost corporation billions annually (Tepper, Duffy, Henle, & Lambert, 2006). Mitchell and Ambrose (2012) examined the way employees reacted to perceived supervisor aggression to gain a better understanding of what prompted the employees to

react constructively or destructively to aggression. “The findings across three studies suggested locus of control (LOC), fear of retaliation from the aggressive supervisor, and behavioral modeling of coworkers’ impact the degree to which victims engage in destructive or constructive reactions” (Mitchell & Ambrose, 2012 p. 1165). Various factors can influence either constructive or destructive responses by employees.

Conflict and role ambiguity are conceptualized as potential obstacles for employees, and have significant associations with low job satisfaction, high job pressure, and high general fatigue (Rizzo, House, & Lirtzman, 1970). When low job satisfaction, high job pressure, and high general fatigue are experienced by employees they can influence subsequent reactionary behaviors (Rizzo et al., 1970). Employees who engage in actions that harm other members or the organizations, are of concern, and are important topics of investigations in industrial and organizational psychology for several reasons (Dalal, 2005; Vardi & Weitz, 2004). Negative behaviors at work including some previously mentioned: sabotage, theft, withdrawal behavior, harassment, and drug use at work (Gruys & Sackett, 2003; Robinson & Bennett, 1995; Spector et al., 2006) hinder organizational functioning. “Given the serious nature of these behaviors it should be no surprise that research has found that CWBs have important implications for the well-being of organizations and their members” (Bowling & Eschleman, 2010 p. 91).

Various areas of investigations examined the main effects of individual difference variables such as personality traits (Berry, Ones, & Sackett, 2007), yet others examined the main effects of work stressors (Brunk-Lee & Spector, 2006). “As a response to ineffective coping with stressors, CWBs are likely to increase in response to increases in

work stressors" (Bowling & Eschleman, 2010, p. 92). Examples include psychologically withdrawing from one's environment, or responding in a hostile fashion, or using drugs (Carver, Scheier, & Weintraub, 1989; Bennett & Robinson, 2000). Studies related to the research questions in this study include those conducted on perceived uncertainty, perceived stress, frustration, and CWBs.

Perceptions of Psychological Uncertainty

Unprecedented increases in the level and duration of unemployment in the United States have increased levels of uncertainty (Ravn & Sterk, 2012). "The unemployment rate in September 2012 remains close to 8% having surpassed 10% in late 2009, and the number of unemployed workers who have been out of work for 6 months or more now accounts for more than 40% of the total unemployed" (Rave & Sterk, 2012, p. 1). In another vein of research of work uncertainty, Leach, Hagger-Johnson, Dierner, Wall, Turner, Dawson and Grote (2012) investigated a self-report measure of work uncertainty in any setting to assist the progress of research, and decision making regarding the design of work.

Leach et al.'s (2012) goal was to develop a short and easily administered measure to access employee perceptions of work uncertainty. Items in the scale corresponded to common work factors such as equipment reliability and task predictability (Leach et al., 2012). The data were collected from three diverse samples in the study, and the researchers argued that the scales provide the means by which to examine uncertainty in manufacturing and non-manufacturing environments (Leach et al., 2012). Findings in the study reflected "good internal consistency and construct validity for a multi-dimensional

measure comprising three distinct scales: resource, task, and input/output uncertainty" (Leach et al. 2012, p. 95).

Schweiger and Denisi (1991) proposed early on that when employees are uncertain about their futures, it can be very stressful for them. Employees in these situations may try to lessen feelings of uncertainty by relying on less formal methods of information gathering such as rumors mills or other means of communications (Napier, Simmons, & Stratton, 1989). Rosnow (1988) stated that these types of information gathering methods do not necessarily reduce anxiety, but instead often provide less reliable information that is often exaggerated and lacking in accuracy.

Uncertainty which occurs during organizational change can be an outcome of the breakdown in communicating to employees what changes are being made, and this can leave them feeling uncertain about their future (Schweiger & Denisi, 1991). Buono and Bowditch (1989) suggested a correlation between information provided via the rumor mill or grapevine and CWBs. Researchers proposed that communicating with employees the anticipated effects of change is one way to deal with the uncertainty and anxieties that may result in dysfunctional outcomes such as: stress, job dissatisfaction, low trust in the organization and commitment to it, and intentions to leave the organization (Ashford, Lee, & Bobko, 1989; Bastien, 1987).

Schweiger and Denisi (1991 in opposing research argued that even though arguments exist for communicating with employees as soon as possible there are also a number of considerations that managers should first take into account. For example, information may be lacking on all the details concerning changes until later into process,

and managers may be hesitant to communicate inaccurate information so as not to create an atmosphere where employees feel they have been deceived (Schweiger & Denisi, 1991). Buono and Bowditch (1989) further proposed that management should refrain from communicating realistically with employees during change because of the chance that these communications might draw the attention of competitors. Buono and Bowditch stated this might result in employees leaving the organization earlier rather than weathering through changes.

Rafferty and Griffin's (2006) development of organizational change measures, and psychological uncertainty scale assesses individuals' perceptions on the frequency, impact, and planning of change. Rafferty and Griffin suggested ways that these change characteristics may have some influence on individuals' appraisal of the uncertainty associated with change, and eventually job satisfaction and turnover intentions. Lazarus and Folkman's (1984) cognitive phenomenological model of stress and coping was referenced by Rafferty and Griffin as part of their investigation on how these change characteristics may influence the appraisals one makes of the uncertainty associated with change, and eventual relationships with job satisfaction and turnover intentions.

A repeated cross-sectional design was adopted by Rafferty and Griffin (2006), and measures of organizational change and psychological uncertainty were administered via survey method to participants, data collected were analyzed. Results of the study revealed that "individuals' perceptions of these three aspects of change (e.g., frequency, impact, and planning) were related, in expected and meaningful ways, to job satisfaction and turnover intentions" (Rafferty, Allanah, & Griffin, 2006, p. 1159). Uncertainty is

considered one of the more common psychological states that can be experienced by employees during organizational change (Bordia, Hunt, Paulsen, Tourish, & DiFonzo, 2004). The restructuring process can also prompt employees to feel a great deal of uncertainty because they are unsure of what the organization's priority will be, if they will be affected by it, or if adjustments will be made in employment contracts (Jungsik, Song, & Seongsoo, 2013). More recently, Cullen, Edwards, Casper and Gue's (2014) study supported the role that perceived organizational support has in the relationship between employees' ability and perceptions of change related uncertainty and employees' satisfaction and performance.

Organizational environments are becoming more complex and organizational leaders are met with mounting challenges and uncertain futures (Ganta & Manukonda, 2014). Uncertainty and change provokes fear and anxiety in workers, and when workers are fearful their stress level increases (Ganta & Manukonda, 2014). Ganta and Manukonda noted that organizations must develop trained leaders with a clear vision to guide and motivate others during uncertain times. While psychologists are divided on whether workplace stress is a result of workplace experiences, or other factors, it is more commonly viewed that people experiencing stress can demonstrate decreased workplace performance (Patching & Best, 2014). Stressors which are characterized as physical or psychological stimuli in the environment can negatively influence reactions and are further described by researchers Beehr and McGarth (1992) and McGrath and Beehr (1990) as stress-producing environmental circumstances or stress-producing events and conditions (SPECs).

Stress

Economic Stress, Stressors and Strains

Mulki, Jaramillo, Malhorta and Locander (2012), examined how salespeople resistance to change, and a manager's decisiveness affect an individuals' felt stress and turnover intentions. Results of the study suggested that when employees believe that their supervisor is indecisive over important decisions they lose confidence, feel vulnerable, and are likely to develop stress (Mulki et al., 2012). Individuals may manage change in different ways, some ignore change initiatives, yet others resist passively by not reacting and continue to do things the way they have done in the past (Mulki et al., 2012). Others might actively resist change, act subversively, and become involved in behaviors that are damaging to the organization (Mulki et al., 2012). Employees may also build alliances with other likeminded individuals which could negatively impact organizational functioning (Mulki et al., 2012).

Resistance that builds can be very stressful to employees and can create an atmosphere in which they consider moving to another organization (Mulki et al., 2012). A leader who is trusted by employees, and who does not waver in making decisions, reaffirms the employees' beliefs in the organization and its goals (Mulki et al., 2012). Decisive leaders can inspire their employees convincing them that change is worth pursuing (Mulki et al., 2012). Decisive leaders can also effectively manage change initiatives because of the clarity they provide in decision making (Mulki et al., 2012).

The economic crisis can create alarming circumstances that influence individuals' approaches in life and assessments of their work situations (Markovits, Boer, & Van

Dick, 2014). Employment situations are severely impacted during economic crisis prompting less positive and more negative job conditions (Markovitis et al., 2014). The looming economic crisis steadily deteriorates one's economic and employment status which has negative effects on attitudes (Markovitis et al., 2014).

Increases in economic stress are comprised of both objective and subjective components for both employees as well as their families (Probst, 2005). Probst stated early on that the prevalence of unemployment, underemployment, and job insecurity has continued to rise, and along with it related stressors. Stressors which are characterized as physical or psychological stimuli in the environment can negatively influence reactions and were further described by Beehr and McGarth (1992) and McGrath and Beehr (1990) as stress-producing environmental circumstances or stress-producing events and conditions (SPECs). Opposing views suggested that stressors can also have some positive effects as well; for example, they can enhance productivity, thus allow opportunities for promotions and additional responsibilities (Beehr & Glazer, 2005).

Among negative effects are anxiety and depression which are manifested when individuals lack positive coping skills that can lead to potential strains (Beehr & Glazer, 2005). Beehr and Glazer (2005) identified three categories of strains, they include: psychological, physiological, and behavioral strains. Psychological strains involve forms of impaired cognitive functioning (e.g., anxiety, depression, burnout) that can be experienced by individuals in the workplace (Beehr & Glazer, 2005). Physical strains include actual body reactions (e.g., aches and pains, high blood pressure, coronary heart disease) which can impact an individuals' ability to work (Beehr & Glazer, 2005). Lastly,

behavioral strains include unhealthy behavior such as smoking, alcohol consumption, or thoughts of suicide (Beehr & Glazer, 2005).

Some of the negative behavioral reactions to stressors and strains were also associated with negative organizational outcomes (Beehr & Glazer, 2005). Stressors leading to psychological strains, or physical strains, and behavioral strains are described as having a domino effect. For example, in situations where individuals perceive role overload at work anxiety (psychological strain) can lead to a lack of sleep (physical strain), and in turn can lead to the use of sleep medication ultimately impacting work performance (Beehr & Glazer, 2005).

When assessing changes in work environments it can lead to a range of emotions and reactions with either positive or negative outcomes (Weinberg & Cooper, 2012). For example, uncertainty in work environments appears to feed perceptions of threat associated with unhealthy attitudes and behavior in individuals (Weinberg & Cooper, 2012). Prior to responding to demands in the environment be it physical, or psychological individuals first appraise the situation, and how it pertains to them, or how significant it is (Weinberg & Cooper, 2012).

Reviewing on a continuum those things which promote positive-well-being at one end to those things associated with strain and distress on the other, allows us an opportunity to make better valuations of benefits as well as detriments and allows us to better recognize the presence or absence of healthy or unhealthy experiences (Weinberg & Cooper, 2012, p. 42). Strains that cause distress in individuals are the negative psychological experiences that one has on a regular basis, for example, the uncertainty of

maintaining employment amidst waves of job cuts, or the increases in workloads created by the termination of co-workers have been associated with strains (Weinberg & Cooper, 2012). Strains can also lead to difficulties in relationships at work, or at home and challenges an individuals' ability to cope (Weinberg & Cooper, 2012).

Changes in behavior related to strain for some individuals can lead to avoidance and withdrawal from interaction with others (Weinberg & Cooper, 2012). Additionally, the quality of social interaction might also be affected so much so that irritation, anger, incidences of bullying, and frustration with customers, clients and colleagues occur with increased frequency (Weinberg & Cooper, 2012). Organizations can also experience strain, particularly when faced with increases in low morale rates, reduced commitment, increases in error rates, and complaints, all of which present significant challenges to achievement of goals (Weinberg & Cooper, 2012). In addition to strains other factors are associated with contributing to employee frustrations, for example the lack of progress in career movement (particularly for younger workers), job security, and the lack of transparency in communication to name a few (Society for Human Resource Management, 2011). Mitchell-McCoy and Evans (2005) stated that a common indicator of psychological stress is task performance, and individuals can overcome its negative impact as long as the stressor is not severe, the duration of performance is not prolonged, or the task does not require maximum cognitive capacity.

Psychological Reactions to Stress

Patching and Best (2014) stated that while psychologists are divided on whether workplace stress is a result of workplace experiences, or other factors, its more

commonly accepted that people experiencing stress can demonstrate decreased workplace performance. From a human performance perspective, it's significantly more important to have systems and procedures that contribute to avoidance of undue work environment-caused stress (Patching & Best, 2014). Beehr and Glazer (2005) provided examples of employee reactions to stress that resulted in negative consequences for organizations, to include: organizational commitment, turnover intentions, and organizational justice among others.

Of these reactions, organizational commitment appears to be the most widely investigated construct, and is comprised of three components: affective, continuance, and normative commitment (Meyer, Allen, & Smith, 1993). In summary, affective commitment is an individuals' intention to remain with the organization because they want to, for those with continuance commitment they stay with the organization because they need to and have no choice, and those with normative commitment stay with the organization because they feel a sense of obligation (Meyer, Allen & Smith, 1993, p. 539). Future studies are needed to further explore health related issues, and changes in employees' psychosocial factors that may be associated with work related stress during economic undulations (Houdmont, Kerr, & Addley, 2012).

Stress, Psychological and Physical Workplace Link

Researchers in earlier studies elaborated on stress and noted that stress can occur when "environmental demands tax or exceed the adaptive capabilities of the organism resulting in psychological or physiological changes" (Mitchell-McCoy & Evans, 2005, p. 220). The physical characteristics of work settings (e.g., lighting, noise) were associated

with certain stress related issues, and the physiological markers of stress can occur without subjective consciousness of environmental demands (Mitchell-McCoy & Evans, 2005). Physiological markers included such things as elevated cardiovascular activity and heightened physiological arousal among other symptoms (Mitchell-McCoy & Evans, 2005). Careers can sometimes affect people so intensely that "it is not so much that certain people have a job, but rather that their job has them, and 'burnout' can be the eventual consequence" (Patching & Best, 2014, p. 683). Ineffective coping skills leads a person to likely perceive that they no longer possess the resources to manage the expectations and demands placed on them, and this state is known as psychological stress (Patching & Best, 2014). Stress is primarily controlled by a primitive region of the brain close to the brain stem known as the limbic hypothalamic system (LHS) (Patching & Best, 2014). The hippocampus, which deals with emotional memory, the hypothalamus, which controls certain metabolic processes of the autonomous nervous system by secreting neuro-hormones, and the amygdala, an almond shaped brain part, which primarily controls our response to intense emotions such as aggression and fear comprise the main components of the LHS system (Patching & Best, 2014). The LHS regulates vitally important body functions taking in information from our senses even before we are consciously aware of it (Patching & Best, 2014).

Mitchell-McCoy and Evans (2005) noted that the most pervasive index of psychological stress in the workplace is self-reports of negative affect which encompasses assessments of stress, fatigue, tension, workload pressure, and other forms of anxiety. Another common indicator of psychological stress is task performance, and in

this category, individuals can overcome its negative impact if the stressor is not severe, the duration of performance is not prolonged, or the task does not require maximum cognitive capacity (Mitchell-McCoy & Evans, 2005). Mitchell-McCoy and Evans stated that in addition to self-reports of negative affect and task performance, physical stressors that are uncontrolled can spiral into a lack of motivation related to learned helplessness. Mitchell-McCoy and Evans further stated that uncontrolled stressors can also have a negative effect on social relationships. The physical work environment includes risk factors that can elevate stress levels in some individuals; risk elements include such things as ambient conditions, resources, views, and visual access from the workspace among others (Mitchell-McCoy & Evans, 2005). Environmental stressors result in psychological or physiological changes, influencing motivation and performance affect social interaction, and may lead to negative affect (Mitchell-McCoy & Evans, 2005).

The National Institute for Occupational Safety and Health (NIOSH) is the Federal agency tasked with conducting research, and then making recommendations for the prevention of work-related illness and injury (NIOSH, 2013). Researchers' investigations include stress related issues at work, and its effect on worker safety and health; and methods to minimize its impact in work environments (NIOSH, 1999). A number of researchers and the NIOSH pointed out in prior studies that the nature of work environments is changing at whirlwind speed, and job stress will continue to pose a threat to the health and well-being of workers and organizations (NIOSH, 1999). Researchers have also proposed that differences in personal characteristics (e.g., personality and coping styles) are the most important in influencing perceptions of what is stressful, and

what may be perceived a stressful situation for some individuals, may not be for others (NIOSH, 1999). Individual differences cannot be disregarded, nor the associations between certain work conditions (e.g. job overload), and increased levels of stress for most individuals (NIOSH, 1999).

Stress and Work Conditions

The NIOSH (1999) outlined several work conditions that may lead to stress for individuals. The first work condition that may lead to stress for some individuals includes the design of tasks such as heavier workloads, or the lack of rest breaks, excessive work hours, and underutilized worker skills (NIOSH, 1999). The second work condition that may lead to stress for individuals is management style (e.g., poor communication, lack of worker participation in decision making process), and lack of family friendly policies (NIOSH, 1999). The third work condition that may lead to stress for individuals is interpersonal relationships such as poor social environment, or lack of support or assistance from coworkers and supervisors (NIOSH, 1999). The fourth work condition that may lead to stress for individuals includes work roles such as conflicting or job ambiguity (NIOSH, 1999). The fifth work condition that may lead to stress for individuals includes career concerns such as job insecurity, or a lack of opportunity for advancement or promotion, and rapidly changing work conditions for which workers are unprepared (NIOSH, 1999). And the sixth work condition that may lead to stress for some individuals includes environmental conditions such as overcrowding, noise, air pollution, or ergonomic problems (e.g., designs to reduce worker fatigue and discomfort) (NIOSH, 1999).

Beehr and Glazer (2005) stated that stressors and their relationship with employee well-being were of concern, they can be very costly for organizations and even reach beyond to other environments. Psychological reactions to stressors have been grouped by researches into various categories. Categories included those outside the organization (e.g., traffic to and from work, family), and those from within the organization (e.g., job security), or work-related responsibilities (e.g., task related) even stressors related to different work roles (Beehr & Glazer, 2005). Stress and health are of concern because it impacts individuals' and organizational effectiveness (Beehr & Glazer, 2005).

Stress and Health

Humans are equipped with a mechanism in the brain which when presented with stress it sets off an alarm that prepares the body for defensive action (NIOSH, 1999). When the alarm system is alerted the nervous system is awakened and hormones released act to sharpen the senses, quicken the pulse, deepen respiration, and tense muscles (NIOSH, 1999). This is better known as the fight or flight response, and it is biological in nature therefore everyone is preprogrammed (NIOSH, 1999). The duration of unresolved stressful situations can increase risk of injury or disease, and there are several studies which have investigated stress-related problems and its relationships with a variety of ailments (NIOSH, 1999). Among the stress-related problems are unhealthy relationships with family and friends and increases in situations that are quick to develop such as: job stress, cardiovascular disease, musculoskeletal disorders, and psychological disorders (NIOSH, 1999).

Early warning signs of job stress include: headache, sleep deprivation, difficulty

in concentrating, short temper, upset temper, job dissatisfaction, and low morale (NIOSH, 1999). Researchers suggested that psychologically demanding jobs increases the chances of cardiovascular disease due in part to the lack of control individuals have over the processes involved in their job (NIOSH, 1999). Individuals are also at risk of developing musculoskeletal disorders related to job stress (e.g., back and upper back extremity) (NIOSH, 1999). Mental health problems such as burnout, depression, and other psychological problems have also been associated with various job stress levels (NIOSH, 1999). Furthermore, researchers have suggested that stressful working conditions may also be associated with increases in incidences of workplace injury, as well as suicides, cancer, ulcers, and impaired immune function (NIOSH, 1999).

Smith, Karsh, Carayon, and Conway (2003) stated in previous investigations the impact that employee health and well-being could have on organizations. Today it has attracted even more societal attention partially due to the rising medical costs associated with stress-related illnesses. Researchers examining the neurochemical responses of the body to stress, made note that the hypothalamic-pituitary-adrenocortical (HPA) axis and the sympathetic-adreno-medullary (SAM) systems are greatly involved in the association between stressors and health (Dienstbier, 1989). Selye (1936) described that when individuals perceive harmful or threatening situations the hypothalamus is activated. When the hypothalamus is activated it reacts in two ways: first, it activates the HPA system (e.g., alarm, resistance, exhaustion), and secondly as Cannon (1932) described this in turn activates the SAM system by triggering one of the earliest responses to stress through the sympathetic nervous system known as the fight-or flight response (as cited in

Nixon, Mazzola, Bauer, Krueger, & Spector, 2003).

The triggering of the sympathetic arousal then stimulates the adrenal medulla, which secrets hormones that then cause elevated pulse rates, increased blood pressure, and sweating among other physiological symptoms (e.g., stomach distress, headache, backache, and other musculoskeletal pain) (as cited in Nixon et al., 2003). Physical symptoms are manifestations of physical strain which are more likely than not are responses to environmental stressors at work (Nixon et al., 2003. Employee health related issues pose potential negative organizational outcomes.

Strategies to improve stress levels in organizations included providing stress management training to employees, and an employee assistance program (EAP) to help enhance the coping abilities of individuals who are dealing with overwhelming work situations (NIOSH, 1999). At the time of this prior research study, nearly one-half of the large organizations in the United States were said to have provided some form of stress management training for their workforce (NIOSH, 1999). Updated data is needed to ascertain the number of organizations that maintain these programs, and if they have increased in numbers, more importantly the effectiveness of such programs.

The Globe Newswire reported that although the U.S. unemployment rate may continue to decline stress levels are increasing among workers; more than 8 in 10 Americans who are employed reported that they are stressed out due to heavier workloads, and low pay according to the data provided by the 2013 Work Stress Survey conducted by Harris Interactive for Everest College (as cited in Corinthian College Inc., 2013). The survey that was conducted among employed individuals found that

approximately 83% of Americans were stressed by a minimum of one thing at work, and this was an increase from 2012 when 73% reported being stressed (Corinthian College, Inc., 2013). The Everest College's 2013 Work Stress Survey was conducted by telephone within the United States by Harris Interactive between February 21 and March 3, 2013 (Corinthian College, Inc., 2013). Among the 1,019 employed U.S. adults were ages 18+ (Corinthian College, Inc., 2013). Results were weighted for age, sex, geographic region, and race when necessary to align them with their actual proportions in the population (Corinthian College Inc., 2013, para. 2).

Perhaps a combination of approaches to stress management (e.g., community-based efforts working in concert with organizational efforts) can help minimize negative impacts. There are "no standardized approaches or simple how-to manual that exists for developing a stress prevention program; program design and appropriate solutions can be influenced by a number of factors, such as, the size, and complexity of the organization, resources, and unique types of stress faced by the organization" (NIOSH, 1999, p. 16). Steps toward a stress prevention program previously outlined, included building awareness, commitment by top management and support for the program, employee participation in all phases, training for staff and use of consultants, and most importantly communication, these still hold true in today's organizations (NIOSH, 1999).

The side effects of prolonged stress on the human body have been studied for quite some time by the medical profession, stress is significant area of study for organizational leaders, HR professionals, and researchers in the area of industrial and organizational psychology (Kenexa High Performance Institute, 2011). The impact that

workplace stress has on both productivity and personal well-being have been well documented; for example, the European Agency for Safety and Health at Work reported that between 50%-60% of employee absences to be stress related (Kenexa High Performance Institute, 2011). While the recession has generally increased reports of stress levels there are some industries (e.g., manufacturing) that have reported lower levels (Kenexa High Performance Institute, 2011).

In a study conducted by researchers at the Kenexa High Performance Institute (2011) work/life conflict was found to be the leading cause of workplace stress followed by leader effectiveness, and compensation, yet other factors included working in an innovative climate, team cohesiveness, cooperation and having up-to-date technology. In addition to stress, increased levels of frustration were also associated with having influences on employees (Keenan & Newton, 1984). Lewandowski (2003) stated that sources of workplace frustration may stem from within the organization (e.g., role conflict and ambiguity, value conflicts, and feelings of isolation). These factors contributed to workplace frustration and subsequent employee burnout, and as employees and organizations continue to face mounting challenges investigations of such factors increases awareness of workplace concerns and the need for continued improvement (Lewandowski, 2003). Stress and its relationship with CWB were demonstrated to pose threats to individual health and the health of organizations (National Institute for Occupational Safety and Health, 1999). The National Institute for Occupational Safety and Health (NIOSH) is a federal agency responsible for conducting research and making recommendations to minimize work related illnesses, the data are collected from various

sources (e.g., workers, families) in the effort toward prevention (NIOSH, 1999). More recent literature in the area of employee-customer interactions proposed that stressful encounters contributed to negative outcomes for service employees (Zhang, Redfern, Newman, & Ferreira-Meyers, 2016). Zhang et al. demonstrated that customer-related social stressors (CSS) led to emotional exhaustion, which in turn, related to CWB for service employees. Differences in thoughts often lead employees to different conflicts, and conflicts can ultimately lead to frustration (Andalib, Darun, & Azizan, 2013).

Keenan and Newton (1984) found that self-reported frustration in organizations was related with anger reactions, latent hostility, job dissatisfaction, and work-related anxiety. Employees can experience frustration when they are forced to respond to something that they want to avoid (Andalib et al., 2013). Employees can also experience frustration when the organizations they work for treats them as working machines rather than valuing them as human beings (Andalib et al., 2013).

Work Frustrations

Human beings cannot avoid emotions and therefore employees deal with emotions in their work life as well (Andalib et al., 2013). Employees are influenced by their perceptions, ideologies, beliefs, and concepts (Andalib et al., 2013). Differences in thoughts often lead employees to different conflicts, and conflict can ultimately lead to frustration (Andalib et al., 2013). For example, a difficult boss, non-supporting co-workers, and obligatory rules may frustrate employees because it hinders their wish for freedom from annoyance (Andalib et al., 2013). Frustration can be a result of various conflicts in the work environment that can be segmented into two categories: process and

episode (Andalib et al., 2013). Process frustration occurs when individuals feel blocked in an important part of life such as learning, and work (e.g., lacking in salary and benefits at work), or love (Andalib et al., 2013). Episode frustration occurs when a temporary interfering problem, or condition exists in the work environment (e.g., issues with inconsistent supervisors, irrational and biased behavior) changing an otherwise happy employee into an unhappy one that gradually becomes frustrated caught in the process (Andalib et al., 2013).

Frustration is defined as "hindrance with goal attainment or goal-oriented activity and the interference with goal maintenance" (Spector, 1978, p. 816). Researchers that investigated factors contributing to workers' frustrations have evaluated workplace problems associated with burnout (Lewandowski, 2003). Burnout which is a metaphor for energy depletion "refers to the smothering of a fire or the extinguishing of a candle" (Schaufeli, Leiter, & Maslach, 2009, p. 205).

Employees who experienced extended burnout periods can fall short of their ability to make meaningful contributions to the organization (Schaufeli et al., 2009). Researchers have proposed two factors in work life that may account for burnout's persistence, the first, is a continuous imbalance of demands over resources which occurs when resources fail to keep pace with demands. (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Bakker & Demerouti, 2007). The second factor relates to motives as opposed to energy. Hemingway and Maclagan (2004) stated that employees in the twenty-first century are skeptical of organizational missions, visions, and values. Value conflicts increase as organizations and employees lessen their commitment to each other

(Schaufeli et al., 2009).

Keenan and Newton's (1984) study investigated frustration in organizations and relationships to role stress, climate, and psychological strain. Multiple regression analysis indicated that organizational climate, role stress, and social support can all contribute to the level of environmental frustration (Keenan & Newton, 1984). Some of the root sources of frustration related to burnout were suggested to originate within the organization; however, individual characteristics can also be contributing factors affecting one's ability or inability to effectively cope with high stress work situations (Lewandowski, 2003). Reactions to frustrations in organizational settings may also include some aggressive behaviors (Heacox & Sorenson, 2004).

Spector (1978) hypothesized that those individuals who are frustrated with their work situation may react aggressively against other individuals, or against the organization. These behaviors can then escalate into workplace violence where individuals can be seriously injured or killed (Heacox & Sorenson, 2004). Aggressive behaviors associated with organizational frustration were described in a study conducted in the United States by Heacox and Sorenson (2004). Heacox and Sorenson hypothesized that several situational variables (e.g., role conflict and ambiguity, work constraints, and organizational warmth and support) were perceived by workers as roots causes of these behaviors. Earlier research by Spector (1978) noted that behavioral reactions attributed to frustration were not new phenomena. Behavioral reactions attributed to frustration continue to plague some work environments to this day. The correlation between organizational characteristics and frustration was supported by Heacox and Sorenson's

(2004) study. The level of frustration experienced by employees were predicted with situational variables (e.g., role ambiguity, role conflict, work constraints, and warmth and support) (Heacox & Sorenson, 2004). Heacox and Sorenson confirmed relationships between organizational characteristics, and employee reactions such as overt acts of aggression. Workers, who perceived high levels of constraints, role conflict, or ambiguity, and/or low levels of warmth and support at work, would be more likely to engage in CWB (Heacox & Sorenson, 2004).

Furthermore, Heacox and Sorenson (2004) hypothesized that person variables function as moderating variables between organizational characteristics and frustration, and between frustration and aggressive behaviors by employees. Person variables included such things as locus of control and gender. Locus of control is described as "a generalized expectancy that rewards, reinforcements or outcomes in life are controlled either by one's own actions (internality) or by other forces (externality)" (Spector, 1988, p. 335).

Constantly changing work environments can bring about added stress and frustration that have been associated with various negative attitudes, and behaviors (Weinberg & Cooper, 2012). The strength and amounts of frustration are considered important factors in the study of employee behaviors (Spector, 1978). Spector noted that frustration can lead to emotional states. Spector described two important characteristics in investigations: (a) that the emotion is aversive, and that (b) it results in elevated levels of psychological arousal.

In an elevated arousal state, there is an increase in intensity of the response that is

provoked (Spector, 1978). The behavioral aspect was suggested to have at least four classes of reactions influenced by frustration, and they include: finding alternate means to goal attainment, aggressive behavior, withdrawal from the situation, or choosing to abandon the goal altogether (Spector, 1978). Spector noted that much of research on frustration is related to either an aggressive component, or the impact of frustration on performance.

Frustration's relationship with aggressive behaviors is well documented in studies (Buss, 1963; Spector, Penner, & Hawkins, 1975), and researchers have proposed that frustration is most likely to occur when others repeatedly impede the attainment of an important goal, or no punishment is ascribed for the aggressive behavior (Spector, 1978). Spector outlined variables that individuals might perceive as hindering goal attainment and that lead to frustration. Spector stated that variables that may hinder goal attainment include: other individuals at work and the structure of working environments (e.g., organizational procedures and rules. Additionally, researchers using an adaptation of O'Connor et al.'s (1984) scale found situational constraints to be positively associated with perceptions of frustration, and perceived frustration to be positively associated to counterproductive reactions (Storms & Spector, 1987, p. 232). These observations demonstrated the association between perceived frustration and CWBs during stressful organizational change when anxiety levels may be abnormally high. Eder (2008) suggested that having a positive relationship with one's organization helps to reduce some of the negative effects.

Spector (1978) discussed how organizational change can lead to severe frustration

for workers by interfering with task performance and individual needs or goals. Reactions such as turnover intentions, abandonment of production goals, and poor job performance may increase (Spector, 1978). Spector suggested that to lessen negative reactions employee participation in the change process may be part of the solution.

Participation was suggested to have three effects on frustration: first, employees who participate in the change process may have some influence on the form it takes, so that the change does not hinder attainment of personal goals and needs (Spector, 1978). Second, when employees have clarity, and understand the reasons for change and is involved the frustration that arises is reasonably negative, and impact is greatly minimized (Spector, 1978). Lastly, Spector argued that employees need to have a sense of control over their work environment, a lack of control could lead to frustration, so by including their participation it could help avoid frustration particularly for individuals with control needs. Attention has also been devoted to gaining a better understanding of the effects of change events, and the impact that positive/negative employees can have (Avey, Wernsing, & Luthans, 2008).

Subjective Well-Being and Personality

Subjective well-being (SWB) encompasses how people assess their lives both at the current moment, and over longer periods (Diener, Oishi, & Lucas, 2003). Assessments included how individual react to changes when they take place, or moods at the time, judgments formed about such things as satisfaction with their life, and other areas including family and work (Diener et al., 2003). Though everyone's self-assessment and judgments may vary over time, researchers continued to study these undulations

examining the longer-term mean level differences that existed between individuals and societies (Diener et al., 2003).

There are several theoretical traditions that have enhanced our understanding of SWB (Diener et al., 2003). For example, Humanistic psychology has sparked interest in positive psychology (Diener et al., 2003). "The field of subjective well-being (SWB) comprises the scientific analysis of how people evaluate their lives-both at the moment and for longer periods such as for the year" (Diener et al., 2003, p. 404). Diener et al. demonstrated that SWB is moderately stable over time, and rebounds after major life events and is frequently strongly associated with stable personality traits. How individuals feel and think about their lives is necessary to gaining insight on well-being in any society that attaches importance not only to the opinions of experts or leaders, but to all individuals in the society (Diener et al., 2003).

Avey, Wernsing, and Luthans's (2008) study was devoted to gaining a better understanding of the effects of change events and the impact that positive/negative employees have. Empirical investigations that reviewed what impact if any employee's resistance can have on change events, and those who may have a more positive impact, provided a wealth of information (Avey et al., 2008). Employees need to be able to adapt and incorporate healthy strategies in their efforts to attain redefined goals (Avey et al., 2008).

Extending investigations on personality traits and individual differences can provide additional insight. Feedback from participants has identified certain individual characteristics such as positive emotions, communication, management of difficulties and

conflicts, socio-emotional skills, and values that may have some influence on perceptions (Biggio & Cortese, 2013). Feedback in research has been a proven resource to aid researchers in their effort to recognize and understand differences (Biggo & Cortese, 2013). Individual differences include differences in the perceptions, well-being, interactions between individuals and the organization, and the quality of relationships between individuals and coworkers (Biggo & Cortese, 2013). Strategies derived from such constructive feedback provide organizations with invaluable information that they can utilize in helping employees find healthier ways to cope with work stress and frustration thus facilitating employee, and organizational well-being (Biggo & Coetese, 2013).

Another area of concern, and one that is related to employee health and behavior is the psychosocial factor (Houdmont, Kerr, & Addley, 2012). There is not a great deal of research which explores changes in workers' psychosocial hazard exposures, work related stress, and stress related absence related with the onset of economic recession (Houdmont et al., 2012). Houdmont et al.'s investigation demonstrated that exposure to psychosocial hazards to be greater during economic recession than prior to its onset. The findings of Houdmount et al.'s study underscores the need for more investigations on psychosocial risk management as a strategy to promote worker health in times when organizations may be solely focused on their own survival rather than improving the psychosocial work environment.

Psychosocial Factor

Employees are human beings who work to provide support in the economic

system of a nation, and of the world, or improve individual lifestyle and living standards (Andalib, Darun, & Azizan, 2013). Human beings cannot avoid emotions, and deal with their emotions both at work and their personal life, influenced by perceptions, ideologies, beliefs, and concepts (Andalib et al., 2013). Differences in the thoughts of individuals often lead employees to various conflicts (Andalib et al., 2013). Conflict can lead to internal anxiety, peer tension, unhealthy working atmosphere, and ultimately frustration (Andalib et al., 2013). "Frustration is a state of mind which leads one to such a blockage that is captured by all negative vibrations of emotion" (Andalib et al., 2013, p. 2).

Houdmont and Addley's (2012) investigations provided information on levels of psychosocial hazard exposures, work-related stress, and stress related absence that may be experienced at increased levels during periods of economic decline when compared to prior levels. These observations signify that exposures to psychosocial hazards are greater during economic decline than prior to its onset (Houdmont & Addley, 2012). Perceptions of economic stress have been linked with negative job attitudes, work withdrawal, and impaired health (Houdmont & Addley, 2012).

Probst (2005) suggested a correlation between negative job attitudes, compromised health, and economic stress. Surveys conducted during periods of economic downturn suggested that workers characteristically perceive the economic state of affairs as having a direct impact on psychosocial work conditions, and mental health "the findings highlight the need for a focus on psychosocial risk management as a means to promote worker health in times when organizations might be tempted to focus on survival rather than improving the psychosocial work environment" (Mind/Populus,

2010, p. 101).

Individual reactions to organizational strains vary; what remains relatively the same is the potential threat, and costs to organizations (Beehr & Glazer, 2005). Reactions can impact the quality and quantity of productivity, achievement of goals, interpersonal conflicts, absenteeism, and disrupt organizational functioning (Beehr & Glazer, 2005). Uncertainties in the workplace, and the presence of added stress for individuals are not easily avoided during change events (Nixon, Mazzola, Bauer, Krueger & Spector, 2011). The effects on employees' health and wellbeing has gained the interest of many along with rising medical costs (Nixon et al., 2011).

Along with concerns of employees' health are concerns regarding organizational outcomes. Grdinovac and Yancy (2012) explored how organizations adapted to the most recent recession. Organizational commitment was at the top of the list of when considering organizational outcome (Grdinovac & Yancey).

Organizational Outcomes

Beehr and Glazer (2005) described organizational outcome as employees' reactions to stress which causes more damage to the organization than it does to the individual themselves. Negative reactions such as a lack of organizational commitment, changes in work performance, and perceptions of organizational justice related to stress, can all impact organizations and prove costly (Beehr & Glazer, 2005). Psychological, physiological, and behavioral organizational strains have also been associated with employee reactions and negative organizational outcomes (Beehr & Glazer, 2005).

Organizational commitment is important particularly when companies are

severely impacted by economic change, and they may have to employ management practices that appear uncaring and callous to their employees (Grdinovac & Yancy, 2012). Such practices include downsizing which damages relational psychological contracts (Grdinovac & Yancy, 2012). On the other hand, companies that employ management practices that appear caring and humane to their employees, such as executive pay reductions, will enhance relational psychological contract. Organizational commitment was positively associated to job performance, and related employees' work behavior, it was also related to how satisfied employees are with their jobs (Grdinovac & Yancey, 2012). Grdinovac and Yancey further stated that the recent recession may pave the way for organizations to win the loyalty and trust of their employees. Employees who are treated fairly would likely remember their company's treatment during tough times (Grdinovac & Yancey, 2012).

Fluctuations in economic conditions have caused rippling effects on businesses around the world, and organizations are finding that they must take drastic steps in order to successfully overcome challenges (Fapohunda, 2012). The expanding economic decline links countries around the world who have all felt it's long reaching negative impact through massive downsizing, and unemployment left in its wake (Fapohunda, 2012). Effective human resource management is met with challenges related to the current economic crisis; for example, in areas related to conflict resolution the dynamics involved dictate a need to better understand factors that help promote healthier responses to stress and frustration (Fapohunda, 2012). Building stronger transparent relationships between organizations and individuals would aid in the effort to improve work

relationships (Fapohunda, 2012).

Surveys conducted on how economic conditions have influenced individual perceptions of change events include one conducted by Pew Research (2010). Pew Research found that more than half 54% of the respondents said that we were still in a recession compared to 41% who said we were beginning to come out of the recession, and 3% that said the recession was over. Additionally, about 48% said that their household was worse now than before the recession, and one-in-five 21% said they were better off, the rest said there was no change (Pew Research, 2010). Most Americans 70% said that they believed that the recession has imposed major changes on the U.S. economy, and 61% said changes were temporary (Pew Research, 2010). A better understanding of factors which influence perceptions, work relationships, and behaviors during a recessionary period is important in seeking healthier adaptive coping methods for employees.

Investigations related to organizational functioning includes different perspectives. Researchers in various disciplines addressed the problem, strengths, and weaknesses inherent in their approaches in various ways. For example, in Rafferty and Griffin's (2006) study on perceptions of organizational change, strengths of the study included the separate measurement of change perceptions, and employee attitudes as to reduce the effects of common method variance. While in Ostroff, Kinicki, and Clark's (2002) study, they reported that the temporal separation of administration of measures is a valid approach to reducing response bias associated with common method variance.

Hershcovis, Reich, Parker, and Bozeman (2012), demonstrated the value of

investigating aggression dependent on the features of a specific relationship rather than from an individual's perspective such as someone at work; yet a potential limitation of this study was the use of self-reports. In recognition of the possible threat to validity associated with common method bias, Hershcovis et al. employed several strategies recommended by Podsakoff, Mackenzie, Podsakoff, and Lee (2003). "First, to diagnose the presence of common method bias, they conducted a Harman's single factor test; second, they assured participants of the anonymity of their responses; third, they controlled for negative affectivity and social desirability; fourth, they compared their hypothesized measurement model to a model that included a common method factor, and the latter had significantly worse fit" (Hershcovis, et al., 2012, p.15).

The rationale for selection of the variables in this study included organizational studies which have investigated change and its influence on work behaviors. For example, researchers in one study identified three distinct change characteristics: the frequency, impact, and planning of change (Rafferty, Allanah, E., & Griffin, 2006). In other studies, researchers demonstrated that stress and change have posed various challenges for worker's health (Velciu, Drăgoiu, & Mladen, 2010). Additionally, Chernyak-Hai & Tziner's (2014) investigation extended research in the area of CWB and used the Social Exchange Theory as a framework for gaining a better understanding of these negative work behaviors.

There is not an overwhelming body of investigations of the American workplace or influences on the costly effects of CWB, and this area of study needs to be extended. Interest continues to mount concerning factors influencing the behavior of individuals in

work environments, and the potential impact it has on the wellbeing of others and organizational outcomes (Fox & Spector, 2005). The term CWBs are used to describe negative behaviors and related classes, and encompass individual characteristics, and those of the workplace, as well as several personality variables such as conscientiousness, locus of control, narcissism, trait anger (e.g., mild to intense rage), anger, and Type A impatience-irritability (Fox & Spector, 2005).

Summary and Transition

The current review explored research in the areas of perceived uncertainty, stress, frustration, and correlations with CWBs. Uncertainty coupled with persistent stress and frustration can wreak havoc on the physiological, psychological, and emotional well-being of workers, coworkers, organizations, and even extend out into communities. Additionally, there are several work stressors (e.g., interpersonal conflict, organizational constraints) which are suggested to have relationships with interpersonal and organizational forms of CWBs (Hershcovis, Reich, Parker, & Bozeman, 2007; Penny & Spector, 2005).

Investigations of stressors such as interpersonal conflict, organizational injustice and the amount of workload (Hershcovis, Reich, Parker, & Bozeman, 2007; Chen & Spector, 1992; Nixon, Mazzola, Bauer, Krueger, & Spector, 2011) are suggested to have positive relationships with CWBs. Studies on work stressors and relationships with CWBs have provided theoretical mechanisms such as the affective events theory (AET) by which we have gained a better understanding of stressors that lead to CWBs (Weiss, & Corpanzano, 1996). Weiss and Corpanzano suggested that emotions were a primary link

between work experiences and employee behavior. The suggestion that prolonged exposure to work stressors may lead to negative emotional reactions such as anger, frustration, and fatigue has significant implications for employees and organizations (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011). Smith, Karsh, Crayon, and Conway (2003) stated that in addition to job stressors and its relationship with work behaviors, employee health and well-being was also gaining increased societal attention due in part to the medical costs associated with stress-related illness.

Researchers described that the neurochemical responses triggered by stress in the human body have been investigated to a great extent, and while there will still be ongoing investigations the major components of the process are thought to be identified; empirical evidence showed that the hypothalamic-pituitary-adrenocortical (HPA) axis, and the sympathetic-adrenome-dullary (SAM) systems are greatly involved in the association between stressors and health (Dienstbier, 1989; Frankenhaeuser, 1991). Szabo, Tache, and Somogy (2012) noted the contribution of Selye (1936) to medical research involving stress. For example, when an employee perceives a situation as harmful or threatening the hypothalamus is activated, and then responds in two ways: first, it activates the hypothalamic-pituitary-adrenocortical (HPA) system through the three stages of the general adaptation syndrome (e.g., alarm, resistance, exhaustion) (Selye, 1936). The activation of the hypothalamus in turn also activates the sympathetic-adreno-medullary (SAM) system by triggering one of the earliest responses to stress through the sympathetic nervous system, a reaction known as the fight-or-flight response (Cannon, 1932). This study is needed to further investigate associations between

perceptions of uncertainty, stress, and frustrations, and the costly effects that increased CWBs have on organizations in the United States during periods of economic undulation.

There is a gap in knowledge and clarity in the area of negative influences on American workers impacted by a decline in economic climate, and related levels of CWBs because this has not yet been explored. The design for this study was chosen based on a review of existing psychological literature in the areas of perceived uncertainty, stress, frustration, as well as CWBs which have been investigated from different perspectives spanning over the past two decades (Fox & Spector, 2005). CWBs is an umbrella term that describes behaviors at work that harm employees and organizations (Fox & Spector, 2005). Theories presented by researchers on CWBs included the stressor emotion model (Spector & Fox, 2005), and causal/reasoning theory (Martinko, Gundlach, & Douglas, 2000) which further suggested relationships between environment factors and emotional experiences.

Researchers who focused investigations on CWBs aimed at organizations (CWB-O) suggested that future studies should explore "whether theories and findings of the twentieth century's examinations of CWB-O continue to accurately describe motives and outcomes of new types of workplace deviance in the twenty-first century" (Klotz & Buckley, 2013, p. 128). Although a large body of work exists on counterproductive workplace behavior, few studies were found which examined relationships between uncertainty, stress and frustration and incidences of CWBs in the United States. This study fills a gap that exists and extends knowledge in the area of the costly effect of CWBs by American workers in an uncertain climate. The design for this study was

chosen based on a review of existing psychological literature in the areas of perceived uncertainty, stress, frustration, and CWBs. The next chapter discusses the methodology, setting, sample, and analysis that was used to conduct the study.

Chapter 3: Research Method

Introduction

The purpose of this study was to examine whether uncertainty, stress, or frustration are related to variability, or in predicting CWBs. Researchers have found that employee CWBs are costly and can harm organizations and stakeholders (Fox & Spector, 2005; Ramshida & Manikandan, 2013). Researchers encourage future investigations to consider more predictors that contribute to deviant behavior in private organizations as well as public organizations (Alias et al., 2013). This chapter includes a detailed description of the research design and rationale, and methodology. Additionally, measures and instruments, analysis plans, and ethical considerations are included.

Research Design and Rationale

The design for this study examined the research questions associated with relationships among uncertainty, stress, frustration, and CWBs in auto industry workers. The independent variables are uncertainty, stress, and frustration. The dependent variable is counterproductive work behavior. Multiple regression analysis aided in differences and relationships among variables.

Additionally, the design for this study was correlational with a cross-sectional survey method. Surveys took the participants approximately 30 minutes to complete, and a shut off date and time (e.g., beginning at 8 am on the first day and ending at midnight on the last day) was provided. The survey design choice is consistent with research designs needed to advance knowledge in the discipline; it allows for the collection of pertinent information related with the problem statement. The problem statements

speculated that there is a relationship between the independent variables of uncertainty, stress, and frustration, and the dependent variable of CWB. Both FindParticipant.com and SurveyMonkey were approved by the institutional review board (IRB). FindParticipants.com was used to recruit the participants; then the survey was hosted on the SurveyMonkey platform. The collection time was 4 months.

Additional research relevant to the topic of study reported use of survey design. Anjum and Parvez (2013) conducted a study that demonstrated use of a survey method to collect Minnesota Job Satisfaction, Interpersonal Conflict, and CWB data from 400 blue collar and white-collar workers. Anjum and Parvez were able to demonstrate through statistical analysis of data collected, that significant differences exist in the magnitude of CWBs in blue and white-collar workers. Likewise, this study investigated CWB as a variable and used a survey design.

Methodology

Population

Participants in this study consisted of a sample of culturally diverse individuals representing all areas of the automotive industry across the United States. A population of 500 was sought from a pool of automotive workers in the United States; however, due to the limited number of participants/volunteers who met the criterion set forth in this study, the proposal was revised to reflect that surveys were sent to approximately 300 volunteers who met the criteria. Online professional survey platforms named Find Participants.com and SurveyMonkey.com were used to reach the participants for this study. The participants were individuals who volunteered for the study, were currently

working in all areas of the auto industry across the United States, and who were recruited via Find Participants.com.

Procedures

Prior to the collection of survey information from participants, and in line with the appropriate steps required in data collection, approval authorization was first obtained from Walden's Institutional Review Board (IRB Approval # 02-23-17-0091-335). Demographics: A demographic questionnaire at the end of the survey assessed basic information regarding the participants' gender, age, employment status, position, tenure, and ethnicity. Findparticipants.com sent recruitment e-mails to potential participants, which included the researcher's conditions of participation. FindParticipants did not survey the participants; they simply provided the forum for researchers to connect with participants who had already volunteered to be contacted for research. FindParticipants does not release any identifying information about participants, or information that would allow participants to be identified to any other user including researchers. Auto industry workers were recruited/encouraged via an invitation by Find Participants.com a professional online survey link. All information pertaining to the survey, and the survey was accessible to participants online. As an introduction to the survey, the informed consent explained the study; additionally, anonymity regarding participation was included. Risks and benefits to participate outlined, and contact information was provided.

Participants were selected for the following reasons, the population is accessible, they are of age to provide informed consent, it is presumed that they have experienced

both positive and negative life events, they have the reading comprehension necessary to complete the questionnaires, and they are employed in the U.S., and have access to the internet. Online survey is consistent with methodology used in previous CWB research, consisting of survey data collected from employees (e.g., Cohen, Panter, & Turan, 2013). Information on how respondents were recruited via Find Participants.com is available at their website.

Because the number of participants who met the criteria of the study was 300, according to Raosoft's (2004) sample size calculator, with a margin of error set at 5%, a confidence level of 95%, a population size of 300, and a response distribution of 50%, the recommended sample size was 169. The sample size is very important, and among the considerations for the sample size in this study is the need to have sufficient statistical power as well as the expense of the collection. The American Psychological Association (2010) suggests that we should also look at effect size. The effect size (e.g., Cohen's *d* and r^2) shows how much of a role the conditions of the independent variable play in determining scores on the dependent variable (Jackson, 2010). Cohen's (1988) conventions was used to interpret effect size; a correlation coefficient of .50 represents a strong/large correlation. The significance level (α) is an observed difference between two descriptive statistics that is unlikely to have occurred by chance (Jackson, 2010). Most researchers adopt a .05 level of significance (Jackson, 2010). A significance set at the .05 level means that a difference as big or bigger than what is observed between the sample and the population could have occurred by chance only 5 times or fewer out of 100 (Jackson, 2010).

All response data were analyzed using the statistical package for social sciences (SPSS) version 21, and measures reliability were assessed and reported. Data collected was stored in SurveyMonkey.com initially, and then exported to SPSS version 21 graduate package for analysis. Data is stored on a disk in a secure location in compliance with Walden University's guideline requirements.

"Statistical power depends on three classes of parameters: (1) the significance level (i.e., the Type I error probability) α of the test; (2) the size (s) of the sample (s) used for the test; and (3) an effect size parameter" (Faul, Erdfelder, Lang, & Buchner, 2007, p. 176; University of Wisconsin, n. d.). Type I errors occur when the researcher rejects a null hypothesis that is true, and the risk of committing a type I error is minimized by selecting an alpha level (usually .05 or .01 (Gravetter & Wallnau, 2004). Type II errors which are represented by the Greek letter ß occur when the researcher fails to reject the null hypothesis that is really false (Gravetter & Wallnau, 2004).

Instrumentation and Operationalization of Constructs

Measures

Psychological Uncertainty Scale. The psychological uncertainty scale was developed by Rafferty and Griffin's (2006) study, and was based on work by Milliken (1987) to measure individual's appraisal of the uncertainty associated with organizational change. This measure was selected based on the use by researchers who investigate organizational change, and the influence on individuals' appraisal of uncertainty associated with change, and their response to change (Dahl, 2010; Lattuch & Young, 2010; Rafferty & Griffin, 2006). This study was conducted in a large Australian public-

sector organization and utilized a repeated cross-sectional design (Rafferty & Griffin). Change items were administered to more than 200 employees in two pilot studies.

Items used to assess an individuals' perception of change were developed following semi structured interviews with employees (Rafferty & Griffin, 2006). Followed by the change items that were administered to 200 employees in two pilot studies (Rafferty & Griffin, 2006). A process of iterative development was put into effect resulting in the modification of items, so that items that did not load onto their hypothesized factor in the first pilot study were removed or modified (Hinkin, 1995, 1998). The modified items were then administered to participants in the second pilot study (Rafferty & Griffin, 2006). This process resulted in a three-item change measure, and a four-item measure of psychological uncertainty (Rafferty & Griffin, 2006). An example item includes: "I am often uncertain about how to respond to change" (Rafferty & Griffin, 2006, p. 1157). A 7 -point Likert scale was utilized, with responses from (1) strongly disagree) to (7) strongly agree; lower scores indicate less experienced uncertainty; higher scores indicate more experienced uncertainty (Rafferty & Griffin, 2006). This scale had a Cronbach's alpha of .88 in Sample 1 and .91 in Sample 2 (Rafferty & Griffin, 2006). Hypothesis results reflected that hypothesis 1A was supported as the planning of change was significantly negatively associated with psychological uncertainty (ß = -.17, $p < .01$). Hypothesis 1B was also supported as the frequency of change was positively associated with uncertainty (ß = .55, $p < .001$). It is noted however, hypothesis 1C was not supported as transformational change was not significantly associated with uncertainty (ß = .10, $p > .05$). Hypothesis 2A was supported as

uncertainty was negatively related to satisfaction (ß = -.15, $p < .01$), and positively related to turnover intentions (ß =.17, $p < .01$). This instrument appears to measure what it says it does. Permission was obtained from the scales developers.

Perceived Stress Scale. The perceived stress scale (PSS-10) used in this survey is an instrument developed by Cohen, Kamarck, and Mermelstein (1983). Cohen et al.'s (1983) PSS-10 was "designed to measure the degree to which situations is appraised as stressful" (pg. 385). This measure was selected because it is widely used globally as a measure of perceived stress (Fireman & Santuzzi, 2012). Reliability was determined using three samples, two of college students and one in a community smoking-cessation program (Cohen et al., 1983). The respondents were 322 in sample I, 144 in sample II, and 64 in sample III (Cohen et al., 1983). Coefficient alpha reliability for the PSS was .84, .85, and .86 respectively. For a state measure, test-retest correlations should be much higher for short test intervals; the PSS was administered on two occasions separated by two days to 82 college students, the test-retest correlation in this sample was .85 (Cohen et al., 1983). Construct validity PSS scores were moderately related to responses of stress, and potential stress according to frequency (Cohen & Williamson, 1988). Content and face validity of the PSS was supported by evidence in Cohen et al. (1983), and Cohen and Williamson (1988).

Fireman and Santuzzi's (2012) study on bullying, and its correlation with emotional stress found the PSS to have an internal reliability value of .850. The perceived stress scale (PSS) has various versions; however, this study used the 10-item scale (Cohen et al., 1983). For scoring purposes, the PSS scores are obtained by reversing

responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1, & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. A short 4 item scale can be made from questions 2, 4, 5, and 10 of the PSS-10 item scale (Cohen et al., 1983).

The PSS-10's items tap into how unpredictable, uncontrollable, and overloading respondents find their lives (Cohen et al., 1983). Participants respond on a 5-point Likert type scale ranging from 0 (never) to 4 (very often); of the 10 items, and 4 items are worded in a positive direction, these are reversed scored. The responses are then summed to form a psychological stress score with the higher scores indicating greater psychological stress. Cohen and Janicki-Deverts (2012) assessed psychological stress in three national surveys administered in 1983, 2006, and 2009. The Harris Poll Survey was comprised of 960 males and 1,427 female respondents residing in the United States, 18 years of age and older. The eNation Survey administered in 2006 and 2009 consisted of 2,000 adults 18 years of age or older residing in the United States. Internal reliabilities (Cronbach's α's) for the PSS-10 were .78 in a Harris Poll sample, and .91 in the 2006 and 2009 eNation samples (Cohen & Janick-Deverts, 2012, p.1324).

The data collected from these samples were used to compare the stress levels of individuals in the United States, and how unpredictable, uncontrollable, and overloading participants find their lives (Cohen & Janicki-Deverts, 2012). The responses were then summed to get a psychological stress score, and higher scores were indicators of greater stress (Cohen & Janicki-Deverts, 2012). Internal reliabilities (Cronbach's α) for the PSS-10 were .78 in the Harris Poll sample, and .91 in both the 2006 and 2009 eNation samples (Cohen & Janicki-Deverts, 2012). This instrument appears to measure what it says it

does. Permission was obtained from the scales developers to use in this study.

Frustration Scale. The frustration scale (FS) was developed by Peters, O'Connor, and Rudolf (1980) to assess job-associated frustration. This measurement was selected based on its usage by various researchers (e.g., Peters, O'Connor, & Rudolph, 1980; Spector, Dwyer, & Jex, 1988; Avey, Wu, & Holley, 2015) who seek to better understand and predict behaviors in organizations. Avey et al.'s (2015) study focused on how job embeddedness could influence job frustration, and subsequent citizenship withdrawal, and deviance behavior. Example items included: (a) Trying to get this job done was a very frustrating experience; (b) Being frustrated comes with this job; and (c) Overall, I experienced very little frustration on this job (Avey et al. 2015). This scale demonstrated adequate internal reliability (α =.70). Participants respond to each item on a 7-point Likert type scale, and responses are summed so that a high score indicates more experienced frustration. The validity of this measure was demonstrated in a large sample (N = 1450) drawn from three managerial levels of a national convenience store organization (O'Connor, Peters, Weekley, Frank, & Ernkrantz, 1984). O'Connor et al.'s (1984) analysis demonstrated a strong correlation reliability estimate of .68 between frustration and situational constraints.

In a sample of graduate and undergraduate students the alpha coefficient was .76. The three-item Peters and O'Connor (1980) measure was used to measure secretarial frustration on the job. A sample of 191 female secretaries from the University of South Florida were asked to complete the survey, and the alpha coefficient for the frustration measure in this study was .83. Omar and Ahmad (2014) in a more recent study measured

team frustration in a sample of 292 participants. The researchers used the three-item instrument developed by Peters, O'Connor and Rudolph (1980). The original items were modified to reflect frustrations experienced by team members (Omar & Ahmad, 2014). The results reflected team member frustration had a Cronbach alpha of 0.70, and the construct reliability estimates for all latent variables exceeded 0.70 indicating good internal consistency. Respondents respond to each item on a 7-point Likert scale, and responses are summed so that a high score indicates more experienced frustration. Permission was obtained from the scales developers to use in this study.

Counterproductive Work Behavior Checklist. This measure was selected based on its usage by researchers investigating workplace behaviors (e.g., Spector, Bauer, & Fox, 2010), this scale was adopted from previously established scales. The shorter 10-item version of the Counterproductive Workplace Behavior Checklist (CWB-C; Spector et al., 2006) consists of 5 items targeting the organization, and 5 items targeting people (Spector et al., 2010). Spector et al.'s (2010) study was comprised of 259 participants, both employees and their supervisors were recruited from classes at a large public university in the southeastern United States. The internal consistency reliability estimates (coefficient alpha) in Spector et al.'s (2010) study averaged .78 for the two employee forms (agreement and frequency) and averaged .89 for the two supervisor forms. A copy of the CWB-C 10 was secured after directly contacting Dr. Spector via email inquiry. Permission to use the instrument in this study was granted by Dr. Spector. There isn't a way to set a certain time limit to take surveys; however, a cutoff date and time (e.g., four weeks, beginning at 8 am on the first day and ending at midnight on the last day).

Other versions of the CWB-C used by researchers include that of Cohen, Panter, and Turan's (2013) investigation which suggested that among the variables that predict CWBs are gender, age, intention to turnover, interpersonal conflict at work, negative affect at work, and guilt proneness. Cohen et al.'s (2013) study used the longer 32-item CWB-C scale, and items were found to be internally consistent (α =.97). These scales can also be used to indicate the behavior of others such as coworkers or subordinates (Spector & Fox, 2001). Responses on all scales are made on a 5-point frequency scale; never, once or twice, once or twice per month, once or twice per week, and every day (Fox & Spector, 2001). To score the CWB-C sum the responses to appropriate items where 1 = the least frequent response, and 5 = the most frequent response (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006; Spector, Bauer, & Fox, 2010).

Additionally, in prior studies, Fox and Spector (1999) investigated the situational, dispositional, and affective antecedents of CWBs both personal and organizational. Participants in this study were 185 full-time employees from eight corporations in Florida and Illinois (Fox & Spector, 1999). The CWB-C scale used is a measure developed from the Job Reactions Survey (Spector, 1975). Fox and Spector (1999) reported a Cronbach's α of .86 in this earlier version of the CWB measure. Organizational CWB was related to constraints, locus of control, job satisfaction and frustration (*r* .37, .32, .45, and .36, respectively), and Personal CWB was related to constraints, locus of control, and frustration (*r* .26, .19, and .23, respectively). As demonstrated by Fox and Spector's (1999) study, the CWB-C had a Cronbach's α of .86. "Using structural equation modeling, the plausibility of this model was strongly supported, with goodness of fit

indices of 0.97 and 0.98, and all paths significant" (Fox & Spector, 1999, p. 926).

More recently, Anjum and Parvez (2013) used a version of the CWB-C scale to compare blue collar and white-collar workers' counterproductive behavior at work. This scale is divided into five subscales abuse (nine items), sabotage (three items), production deviance (three items) theft (five items), and withdrawal (four items) (Anjum & Parvez). The reliability statistics of the dimensions were reported as: "abuse ($\alpha = 0.771$), sabotage ($\alpha = 0.812$), production deviance ($\alpha = 0.836$), theft ($\alpha = 0.831$) and withdrawal ($\alpha = 0.883$); the overall reliability (Cronbach's alpha) of this scale (all/32 items) in this study is reported as .84 which shows that the internal consistency is high, and the scale is reliable" (Anjum & Parvez, 2013, p. 423).

Operational Definitions of Variables

In this study, psychological uncertainty was operationalized as responses on Rafferty, Allanah, and Griffin's (2006) psychological uncertainty scale related to: (a) the unpredictability of changing work environments, (b) responding to change, (c) effect of change on work unit, and (d) severity of change. A 7-point Likert scale is utilized to assess uncertainty with responses ranging from 1 (strongly disagreed) to 7 (strongly agree), and employees are asked to respond to these items keeping in mind the changes that occurred in their work environment in the past month (Rafferty & Griffin, 2006). An example item is the following: "I am often uncertain about how to respond to change" (Rafferty, Allanah, & Griffin, 2006, p. 1157).

Perceived stress was operationalized as responses on Cohen, Kamarck, and Mermelstein's (1983) perceived stress scale (PSS-10) related to: (a) unexpected events,

(b) lack of controlling important things in one's life, (c) ability to handle one's personal problems, and (d) anger over things outside of one's control. The questions in the PSS-10 asked about feelings and thoughts during the last three months (Cohen et al., 1983). "Participants respond on a 5-point scale ranging from 0 (never) to 4 (very often); of the 10 items, 4 items are worded in a positive direction, so they are reversed scored" (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) (Cohen & Janicki-Deverts, 2012, p. 1323). "The responses to the 10 items are then summed to produce a psychological stress score with higher scores indicating greater psychological stress" (Cohen & Janicki-Deverts, 2012, p. 1323). An example item is the following: In the last month how often have you felt you were on top of things (Cohen et al., 1983)?

Frustrations were operationalized as responses on Peters, O'Connor, and Rudolf's (1980) frustration scale related to: (a) levels of frustration/trying to get a job done, (b) being frustrated comes with this job, (c) overall, very little frustration experienced on this job. Participants respond to each item on a 7-point Likert scale with responses ranging from 1 (not frustrating) to 7 (extremely frustrating), and responses are summed so that a high score indicates more experienced frustration (Peters, O'Connor, & Rudolf, 1980). An example item is the following: Trying to get this job done was a very frustrating experience (Peters et al., 1980).

Counterproductive work behaviors were operationalized as self-reported responses on Spector, Bauer, & Fox's (2010) counterproductive work behavior checklist related to a person's behavior: 5 items targeting the organization and 5 items targeting people. Responses were made on a 5-point frequency scale: Never, Once or twice, Once

or twice per month, Once or twice per week, Everyday (Spector et al., 2010). An example item is the following: How often have you done each of the following on your present job: insulted or made fun of someone about their job performance (Spector et al., 2010)?

Data Analysis Plan

All survey response data were analyzed using the statistical package for social sciences (SPSS) version 21, and measures reliability were assessed and reported. Data cleaning addressed data problems. This process involved dealing with data problems once they took place, and entailed repeated rounds of screening, diagnosing, and editing of suspected abnormalities (Van den Broeck, Cunningham, Eeckles, & Herbst, 2005). Van den Broeck et al. described a data cleaning framework that involved a screening process (e.g., lack/excess of data, outliners, strange patterns, suspect analysis results), and diagnosis (e.g., errors/ missing data, true extreme, true abnormalities, no diagnosis, still suspect), and editing (e.g., correction, deletion, leave unchanged). The data were analyzed for problems, and adjustments were made as indicated in Chapter 4.

The research questions for this study were derived from the review of existing literature on workplace psychological uncertainty, perceived stress, frustration and CWBs. Is there a correlation between the independent variables (IV's) psychological uncertainty, as measured by Rafferty et al.'s (2006) psychological uncertainty scale; perceived stress, as measured by Cohen et al.'s (1983) perceived stress scale; and frustration, as measured by Peters et al.'s (1980) frustration scale; with the dependent variable (DV) CWB, as measured by Spector et al.'s (2006) counterproductive work behavior checklist.

Reacher Question 1: Does perceived employee uncertainty, stress, and/or frustration predict CWBs during periods of organizational transformations, and throughout their work careers?

*Ho*1: Perceived employee uncertainty, stress, and/or frustration does not predict their CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*1: Perceived employee uncertainty, stress, and/or frustration predicts their CWBs during periods of organizational transformations, and throughout their work careers.

Research Question 2: Are perceived employee uncertainty, stress, and/or frustration scores useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers?

*H*o2: Perceived employee uncertainty, stress, and/or frustration scores are not useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*2: Perceived employee uncertainty, stress, and/or frustration scores are useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

Descriptive statistics provided a description of the sample population, and graphs of relative contributions of high and low perceptions of uncertainty, stress, frustrations and CWBs experienced. Frequency distributions were used to summarize the data, and frequency tables depicted the data analysis. The measure of central tendency described

what was average or typical of the distribution of data. Multiple regression analysis combined several predictor variables into a single regression equation. Predictor variables (e.g., psychological uncertainty, perceived stress, and frustration) were entered into analysis simultaneously. Age and gender were analyzed for their potential influence on the responses. The rationale for inclusion of potential confounding variables was that they could adversely affect the relation between the independent variables and the dependent variable (e.g., the social environment for males and females was quite different and age as well).

To make a determination if the observed validity coefficient is statistically significant there are two columns in the sample table which represent the lower and upper limits to the confidence interval (e.g., 95%). If the interval includes zero, the mean validity coefficient is not significant (Aamodt, Surrette, & Cohen, 2007). By using confidence intervals, findings can be communicated in a sentence (Aamodt et al., 2007).

Threats to Validity

One threat to external validity in this study included effects of selection (e.g., sample does not reflect the general population). This can be addressed via randomization. Threats to external validity also included as non-representative research model; the participants in this study would be unrepresentative of those people who need to be understood; this precluded generalization from one to the other.

Threats to internal validity included temporal ambiguity (e.g., does the independent variable come before the dependent variable); in this study, understanding the variables under study was important in addressing this issue. Short-term changes and

their effects on participant's behavior can change for a number of reasons. For example, participants can go from being in a good mood to being in a bad one, or hunger, boredom, and even inattention can have an effect. Such participant led factors can be hard to control, reducing the internal validity of a study.

Threats to construct validity included inadequate preoperational explication of constructs (e.g., poor construct definition). Another threat was construct confounding in which operations usually involved more than one construct, failing to describe all the constructs thereby resulting in incomplete construct inferences. An additional threat mono-operation bias can lead to the underrepresentation of the construct and measurement of irrelevant constructs.

Measures for the Ethical Protection and Security of Participants

Authorization was received from Walden University's Institution Review Board (IRB # 02-23-17-0091335). Data collection by SurveyMonkey.com and FindParticipants.com adopted appropriate data collection, encryption, storage and processing practices and security measures to protect against unauthorized access, alteration, disclosure or destruction of your personal information, username, password, transaction information and data stored on their site. It essentially worked through a cryptographic system that secured a connection between a client and a server. Many websites use this protocol to obtain confidential user information, and it is supported in all modern browsers. The informed consent form outlined background information on the study, and the procedures involved for participation, a review of confidentiality, the voluntary nature of participation, and ethical concerns.

Data collected was stored in SurveyMonkey and FindParticipants.com initially, and then was exported to SPSS version 21 graduate package for analysis. Data were then stored on a disk in a secure location in compliance with Walden University's guideline requirements.

Anonymity. The records of this study will be kept strictly anonymous. In any reports that may be published no information will be included that make it possible to identify a participant. Research records are kept in a secure location, and only the researcher (s) has access to these records for a minimum of five years.

Individuals who indicated that they agreed to the outlined conditions for participation in the study received forms via SurveyMonkey.com and FindParticipants.com online platform. This included an instruction sheet for completing all attached forms as well as a designated date for completing and emailing all information back to the researcher. A demographic questionnaire also inquired as to the gender, age, employment status, position, tenure, and ethnicity of participant. Any participant who was interested in receiving the results of the study could indicate so by checking the appropriate box, and the results shared when available. Potential participants were also informed that they were free to withdraw from this study at any time during the process without consequence. No physical risks or benefits are associated with participation in the study. However, there was the potential for emotional upset as participants reflect on certain behaviors. Participants were informed that they were not obligated to complete any part of the study in which they felt uncomfortable. Informed consent was obtained when the researcher received a copy of the informed consent form

which signified that the participant agreed and understood the conditions of the study.

Summary and Transition

A survey design was appropriate for this study because it investigated relationships between variables. Participant's self-report scores on the perceived uncertainty scale, reflected the perceived level of uncertainty (Rafferty, Allanah, & Griffin, 2006); scores on the PSS-10 reflected levels of perceived stress (Cohen & Janicki-Devert, 2012); scores on the FS reflected perceived frustration Peters, O'Connor, & Rudolf, 1980); and scores on the CWB-C 10 reflected levels of reported counterproductive workplace behaviors (Spector, Bauer, & Fox, 2010).

The research that was conducted investigated employees' perceptions of uncertainty, perceived stress, frustration, and relationships with levels of reported counterproductive work behavior. The results provide a better understanding of variables, and assist in the prediction of perceptions of uncertainty, stress and frustrations' relationship with worker's behaviors in the United States. Additionally, the results extended research that quantitatively examines perceptions relationship with counterproductive work behaviors. The next chapter presents the results of this study.

Chapter 4: Results

Introduction

The purpose of this study was to examine whether uncertainty, stress, or frustration are related to counterproductive work behaviors (CWBs). The research questions that guided this study stem from the review of existing literature on workplace psychological uncertainty, perceived stress, frustration and CWBs. The research questions and hypotheses asked whether there is a correlation between the independent variables (IVs) psychological uncertainty, perceived stress, and frustration, with the dependent variable (DV) CWBs?

Research Question 1: Does perceived employee uncertainty, stress, and/or frustration predict CWBs during periods of organizational transformations, and throughout their work careers?

*H*o1: Perceived employee uncertainty, stress, and/or frustration does not predict their CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*1: Perceived employee uncertainty, stress, and/or frustration predicts their CWBs during periods of organizational transformations, and throughout their work careers.

Research Question 2: Are perceived employee uncertainty, stress, and/or frustration scores useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers?

*H*o2: Perceived employee uncertainty, stress, and/or frustration scores are not

useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*2: Perceived employee uncertainty, stress, and/or frustration scores are useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

In this chapter, the treatment of data, time frame for data collection, as well as actual recruitment, and response rates were described. The treatment of data is described after they were downloaded from SurveyMonkey (the collection site), to include the data screening, instrument reliabilities, the demographic characteristics of the sample, and the results of statistical analyses.

Data Collection

Data were collected over a period of 4 months from a pool of automotive employees working in various departments and organizations across the United States. After concluding the data-collection procedures, data were downloaded from SurveyMonkey into Excel files. Extra lengths were taken to get participation. The process included listing the criteria for participation in the recruitment stage, sending out invitations which outlined the survey, as well as providing the link for the survey. The true demographics of this population are unknown, it is impractical, in terms of time, finances and effort to collect data on every person in the target population. Additionally, two internet collection sites were utilized to recruit volunteers, and the participants out of the population who met the requirements did not exceed 300. Participants/volunteers who took the time to take this survey have a voice that should be heard. Though the results

may not be generalizable, they should indicate some potential problems and areas that need further study. Participants were recruited from a pool of automotive workers in the United States; however, due to the limited number of participants in this industry area, surveys were distributed to approximately 300 volunteers who met the criteria. FindParticipants.com recruited volunteers and SurveyMonkey hosted the data collection. Workers were recruited via an invitation by Findparticipants.com. Invitations included the researcher's conditions of participation.

Because this study included sample data rather than population census data, it is a statistical error to which the model was exposed. This study's sample size could give meaningful results. For example, surveying people working in the automobile industry who are affected negatively by their work environment, provided data which can be used to design larger confirmatory studies. Of the 300 invitations, 180 returned the survey. Five of the 180 participants did not answer all questions; only one response was missing for each and so were still included thus yielding 60% return rate (Fryrear, 2015). All information pertaining to the survey was accessible to participants online. As an introduction to the survey, the informed consent explained the study; additionally, anonymity regarding participation was included. Risks and benefits to participate were outlined, and contact information was provided.

Data were exported from SurveyMonkey into Excel files and then uploaded into the Statistical Package for the Social Sciences (SPSS) for statistical analyses. The responses downloaded from SurveyMonkey to Excel were answers to the psychological uncertainty scale, the perceived stress scale (PSS), the frustration scale, the

counterproductive work behavior checklist (CWB-C), and responses to the demographic questionnaire. The Excel file was then imported into SPSS. SurveyMonkey assigned a unique identifier to each respondent. Anonymity was retained at each point, as names were not gathered. When the file was downloaded into Excel and cleaned, the unique identifiers were no longer needed. The file downloaded into SPSS contained no identifiers as none were necessary for the current analysis.

Data were then screened for missing responses to individual items on the psychological uncertainty scale, the perceived stress scale, the frustration scale, and the counterproductive work behavior checklist. Only five of the 180 participants did not answer all questions. Each of the five participants with missing data were only missing one response, and so were still included in the analysis. No patterns to the missing data existed. The missing responses were each to a different question. Missing responses to the five items were replaced with the item mean for those who did respond on the respective scales (Little & Rubin, 1987).

Scales

The next step included the scoring of the psychological uncertainty scale, the perceived stress scale, the frustration scale, and the counterproductive work behavior checklist. Items included in the scales were summed. Any reverse items that were stated in a positive manner (such that a higher score meant less frustration or less perceived stress) were reversed scored to be consistent with all other scales and scale items. In all cases, after reverse scoring, a higher scale value meant a greater level of psychological uncertainty, more perceived stress, greater frustration, and more CWB.

Outliers

To check for outliers, a box plot was constructed for each of the four scales using SPSS. Limited outliers were shown for the Psychological Uncertainty Scale and the Perceived Stress Scale. For the Frustration Scale and the Counterproductive Work Behaviors Checklist all responses were within two standard deviations of the mean. For the two scales with limited outliers, a check of the raw data indicated that the outliers were the result of the survey participants making full use of the response scale and thus not a problem but instead representative of the sample.

Reliability

Each of the scales was then tested for reliability using Cronbach's alpha. In general, there is not one single universally accepted minimum Cronbach's alpha value (Bonett & Wright, 2015), although some researchers do suggest a value of .8 as the minimum acceptable reliability level (Peters, 2014). Other researchers such as Tavakol and Dennick (2011) have reported acceptable Cronbach's alpha values should be between .7 and .95. The number of items included in each scale and its Cronbach's alpha score are shown in Table 1. The reliability statistics for all scales are well within all acceptable ranges.

Table 1

Scale Reliability Statistics

Scale	Number of Items in Scale	Cronbach's Alpha
Psychological Uncertainty Scale	4	.901
Perceived Stress Scale–10	10	.857
Frustration Scale	3	.924
Counterproductive Work Behavior Checklist–10	10	.882

Summary of Demographic Information

The sample was diverse as far as gender, age, and ethnicity. The breakdowns are shown in Table 2. The sample was predominately male (60.2%) and under 40 years of age (67.2%). Although "White or Caucasian" was the most popular Ethnicity/Race category, less than half of the sample (42.4%) chose this selection, as 30.5% of the sample was Black or African American, 10.7% was Hispanic, and another 14.1% indicated that they were multiple ethnicities or another race. Table 2 also shows the work and employment information of the sample. The table shows that most of the sample (86.9%) worked full-time rather than part-time, most of the sample were salespeople, service writers, or technicians rather than leaders or managers, and all but 7.9% of the sample had at least one year of tenure at their current job.

It is important to note that information obtained from the BLS (2018), shows that the American automotive industry is not formally defined in the North American Industry Classification System (NAICS). Despite enrollment being more difficult than expected, the results of this study are still important. The demographics of the sample are shown, but since the overall population are not known, what is provided are the demographics of the study's sample. Factors related to certain work behaviors were investigated; behaviors that impact individuals as well as organizational wellbeing. There are still gaps in the knowledge base that need to be filled. Based on these results, the next steps would include building a stronger overall evidence base, piecing together parts of the bigger picture.

Table 2

Demographic Profile of Participants

Characteristic		N	%
Gender	Male	106	60.2%
	Female	70	39.8%
Age Distribution	18-20	15	8.5%
	21-29	70	39.5%
	30-39	34	19.2%
	40-49	33	18.6%
	50-59	16	9.0%
	60+	9	5.1%
Employment Status	Fulltime	153	86.9%
	Part-time	23	13.1%
Position	Salesperson	22	12.5%
	Service	47	26.7%
Writer			
	Technician	43	24.4%
	Supervisor	2	1.1%
	Manager	9	5.1%
	Group	3	1.7%
Leader			
	Other	50	28.4%
Tenure	Less than 1	14	7.9%
year			
	1-3 years	70	39.5%
	3-6 years	49	27.7%
	6 years or more	44	24.9%
Ethnicity/Race	American India		
	Alaskan Native	2	1.1%
	Asian/Pacific Islander	2	1.1%
	Black or		
African		54	30.5%
	American		
	Hispanic	19	10.7%
		75	42.4%
White/Caucasian			
	Multiple/	25	14.1%
Ethnicity/other			

Threats to External Validity

The target population included the automotive industry, retail, as well as manufacturing. The retail sector included not only sales representatives, but other departments within that sector (e.g., dealerships, used and new cars, managers, supervisors, group leaders, auto repair technicians, service writers, oil changers, office personnel, etc.). Manufacturing workers were from all areas as well (e.g., floor assembly, managers, supervisors, office, etc.). FindParticipants.com facilitated the invitation to participants and included participants employed in the automotive industry in the United States, (in all areas of the industry, sales, factory, etc.). Potential participants were a minimum of 18 years of age and employed full or part-time. Invitations were sent to all volunteers who matched the criteria. Surveys were hosted by SurveyMonkey.com a web-based survey provider.

A total of 300 individuals employed in some facet of the automobile industry volunteered to participate in the survey. Workers in this industry were considered the target population for the study, even though the actual number of workers in the automobile industry is much higher. Individuals who work in this industry and who volunteered for this study, have a voice that should be heard; particularly when they are having negative experiences in the workplace that need to be addressed.

According to the Bureau of Labor Statistics (BLS), the current employment statistics survey data extracted on February 26, 2018, reflected that employment, hours, and earnings for U.S. workers in the motor vehicles and parts industry was 959.0 in December 2017, and 953.9 in January 2018. Each month current employment statistics

(CES) national estimates are produced. This industry is not formally defined in the North American Industry (BLS, 2018). The true demographics of this population are unknown.

This study utilized two internet collection sites to recruit volunteers and to host the surveys. Participation was not high due to the limited number of participants who met the criteria to participate. A convenience sample was used rather than a scientifically derived random selection of the population; even though the results may not be generalizable, they should indicate some potential problems and areas that need further study.

Descriptive Statistics of Study Variables

Descriptive statistics were calculated for each of the scales overall, and by gender, age group, employment status, company position, tenure, and ethnicity. The histograms aid in determining whether the scales are normally distributed or not. The descriptive statistics are shown in Table 3 and the histograms in Figures 1-4.

Table 3

Scale Descriptive Statistics

Scale	Mean	Median	Std. Deviation	Minimum	Maximum
Psychological Uncertainty Scale	22.194	24	5.560	4	28
Perceived Stress Scale–10	33.552	35	5.499	13	43
Frustration Scale	14.761	16	4.575	3	21
Counterproductive Work Behavior Checklist–10	23.330	26	6.994	10	28

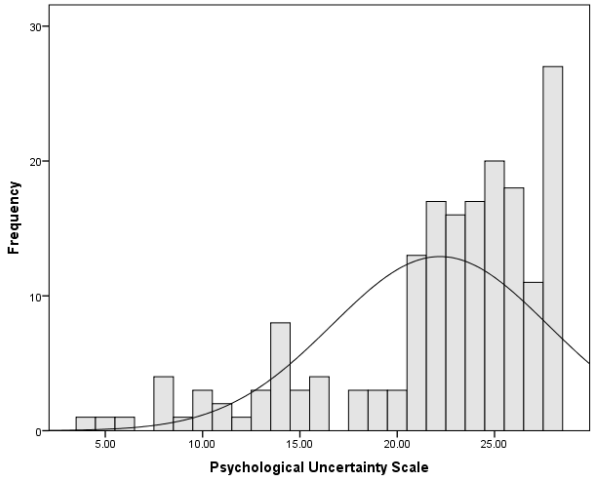

Figure 1. Histogram of Psychological Uncertainty Scale.

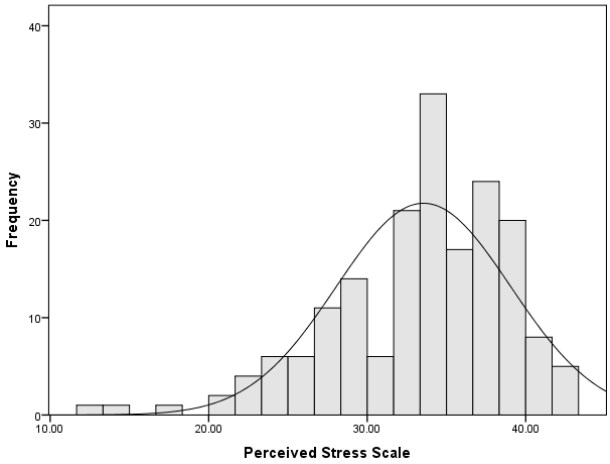

Figure 2. Histogram of Perceived Stress Scale–10.

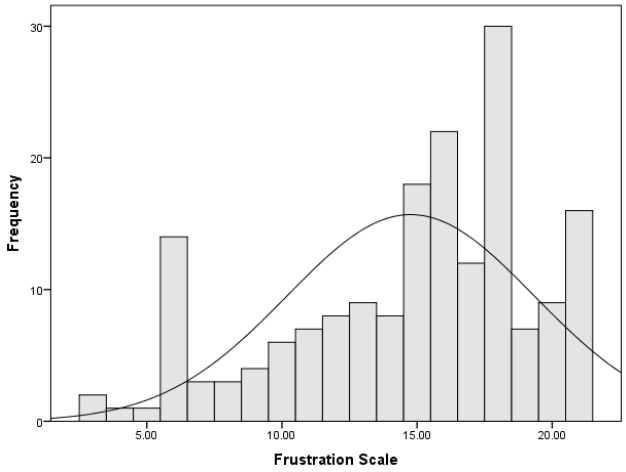

Figure 3. Histogram of Frustration Scale.

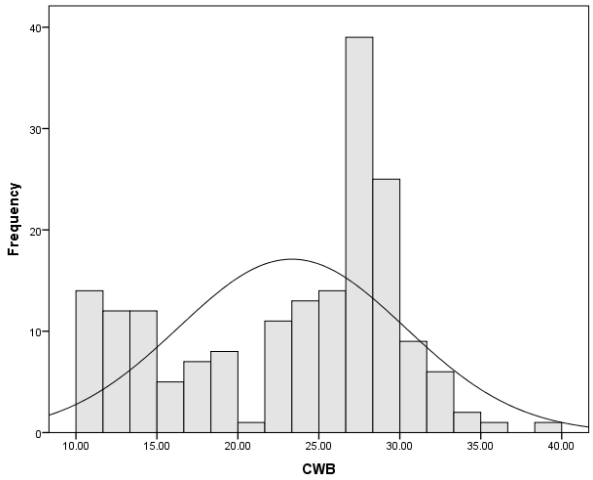

Figure 4. Histogram of Counterproductive Work Behavior Checklist–10

The histograms for the scales do not appear to be normally distributed, in general. The perceived stress scale does show a somewhat normal-shaped bell curve. The current study was carried out using multiple regression, however, rather than a purely parametric test such as Pearson's product-moment correlation. The assumptions required for multiple regression are different from many parametric tests and are discussed below.

The Assumptions of Multiple Regression

In order to use multiple regression to analyze the research questions, the basic assumptions of linear regression were first tested. According to Nau (2015), four assumptions should be met in order to use linear regression models for inference or prediction purposes. The four assumptions are:

1. A linear relationship exists between the dependent and independent variables; The error terms are independent of each other-no correlation exists between consecutive error terms;
2. Homoscedasty or constant variance of errors; and
3. Normality of error distribution.
4. (Multiple regression only) The independent variables are not highly correlated with each other (Poole & O'Farrell, 1971). If this assumption is violated, multicollinearity is said to exist in the model.

Testing the Assumptions

In order to test the first assumption, three scatterplots were created, each one showing the relationship between the standardized predicted values for the dependent variable, CWB, and the standardized residuals created by a simple linear regression on each of the three independent variable scales. Researchers often use a scatterplot to check for the existence of a linear relationship between the dependent and independent variables (Osborne & Waters, 2002). If the assumption of a linear relationship is met, the points on the scatterplots should appear be distributed randomly around the zero-horizontal line. When the error terms appear to be curved, rather than random around the line, this is an

indication that the relationship between the DV and IVs is nonlinear (Princeton University Library, 2007). Figure 5, Figure 6, and Figure 7 show the scatterplots for the regressions on the three independent variable scales. The points appear to be random, hence upholding the first assumption.

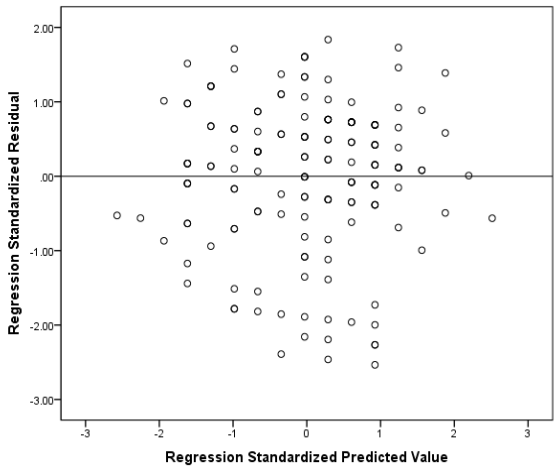

Figure 5. Scatterplot of residuals and predicted value from regression CWB scale on psychological uncertainty scale.

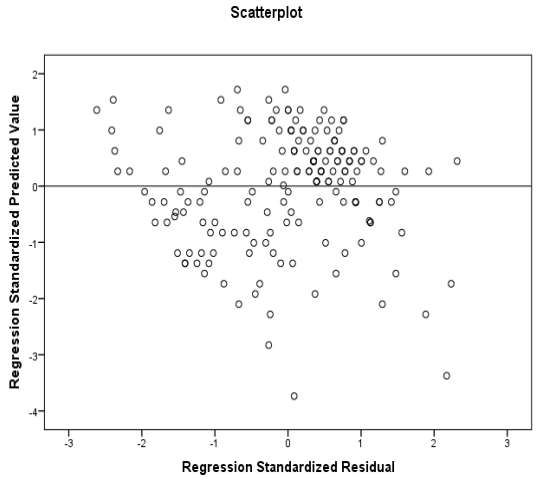

Figure 6. Scatterplot of residuals and predicted value from regression CWB scale on perceived stress scale.

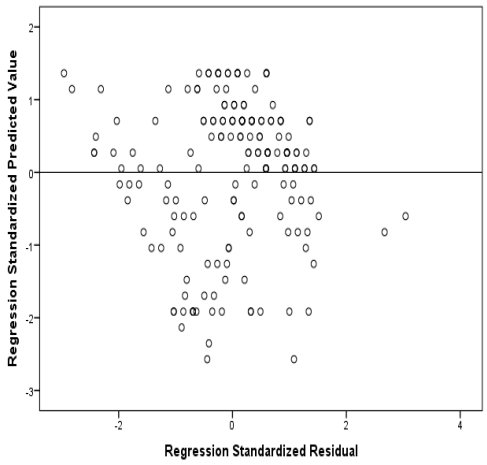

Figure 7. Scatterplot of residuals and predicted value from regression CWB scale on perceived stress scale.

The second regression assumption states that the error terms or residuals of the regression are independent of each other or that autocorrelation is not present. This assumption does not apply in this case because the data is from a cross-sectional sample. This means that the order of the observations does not matter. The observation can be shuffled into any order without changing their meaning. This assumption is more likely to be a problem with time series data, where the order of the data is sequential in nature (Hill, Griffiths & Lim, 2011).

The assumption of constant variance, also known as homoscedasticity, is important to test, as cross-sectional data can be subject to violation of this assumption. If the assumption is violated, heteroscedasticity is present. This assumption was tested by observing the same scatterplots used to test the first assumption (Osborne & Waters, 2002). In this case, the width of the band of error terms were examined. If the regressions have a constant variance, the width of the band should be relatively even. If the data is

heteroscadastic, the band is narrower in some places than others (Princeton University Library, 2007). Figures 5 through 7 all show an error band that appears approximately the same width over the range of values.

The fourth assumption is that the error terms are normally distributed. With a normal Q-Q plot, the data points should all be close to the diagonal line (Laerd, 2013). Both a P-P plot and a Q-Q plot was ran for both regressions used to analyze RQ1 and RQ2. The RQ1 plots are shown in Figure 8 and the RQ2 plots are shown in Figure 9.

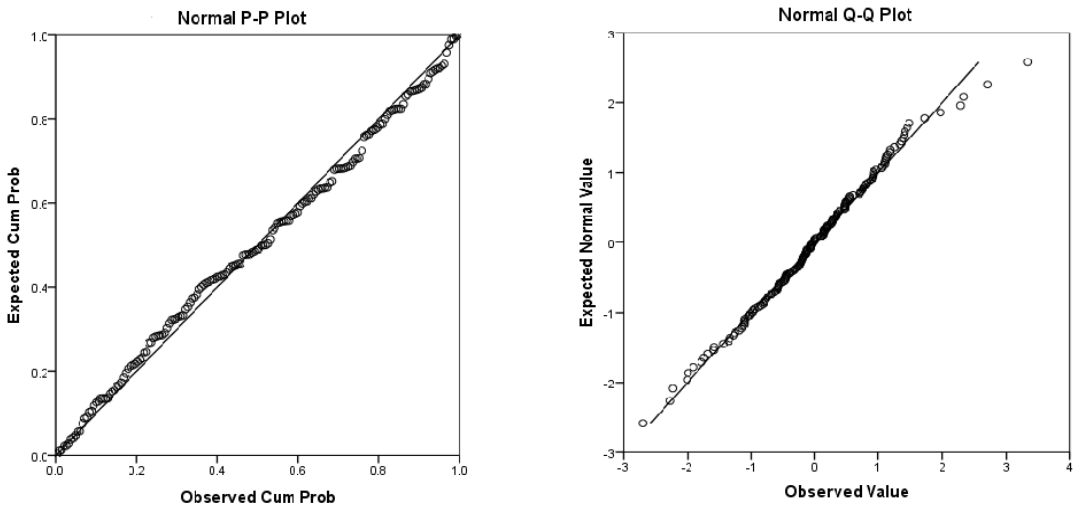

Figure 8. Normal P-P plot and normal Q-Q plot for the RQ1 regression.

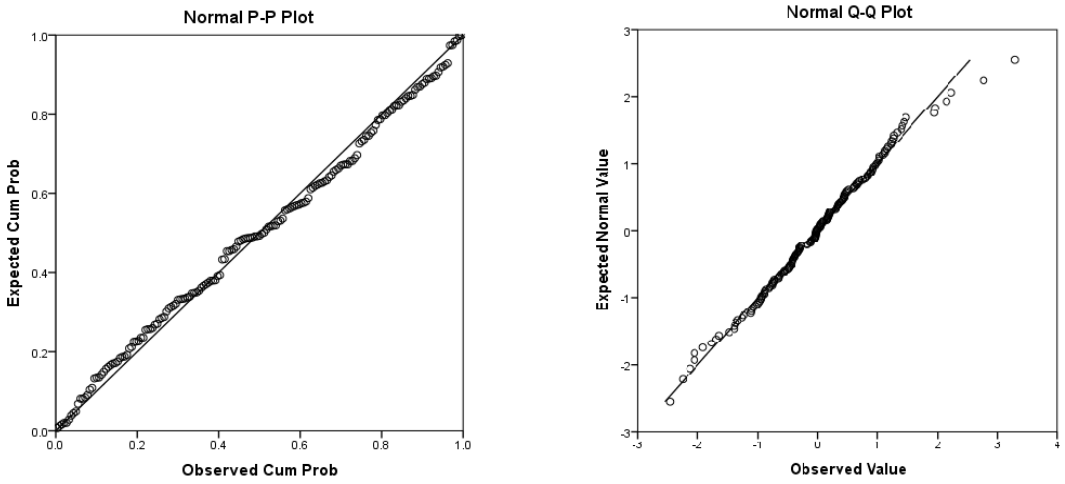

Figure 9. Normal P-P plot and normal Q-Q plot for the RQ2 regression.

The normal P-P plot and the normal Q-Q plot yield in general the same result in that they are very similar except that the P-P plot uses a cumulative distribution while the Q-Q plot uses a non-cumulative distribution. As shown in both figures, the error terms appear to be normally distributed. The P-P plots in particular appear to very closely follow the diagonal line that indicates normality.

The final assumption examined for the study applies to multiple regression only. According to this assumption, the independent variables must be linearly independent of each other. Violation of this assumption is called multicollinearity. In general, multicollinearity occurs when two or more independent variables are highly correlated with each other (Alauddin & Nghiem, 2010; Hirsch & Riegelman, 1992). In order to test for multicollinearity, tolerance and variance inflation factors (VIFs) were calculated for the three scales used in the analysis. A VIF of 1 indicates no multicollinearity with the other scales, while a VIF of 10 shows strong multicollinearity and any values over 4 need further examination. Any tolerance factors under 0.1, which would also indicate a need

for further investigation were examined. As shown in Table 4, the tolerance factors for all scales are all above 0.1 and the VIFs are below 4. These results indicate that the final assumption was upheld, and multicollinearity should not be a problem.

Table 4

Multicollinearity Statistics

	Collinearity Statistics	
Scale	Tolerance	VIF
Psychological Uncertainty Scale	.397	2.521
Perceived Stress Scale	.472	2.120
Frustration Scale	.466	2.147

RQ1 – Results

A multiple linear regression model was used to examine RQ1 and test the associated hypotheses:

Research Question 1: Does perceived employee uncertainty, stress, and/or frustration predict CWBs during periods of organizational transformations, and throughout their work careers?

*H*o1: Perceived employee uncertainty, stress, and/or frustration does not predict their CWBs during periods of organizational transformations, and throughout their work careers.

*Hα*1: Perceived employee uncertainty, stress, and/or frustration predicts their CWBs during periods of organizational transformations, and throughout their work careers.

For this regression, the independent variables were the three IV scale variables, the psychological uncertainty scale, the perceived stress scale, and the frustration scale,

and control variables for gender, age, ethnicity, position, tenure, and employment status. The regression results with simultaneous entry are shown in Table 5. The model exhibited an R^2 of .536 with an adjusted R^2 of .482. The adjusted R^2 value indicates that the three IV scales, along with the control variables, predict 48.2% of the variance in CWB. Table 6 presents the associated *F* statistic indicating the model is statistically significant ($F = 10.003$, $p < .001$), or the three IV scales variables plus the control variable do predict CWB.

Table 5

Multicollinearity Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
RQ1	.732	.536	.482	5.02707

Table 6

RQ1: ANOVA Statistics

	Sum of Squares	*df*	Mean Square	*F*	*p*
Regression	4550.334	18	252.796	10.003	.000
Residual	3942.344	156	25.271		
Total	8492.678	174			

Table 7 shows the coefficients for the three IV scales along with their associated *p*-values and confidence intervals around each estimated coefficient. Of the three IV scales, only the frustration scale significantly predicts CWB ($t = 4.269$, $p < .001$). The coefficient on the frustration scale is positive (0.572), meaning that higher levels on the frustration scale predict higher levels of CWB. Also note that the confidence interval for the frustration scale does not include zero (Aamodt et al., 2007) with 95% CI [0.308,

0.837]. The psychological uncertainty scale and the perceived stress scale do not significantly predict changes in CWB, as both have *p*-values below .05 at $p = .431$ and $p = .152$ respectively and the confidence intervals do include zero, with 95% CI [-0.139, 0.324] and [-0.062, 0.394] respectively.

Table 7

RQ1: Coefficients, p-Values, and Confidence Intervals

IV or Control Variable	Coefficient (*B*)	Std Error	*t*	*p*	95% Confidence Interval for B	
					Upper Bound	Lower Bound
Constant	8.635	2.706	3.191	.002	3.291	13.978
Psychological Uncertainty Scale	.093	.117	.790	.431	-.139	.324
Perceived Stress Scale	.166	.115	1.440	.152	-.062	.394
Frustration Scale	.572	.134	4.269	.000	.308	.837

As for the control variables, gender, age, and position exhibited some influence on CWB; employment status, ethnicity, and tenure did not.

Tenure and employment status were used to proxy "periods of organizational transformations, and throughout their work careers" as stated in RQ1, as well as functioning as control variables. Changes in employment status can occur during organizational transformations, as well as layoffs that affect tenure. Higher values of tenure can represent longer work careers and fewer organizational transformations. Neither of these proxy variables were statistically significant. It was found that frustration significantly predicts CWB, but this seems to occur regardless of the stage of a person's work career or employment status.

In conclusion, this research found that the evidence rejected the null hypothesis *H*o1 and supported *Hα*1: perceived employee uncertainty, stress, and/or frustration

predicts their CWBs. The specific version of $H\alpha_1$ that was found to be supported was that perceived frustration predicts the CWB of workers in the automobile industry, but perceived employee uncertainty and stress do not significantly predict CWB. The proxies for work career and organizational transformations did not influence this conclusion.

RQ2 – Results

A hierarchical multiple regression was used to examine RQ2 and test its associated hypotheses:

Research Question 2: Are perceived employee uncertainty, stress, and/or frustration scores useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers?

H_o2: Perceived employee uncertainty, stress, and/or frustration scores are not useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

$H\alpha 2$: Perceived employee uncertainty, stress, and/or frustration scores are useful in explaining variability in CWBs during periods of organizational transformations, and throughout their work careers.

To examine the variability in CWBs and whether any or all of the three IV scales are useful in explaining this variability, the adjusted R^2 statistics and the change in R^2 from the addition of the three scales to the model were further investigated. To accomplish this, a model without any of the three-perceived psychological uncertainty, stress, or frustration scales was ran. This included only the demographic control or confounding variables in the regression in order to determine baseline values of R^2 and

adjusted R^2. These are shown in Table 8. The control variables alone explain 24.6% of the variability in CWBs.

Table 8

Baseline Values of R² Change: Psychological Uncertainty, Stress, and Frustration Scales Added

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Base	.558	.311	.246	6.06516

Next, a hierarchical multiple regression was performed to examine the change in R^2 from the addition of the three independent variable scales, the psychological uncertainty scale, the perceived stress scale, and the frustration scale. Using an *F* test, helped determined whether the change in the R^2 value from the addition of these three scales was statistically significant or not. These R^2 and *F* changes statistics are shown in Table 9.

Table 9

R², Adjusted R², and F Statistics for R² Change: Psychological Uncertainty, Stress, and Frustration Scales Added

Model	R^2	Adjusted R^2	Change Statistics				
			R^2 Change	F Change	df1	df2	p
Base	.311	.246	.311	4.791	15	159	.000
3 IV Scales Added	.536	.482	.225	25.149	3	156	.000

When the three IV scales are added to the model with control variables only, 48.2% of the variability in CWB is explained, as compared to 24.6% without the addition of the scales. The change in R^2 was also significant ($F(3, 156) = 25.149$, $p < .001$). These results indicated that the addition of the psychological uncertainty, perceived stress, and

frustration scales to the model was very useful in explaining the variability of CWBs. However, recalling that the frustration scale was the only scale that could significantly predict changes in CWB, the changes in R^2 from the addition of the frustration scale only was also examined. These results are shown in Table 10.

Table 10

R², Adjusted R², and F Statistics for R² Change: Frustration Scale Added

Model	R^2	Adjusted R^2	Change Statistics				
			R^2 Change	*F* Change	*df1*	*df2*	*p*
Base	.311	.246	.311	4.791	15	159	.000
Frustration Scale Added	.521	.473	.210	69.183	1	158	.000

The model including the frustration scale explains 47.3% of the variation in CWB. This adjusted R^2 is nearly as high as that with the three scales added (which explained 48.2% of the variance). The increase in R^2 due to the addition of the frustration scale to the model is statistically significant ($F(1, 158) = 69.183$, $p < .001$). This result indicated that the frustration scale, is useful in explaining the variability in CWBs. Finally, to discover if the addition of the psychological uncertainty scale and the perceived stress scale added to the variability already explained by the frustration scale, a final hierarchical regression was entered with these final two IVs. These results are shown in Table 11.

Table 11

R^2, Adjusted R^2, and F Statistics for R^2 Change: Psychological Uncertainty and Perceived Stress Scales Added

Model	R^2	Adjusted R^2	Change Statistics				
			R^2 Change	*F* Change	*df1*	*df2*	*p*
Base	.311	.246	.311	4.791	15	159	.000
Frustration Scale Added	.521	.473	.210	69.183	1	158	.000
Uncertainty and Stress Scales Added	.536	.482	.015	2.483	2	156	.087

When the other two IV scales are added to the model with the frustration scale, the percentage of variation in CWB explained increases from 47.3% to 48.2%. This increase is not statistically significant at a .05 level, as shown by the *F* statistics testing the change in R^2 ($F(2, 156) = 2.483$, $p = .087$). These results indicate that it is the frustration scale that truly explains the variability of CWBs rather than the psychological uncertainty and the perceived stress scales.

In conclusion, this study found that the evidence rejected the null hypothesis *Ho*2 and supported *Hα*2: perceived employee uncertainty, stress, and/or frustration scores are useful in explaining variability in CWBs. The specific version of *Hα*2 this study found to be supported was that perceived frustration useful in explaining variability in CWB of workers in the automobile industry, but perceived employee uncertainty and stress do not significantly explain the variability in CWB.

Summary

Chapter 4 presented the results and calculations of the descriptive statistics and multiple regression analyses used to address the research questions and hypotheses of this

study. In order to test RQ1, multiple linear regression analysis was performed. Although the results of the multiple regression analysis showed that the psychological uncertainty scale and the perceived stress scale were not statistically significant predictors of CWB, the frustration scale was a significant predictor. To test RQ2, a hierarchical multiple regression analysis was performed. Results of this analysis found perceived frustration useful in explaining variability in CWBs of workers in the automobile industry, but perceived employee uncertainty and stress did not significantly explain variability in CWBs. In summary, evidence supported both $H\alpha 1$ and $H\alpha 2$. Thus, the null hypotheses were rejected, and the alternative hypotheses were supported for both the prediction of CWBs and variability in CWBs questions. Chapter 5 concludes this study, and contains the interpretations of the findings, the limitations of study, recommendations, implications, and conclusions.

Chapter 5: Discussion, Recommendations, Conclusions

Introduction

Two research questions guided this study. First, does perceived employee uncertainty, stress, and/or frustration predict counterproductive work behaviors (CWBs) during periods of organizational transformations, and throughout their work careers? Second, are perceived employee uncertainty, stress, and/or frustration scores useful in explaining variability in CWBs during periods of organizational transformations and throughout their work careers? Null and alternative hypotheses were presented for each question, and an analysis of the data was completed to address the hypotheses.

The intent of the study was to determine if there were correlations in perceived uncertainty, stress, and/or frustration, and the self-reported instances of CWBs. The notion of searching for correlation in a collection of individual perceptions of uncertainty, stress, and/or frustration to instances of CWBs has been supported by past research. Cullen, Edwards, Casper, and Gue's (2014) study demonstrated the role that perceived organizational support has in the relationship between employees' ability and perceptions of change-related uncertainty, and employees' satisfaction and performance. Researchers also demonstrated correlations between negative perceptions of the work environment and increased levels of workplace deviance, and that CWBs tend to increase when employees feel that they have been treated unjustly (Robinson & Bennett, 1995; Spector & Fox, 2001). Furthermore, Heacox and Sorenson (2004) found strong relationships between organizational frustration and aggressive behavior; and Patching and Best (2014) found stress to be correlated with decreased work performance. Zhang, Redfern,

Newman, and Ferreira-Meyers (2014) demonstrated that customer-related social stressors led to emotional exhaustion, which in turn, related to CWB for service employees.

Chapter 4 included a detailed description of the statistical analysis. Prior to performing the analysis, any reverse items that were stated in a positive manner were reversed scored to be consistent with all other scales and scale items. The data were collected in electronic form from a final sample of 180 participants. Multiple regression analysis was performed to examine hypothesis 1 and examine whether any or all of the IVs predicted the DV. The IVs and DV scale items were summed by scoring items included in the scales. Hierarchical multiple regression analysis was then performed to examine hypothesis 2, and to further examine whether any or all three of the IV scales are useful in explaining variability in the DV. The null hypotheses were rejected for both hypotheses 1 and 2.

Interpretation of the Findings

The interpretation of findings and research conclusions are discussed in this section. As outlined in Chapter 2, CWBs have been associated with a host of work problems, including anger reactions, latent hostility, job dissatisfaction, work-related anxiety (Keenan & Newton, 1984), and negative perceptions of work environments (Wolf, Dulmus & Maguin, 2012). In the workplace, Fox and Spector (2005) demonstrated how CWBs can arise from various existing conditions either in the perpetrator or situation and can include individual employee characteristics and the characteristics of the workplace. Additionally, other researchers (Heacox & Sorenson, 2004) found strong relations between organizational frustration and aggressive behaviors,

and that uncertainty is a major source of psychological strain during organizational change (Bordia, Hunt, Paulsen, Tourish, & DiFonzo, 2004).

The study sought to understand the predictive role that uncertainty, stress, and frustration could play in explaining the occurrence of CWBs. Diehl, Richter, and Sarnecki (2016) argued that poor socio-economic conditions, specifically, weak rule of law, low human development, and high-income inequity, as salient sources of uncertainty. Fox, Spector, and Miles (2001) had examined CWBs in response to job stressors and organizational justice and had reported that organizational constraints, interpersonal conflict, and perceived injustice are job stressors, CWB is a behavioral strain response, and negative emotion mediates the stressor-strain relationship.

While the psychological uncertainty scale and the perceived stress scale do not significantly predict changes in CWB, as both have *p*-values below .05 at $p = .431$ and $p = .152$ respectively, and the confidence intervals do include zero, with 95% CI [-0.139, 0.324] and [-0.062, 0.394] respectively, the role of frustration is more apparent and worthy of further study. Behavioral and other outcomes that were correlated with experienced frustration included job satisfaction, work anxiety, physical health symptoms, employee withdrawal behavior, aggression, hostility, and sabotage (Spector, Fox, & Domagalski, 2006). The present study confirmed this relationship. Null hypotheses 1 and 2 were rejected, indicating that support was indicated for the role of uncertainty, stress, and frustration in predicting and explaining variability in CWB.

Of the three IV scales, the specific version of Hα1 that was found to be supported was that the frustration scale significantly predicts CWB ($t = 4.269$, $p < .001$). A

hierarchical multiple regression was used to examine Hα2 and determine whether any or all of the three IV scales were useful in explaining this variability. I further examined the adjusted R^2 statistics and the change in R^2 from the addition of the three scales to the model. The increase in R^2 due to the addition of the frustration scale to the model was statistically significant ($F(1, 158) = 69.183$, $p < .001$). This result indicated that the frustration scale is useful in explaining the variability in CWBs.

The data analysis supported the alternative hypothesis *Hα*1, showing that psychological uncertainty, perceived stress, and frustration are factors that do predict CWBs. Alternative hypothesis *Hα*2 was also supported, and multiple regression analysis showed that the IV's are useful in explaining variability in CWBs.

These findings are consistent with predictions of the social exchange theory (SET). The SET has been used as a framework for understanding CWB. Chernyk-Hai and Tziner's (2014) supported the hypotheses that indicates relationships between organizational distributive justice, overall and ethical climate, and CWB. This is in line with previous research applying SET in the work environment which supported the notion that transactional and relational breach has varying effects on CWB (Janssen, 2000). Therefore, both hypotheses were supported.

As for the control variables, gender, age, and position exhibited some influence on CWB; employment status, ethnicity, and tenure did not. Although not a focus in this study, females showed a higher level of CWB than males. Gender differences as previously noted by researchers (see Öcel & Aydin, 2010) still need to be clarified.

Gender. With regard to the control variables, previous literature indicated that

females engaged in less CWB than men (Cohen, Panter, & Turan, 2013). While other researchers found no gender differences in relation to counterproductive behaviors (Nyarko, Ansah-Nyarko, & Semph, 2014). Spector and Zhou (2014) stated that gender differences in CWB have been understudied. Results of Spector and Zhou's research suggested that the gender differences in acts considered CWB are rather small, noting that men who engaged in more acts than women did so only when they have certain personality characteristics, or perceptions of higher levels of job stressors. In contrast, this study's findings suggested that females, as previously mentioned, showed a higher level of CWB than males. It is possible that personality differences may be related to these findings as well. These finding have practical implications for the field, by extending investigations of the moderating role of gender in CWB as suggested by Spector and Zhou (2014). The question is, what can be done by organizational leadership to minimize negative behaviors in both male and female employees and help advance employer/employee relations?

Age. Researchers in previous studies (see Cohen, Panter, & Turan, 2012) found that older workers engaged less in counterproductive work behavior than younger workers. This study's findings also suggested that older workers have lower levels of CWB. Contrary to this study's findings, Nyarko, Ansah-Nyarko, and Sempah's (2014) predictions found that older workers exhibited more counterproductive work behaviors than younger workers. The reason cited for these findings, researchers remarked, is that this outcome might be attributed to the perceptions that the older workers' have regarding retirement, or having less responsibility, and have nothing to lose (Nyarko et al., 2014).

Findings may be related to geographical location, as well as other correlates of CWB.

Position. Anjum and Parvez's (2014) study proposed that blue collar workers who usually perform lower level jobs are more prone to counterproductive behavior than white collar workers who earn more, enjoy more autonomy, and have more freedom. As far as position, this study found that those employees holding a type of leadership position (e.g., manager, group leader, supervisor) were shown to exhibit lower CWB than employees with other type of positions. Contrary to the findings of both study's, researchers demonstrated that abusive supervision can negatively affect employee attitudes and employees' willingness to engage in positive behaviors (see Tepper, Duffy, Hobbler, Zellars, Tepper, & Duffy, 2002). In the same vein, Mitchell and Ambrose's (2007) results suggested that abusive supervision is positively associated with workplace deviance.

Theoretical framework. In line with the SET (Chernyak-Hai & Tziner, 2014) it was proposed that the perceptions employees have of appropriate workplace environment and rewards, appear to play a primary role in the determination of certain behaviors at their place of employment. The main premise of the social exchange is that it involves a series of interactions that generate obligations (Emerson, 1976). Factors that may predict CWBs include: personal traits and abilities (e.g., Berry, Ones, Sackett, 2007); job experience (e.g., Kulas, McInnerney, Demuth & Jadwinski, 2007); and work stressors such as conditions at work, harsh supervision, role ambiguity, and interpersonal conflicts (e.g., Burk-Lee, & Spector, 2006; Mitchell & Ambrose, 2007; Spector & Fox, 2005).

Among prior organizational studies that have used the social exchange perspective in research are: Chernyak-Hai & Tziner (2014); Ensher, Thomas, and Murphy (2001); and Deckop, Cirka, and Anderson (2003). The findings of this study supported hypotheses *Hα*1 and *H*α2, the results demonstrated that the SET has the construct to explain factors relating to counterproductive behaviors; perceptions of uncertainty, stress, and frustration do predict CWBs; and that uncertainty, stress, and frustration scores are useful in explaining variability in CWB of workers. This study examined counterproductive work behaviors using a single theory. Although many studies have applied the SET independently, other theories such as the Affective Events Theory could be added to the study to bolster the theoretical foundation (see Lyons & Scott, 2012; Matta, Erol-Korkmaz, Johnson & Bicaksiz, 2014). The Affective Events Theory, for example, could be used to explain negative affective states such as anger, hostility, and frustration that induce individuals' engaging in CWBs (Lyons & Scott, 2012).

Limitations of the Study

Self-Report Measure

The chief foundation of this quantitative research effort is the evaluation of perceived behavior by the participants in their corresponding workplace. The data was gathered using a survey method; therefore, the perceptions of behaviors reported were not by behavioral experts. Additionally, the reliance on cross-sectional, self-report methodology can be problematic, as stated in prior studies (Fox, Spector, & Miles, 2001).

Fox, Spector, and Miles (2001) stated that it is a continuous concern in

organizational research that the use of a single source of data, such as self-report questionnaires, may reflect an overstatement of relationships among variables. However, because of the arduous task of obtaining uncontaminated measures of counterproductive behavior, coupled with ethical concerns about the potential of putting participants at risk in the collection of evidence of CWB, anonymous self-reports provide the nearest available approximation of these relations (Fox et al., 2001).

As noted in a previous chapter, there are limitations to this study, including the true demographics and factors related to self-report measures. The first limitation was that the true demographics of the population in this study are unknown, this study included sample data rather than population census data, therefore the researcher was unable to determine whether the sample is representative or not. A convenience sample rather than a scientifically derived random selection of the population was used and even though the results may not be generalizable, they should indicate some potential problems and areas that need further study.

Another limitation in the current study was trustworthiness. With anonymity and confidentiality assured, participants were more prone to respond than in cases where they may not have been inclined to do so. Data collected from these questionnaires can provide data for larger confirmatory studies.

Scales

Uncertainty, stress, frustration, and counterproductive work behavior were measured using multi-item scales. Findings from analysis for the variables showed that the reliability statistics for all four scales were well within all acceptable ranges. A four-

item scale measured psychological uncertainty; a ten-item scale measured perceived stress; a three-item scale measured frustration; and a ten-item scale measured CWB (see Table 1).

Generalizability

One of the potential limitations to this study was generalizability. Specific to this study is the concern that the use of an online participation pool may not produce a general representation of the demographic population, and therefore, generalizability cannot be assumed (Brenner, 2002). According to the Bureau of Labor Statistics (2018), the current employment statistics survey data extracted on February 26, 2018, reflected that employment, hours, and earnings for U.S. workers in the motor vehicles and parts industry was 959.0 in December 2017, and 953.9 in January 2018. Each month current employment statistics (CES) national estimates are produced. This industry is not formally defined in the North American Industry (BLS, 2018). The true demographics of this population are unknown, so the researcher was unable to determine whether the sample is representative or not. A convenience sample rather than a scientifically derived random selection of the population was used. However, even though the results may not be generalizable, they should indicate some potential problems and areas that need further study.

Participant Pool

Obtaining data from an online participant pool as opposed to a single organization was identified as a potential limitation to this study. However, online surveys are consistent with methodology used in previous CWB research consisting of data collected

from employees (e.g., Cohen, Panter, & Turan, 2013). With the advent of internet sampling, participants were recruited via a developed target sampling method employed by FindParticipants.com who then invited participants according to criteria outlined by this study. Therefore, the use of an online sample was not deemed to be a limitation in this study.

Recommendations

This study adds to the empirical data that can identify factors known to be related to CWBs; however, more research is needed. Further extending our knowledge base of psychological factors that may influence workplace behaviors is important in implementing strategies that may help to minimize CWBs. This study focused on affective and behavioral responses to perceived rather than objective work environments. The variables in this study included perceived uncertainty, stress, frustration and their relationship with counterproductive work behaviors. As frustration was found to be a significant predictor of CWBs, it would be beneficial to further extend empirical studies in this area. Studies such as this one provides valuable information to organizational leadership, who can then develop more consistent and sustainable strategies designed to minimize negative occurrences (Alias, Rasdi, Ismail, & Samah, 2013).

Additionally, more research is needed that examines employee relationships and behavior at all levels in the organization. It is also recommended to not only examine factors related to CWBs, but also expand research that gathers data on variables that may lessen occurrences. Further examination of variables which promote the well-being of employees (e.g., job satisfaction, communication, empowerment, motivation,

transparency, and social support among others) would be a benefit to organizations and may help improve workplace behaviors. Employee perceptions of work environments has significant implications for both organizations and individuals (Kanten & Ülker, 2013).

Implications

The results from this study propose valuable data that can be related to positive social change in organizations and for employees. The results of this study suggest that employee perceived frustration is significantly related to CWBs. This information can be used by organizational leaders to refresh and update programs/policies and strategies that help change people's behaviors at work, and potentially change behaviors that extend from the workplace to impact families and communities.

Positive Social Change

Business leaders can facilitate positive behavior through social change mechanisms such as: motivation, opportunity, and capability (Stephan, Patterson, & Kelly, 2013). Furthermore, leaders can create opportunities, create transparency, set up empowering structures and resources, and enable individuals to change by building confidence, educating, and providing training (Stephan et al., 2013). Social change is for the most part a long-term uncertain process as previously noted; therefore, in order to be successful at achieving goals, change strategies need to set in motion sufficient funding and personnel (Stephan et al., 2013).

Stephen et al. (2013) proposed that implementing intervention strategies needs to involve timing, and steps that should be taken to create positive social change. First, organizations should prepare by building motivation, capability, and opportunity on both

the project level and the individual level (Stephan et al., 2013). Second, organizations should create change by sustaining and energizing motivation, and developing capability and opportunity (Stephan et al., 2013). Lastly, organizations should maintain behavior change by sustaining motivation to "keep" with the new behavior, and by supporting capabilities and institutionalizing opportunities (Stephan et al., 2013, p. 75).

Organizational leaders that recognize the need to take steps to better manage the emotional effects on employees, can improve the quality of the workplace environment. An area for improvement involves properly training managers on how to lessen frustration in their relationships with employees, community socialization opportunities can also have a positive effect. Leaders that invest in human capital will ultimately affect social change for the organization. The findings from this study could be beneficial to organizations, as well as to the well-being of employees their families, and the communities in which they live.

Conclusion

The purpose of understanding individual employee factors as they relate to CWBs is to provide organizations with additional insight, and the opportunity to improve employee affective behavioral responses to perceived work environments. CWBs can be costly to organizations and can also have a negative impact on employees and their families and extend into the communities in which they live. Overall, the potential for social change from the findings of this study are contingent on the support, training, and strategies organizations employ to raise awareness. Furthermore, the fair administration of policy that employees perceive as positive action can lead to a more satisfying

workplace. Organizational leaders need to be diligent in maintaining and keeping current the policies and practices that are instrumental in minimizing questionable behaviors. The results of this study demonstrated a statistically significant relationship existed between employee perceived frustration and CWBs. Organizational leaders and human resource practitioners should consider the implementation of strategies to include community resources that will work in concert to better manage employee emotions and related behaviors. Human capital is a significant resource for organizations; encompassing the knowledge, abilities, and experience of the workforce. Special consideration in this area is of the utmost importance for the success and health of organizations, as well as the health, and satisfaction of its members.

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Appendix A: Counterproductive Work Behavior Checklist

Directions: The questions in this scale ask how often you have done each of the following things on your present job?

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

Appendix B: Psychological Uncertainty Scale

Directions: The questions in this scale ask how often you have done each of the following things on your present job?

How often do you find it difficult or impossible to do your job because of?	Strongly disagree	Disagree	Disagree somewhat	Undecided	Agree somewhat	Agree	Strongly Agree
1. My work environment is changing in an unpredictable manner							
2. I am often uncertain about how to respond to change							
3. I am often unsure about the effect on change on my work unit							
4. I am often unsure how severely change will affect my work unit							

Appendix C: Perceived Stress Scale

Directions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

	Never	Almost never	Sometimes	Fairly often	Very often
1. In the last month, how often have you been upset because of something that happened unexpectedly?					
2. In the last month, how often have you felt you were unable to control the important things in your life?					
3. In the last month, how often have you felt nervous and "stressed"?					
4. In the last month, how often have you felt confident about your ability to handle your personal problems?					
5. In the last month, how often have you felt that things were going your way?					
6. In the last month, how often have you found that you could not cope with all the things you had to do?					
7. In the last month, how often have you been able to control irritations in your life?					
8. In the last month, how often have you felt that you were on top of things?					

9. In the last month, how often have you been angered because of things that were outside of your control?					
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Permission obtained from the scales' developers. Cohen, Kamarck, and Mermelstein (1983).

Appendix D : Frustration Scale

Directions: The questions in this scale ask you about job frustrations. In each case you will be asked to indicate how frustrating these experiences were for you.

Questions in this scale ask you about job frustrations	Not frustrating	A little frustrating	More than a little frustrating	Moderately frustrating	More than moderately frustrating	Very frustrating	Extremely frustrating
1. Trying to get this "job" done was very frustrating.							
2. Being frustrated comes with this "job"							
3. Overall, I experienced very little frustration on this "job"							

Appendix E: Demographic Questionnaire

Directions: Completion of the demographic questionnaire is significant for determining the influence of a variety of factors on the results of the study. These records will remain strictly anonymous. Any reports that may be published will not include any identifying information (e.g., name, address, employers' name address, etc.) of the participants in this study. Research will not link individual responses with participant's identities. Please check the appropriate line.

Gender.

_____ Male

_____ Female

Age Bracket.

_____ 18-20

_____ 21-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60 or older

Employment Status.

_____ Employed working full-time

_____ Employed working part-time

***Position in Auto Industry*.**

_____ Salesperson

_____ Service Writer

_____ Auto Technician

_____ Supervisor

_____ Manager

_____ Group Leader

_____ Other

***Tenure in that position*.**

_____ Less than 1 year

_____ 1-3 years

_____ 3-6 years

_____ 6 years or more

Race/ Ethnicity.

_____ American Indian or Alaskan Native

_____ Asian/Pacific Islander

_____ Black or African American

_____ Hispanic/Latino

_____ White/ Multiple ethnicity/Other