

TURNOVER AT THE TOP: EXAMINING CORRELATES ASSOCIATED WITH
TURNOVER INTENTIONS AMONG POLICE CHIEFS

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Joshua T. Shadwick

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by

Joshua T. Shadwick

APPROVED:

Dr. William Wells
Committee Director

Dr. Yan Zhang
Committee Member

Dr. Jason Ingram
Committee Member

Dr. William King
Committee Member

Dr. Phillip Lyons
Dean, College of Criminal Justice

DEDICATION

This dissertation is dedicated to law enforcement officers and their families, your service and scars do not go unnoticed. It is also dedicated to those that dare to dream and do, as nothing worthwhile is every accomplished by dreaming alone. Instead, accomplishments that echo across time are only achieved through equal parts grit, hard work, and personal ownership. Thus, to those that read this dedication may you never doubt yourself, rather may you champion your mind toward a cause or goal and see it through to its final success.

ABSTRACT

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Police chiefs play a pivotal role within society and operate within complex political environments. Despite their important roles within communities and agencies, however, little is known about their well-being and the reasons impacting their willingness to leave their organizations. This dearth in the literature is concerning as the President's Task Force on 21st Century Policing highlighted that officer safety and wellness involves all officers at all administrative levels.

Thus, this study examines two factors that have been examined in length within other disciplines, work-family conflict and organizational commitment, but underexplored in relation to turnover intentions among police chiefs. Therefore, this study had two purposes. First, the goal was to examine the influence work-family stressors had on turnover intentions. Secondly, the goal was to further examine the influence a three-component model of organizational commitment had on chiefs' willingness to leave their organizations. More specifically, to disentangle the influence affective, continuance, and normative commitment have on this work-related outcome. By accomplishing these tasks, the study expands on previous turnover intentions literature specific to police chiefs.

Data were collected from 249 newly appointed Texas police chiefs from varying types and sizes of police departments. Results indicated that the chiefs reported little intentions to leave their organizations and had reported moderate to high levels of affective and normative commitment. Respondents also reported having low levels of

work-family conflict. Specific to key independent variables, affective commitment and strain-based work-family conflict were found to have a significant relationship to TI.

Findings, policy implications and directions for future research are discussed.

KEY WORDS: Police chiefs; Turnover; Turnover intentions; Organizational commitment; Work-family conflict

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CHAPTER I

INTRODUCTION

Police chiefs play a pivotal role in the command and execution of organizational resources and directives (Goldstein, 1977). As a result, their actions will impact multiple facets of society, cascading into both criminal and civil matters (Goldstein, 1977; Hunt & Magenau, 1993). Thus, when agency leaders leave, it can potentially hobble organizational directives and disrupt interagency communication efforts (Orrick, 2008). Subsequently, news outlets have taken notice and documented chiefs leaving agencies (Gabriel & Burns, 2019; Garza, 2019; Ohl, 2019; Sevilla, 2018). Many of those articles include information involving police chiefs' tenure, time at the agency, and possible reason for departure. The narrative surrounding involuntary removals often involve conflicts among chiefs, external stakeholders, and governing bodies unique to a given city (e.g., mayor, council). In essence, politically-infused conflict between chiefs and city administrators has resulted in these law enforcement executives leaving against their will, which has been documented in news reports (Gabriel & Burns, 2019; Garza, 2019; Ohl, 2019; Sevilla, 2018) and scholarly publications (Li, 2016; Li & Brown, 2019; Murdaugh, 2005; Rainguet & Dodge, 2001; Tunnell & Gaines, 1992). However, less is known about voluntary turnover among police chiefs (Brady, 2017; Rainguet, 1998; Rainguet & Dodge, 2001).

By understanding the reasons why police chiefs leave voluntarily, researchers and practitioners can integrate mechanisms at particular leverage points meant to retain high-performing police chiefs. The motivation for implementing such practices is to maintain progressive directives within a law enforcement department, and to maintain positive

relationships between an agency and community stakeholders (Bratton, 2008; Goldstein, 1977; Hunt & Magenau, 1993; Michelson, 2006; Orrick, 2008). Therefore, there is a need for empirically derived knowledge surrounding voluntary turnover among these administrators because the results could inform stakeholders, educate practitioners, and enhance policing scholarship.

Central to voluntary turnover research is turnover intention, which is the conscious and deliberate willfulness to leave an organization (Brady, 2017; Griffeth & Hom, 2001; Matz., Woo, & Kim, 2014). Scholars have argued that turnover intention is a prominent feature of actual voluntary departures among employees (Griffeth & Hom, 2001; Mobley, Griffeth, Hand, & Meglino, 1979). Subsequently, prior scholarship has identified turnover intentions as the strongest predictor in actual departures (Chao & Lewis, 2012; Griffeth & Hom, 2001; Hom, Lee, Shaw, & Hausknecht, 2017; Lambert, 1999; Matz et al., 2014). For example, Chao and Lewis (2012) found turnover intentions to be significantly correlated (.70) with actual departures among a sample of federal employees. The underlining supposition being the more one thinks about leaving, the more likely they are to leave the organization (Griffeth & Hom, 2001; Meyer & Allen, 1997; Rubenstein, Eberly, Lee, & Mitchell, 2018). Thus, the ability to better understand significant factors associated with turnover intentions among police chiefs become the focus of this study.

In order to understand turnover intentions among police chiefs, there are contextual elements associated with police work that are important for developing a contextual grasp on the problem. Foremost, policing is a complex and continuously evolving occupation that presents stressors unique to the profession (Bittner, 1970;

Crank, 1998; Ingram, Terrill, & Paoline, 2018; Paoline, 2003; Muir, 1979; Moskos, 2008; Reuss-Ianni, 2011; Rubinstein, 1973; Woody, 2005). These distinctive stressors stem from the, “non-negotiable coercive force” (Bittner, 1970, p. 46), authority bestowed upon these public officials. In addition, police administrators must oversee the response to diverse community-related problems and intra-organizational issues (Brady, 2017; Goldstein, 1977, 1990; Moskos, 2008; Orrick, 2008; Rubinstein, 1973). Thus, the processes and practices deployed by an agency against criminal acts (e.g., violence and drugs), civil matters (e.g., property disputes and silver alerts), and administrative tasks (e.g., firing and internal investigations) are likely to be critiqued by other community organizations and community members.

Recent events within Texas illustrate the impact unacceptable police behavior can have on departmental policies and community relations. One example is the unjustified officer-involved shooting of Atatiana Jefferson on October 12, 2019, which resulted in the officer’s criminal indictment, strained community relations, and changed departmental patrol practices (Bates, 2019; Friedman & Douglas, 2019; Romero, 2019). Another example is the event that unfolded on August 6, 2019, when two white officers on horseback were photographed leading a handcuffed black man by a rope. This action sparked racial inequality sentiments and public outcry for the officers’ termination (Bates, 2019; Horton, 2019). Consequently, police chiefs must reassess agency policies, address demands from external stakeholders, and account for egregious officer behavior (Hunt & Magenau, 1993; Matusiak, 2016; Matusiak, King, & Maguire, 2017). Consequently, these organizational leaders face multiple work demands by serving as the

tangible link in addressing public directives, community concerns, and operational challenges.

In addition to the work demands placed on these organizational leaders, police chiefs also face pressures in their personal lives (Rainquet & Dodge, 2001). For instance, being a law enforcement executive does not make police chiefs immune to family-related obligations or personal priorities (Rainquet, 1998). Thus, it is possible to consider that strain borne from work stressors can result in conflict with family-related responsibilities. Likewise, family-related priorities may impact police chiefs' abilities to satisfy work demands (Armstrong, Atkin-Plunk, & Wells, 2015; Brady, 2017; Brady & King, 2018; Lambert, Hogan, Camp, & Ventura, 2006; Woody, 2005).

Work-family conflicts that police chiefs may encounter have, however, been rarely discussed within policing scholarship (Brady, 2017; Brady & King, 2018). The dearth of literature on the subject is concerning given the attention devoted to work-family conflict across other disciplines (Allen, Herest, Bruck, & Sutton, 2000; Boles, Howard, & Donofrio, 2001; Boyar, Maertz, Pearson, & Keough, 2003; Byron, 2005; Carlson, Kacmar, & Williams, 2000; Dierdoff & Ellington, 2008; Edwards & Rothbard, 2000; Ford, Heinen, & Langkamer, 2007; Kossek, & Ozeki, 1998; Greenhaus & Beutell, 1985). Moreover, work-family conflict researchers have argued that further investigation is warranted regarding individuals engaged in the human service industries (e.g., teaching, medical, and law-enforcement) (Jackson & Maslach, 1982). Based on research findings drawn from other public sector occupations, such as education (Burke & Greenglass, 1993; Cinamon, Rich, & Westman, 2005; Ilies, Huth, Ryan, & Dimotakis, 2015), medicine (Boamah & Laschinger, 2016; Grzywacz, Frone, Brewer, & Kovner,

2006; Montgomery, Panagopolou, & Benos, 2006), and psychology (Allen, Herst, Bruck, & Sutton, 2000; Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007; Dierdorff & Ellington, 2008), it can be surmised that work-family conflict is likely to persist among police chiefs.

The largely absent discussion of work-family conflict among police chiefs is an empirical and operational issue (Brady, 2017). Prior research has linked such conflicts to psychological and physical well-being among police officers, such as burnout (Burke, 1993, 1994) and suicidal ideation (Mikkelsen & Burke, 2004). These adverse work-related outcomes highlight that work-family conflict is related to officer well-being. Thus, there is a need to document and understand the sources and consequences of work-family conflict, and how it relates to work-related outcomes among law enforcement executives.

The need to understand well-being among police administrators is espoused by empirical discourse (Brady, 2017; Brady & King, 2018) and national discussions. The *21st Century Policing Report* represents this national dialogue as it brings to light several critical elements (i.e., pillars) that need to be addressed regarding policing effectiveness within the United States (President's Task Force on 21st Century Policing, 2015). The last pillar discussed in the report (i.e., Pillar Six), officer wellness and safety, emphasizes the need for the current study.

For example, the *21st Century Policing Report* encourages agencies to promote officer wellness at every organizational level (President's Task Force on 21st Century Policing, 2015, p. 65). Likewise, the report indicates that wellness issues impact all law enforcement professionals (President's task force on 21st century policing, 2015, p. 65).

This latter point recognizes that police chiefs are not immune to wellness problems, such as job stress, burnout, and exhaustion, as recent scholarship has documented these issues among police administrators (Brady, 2017; Brady & King, 2018). Additionally, the ability to enhance or diminish police reform efforts is mediated, in part, by police chiefs (President's Task Force on 21st Century Policing, 2015; Goldstein, 1977; Hunt & Magenau, 1993). Therefore, internal directives that impact all departmental employees' well-being rest partially on the police chief's position (Brady, 2017; Hunt & Magenau, 1993; Rainquet & Dodge, 2001; Witham & Watson, 1983).

Few studies have, however, explored factors associated with police chief well-being and work-related outcomes (Brady, 2017; Brady & King, 2018; Rainquet, 1998; Rainquet & Dodge, 2001). Early qualitative works address variation in stressors encountered by these leaders, and how these stressors impact their well-being and voluntarily departures (McIntyre, Stageberg, Repine, & Mernard, 1990; Rainquet, 1998; Rainquet & Dodge, 2001). Building on these early works, researchers started to collect and analyze quantitative data to better enumerate and identify elements associated with chiefs' work and personal lives that impacted their well-being (Brady, 2017; Brady & King, 2018).

Additionally, little attention has been directed toward factors that may reduce work and personal stressors (e.g., work-family conflict) among police chiefs (Brady, 2017; Brady & King, 2018). One potentially relevant attribute is organizational commitment, which is viewed as a force that can shape behavior and draw a person to a particular outcome (Meyer & Herscovitch, 2001). For example, research has identified the saliency organizational commitment has with decreasing turnover among other

occupations (Griffeth & Hom, 2001; Hom, Lee, Shaw, & Hausknecht, 2017; Meyer & Allen, 2007). Criminal justice research has only recently examined the influence organizational commitment has with turnover among police chiefs (Brady, 2017). Given the scant literature, more empirical focus is needed to further examine the relationship between work-family conflict and organizational commitment on turnover intentions.

The reasons for studying voluntary turnover among police chiefs are manifold. First, prior scholarship has identified that voluntary turnover can be viewed as an expression of stress and conflict one encounters in their position (Griffeth & Hom, 2001; Griffeth, Hom, & Gaertner, 2000; Hur, 2013; Mor Barak, Nissly, & Levin, 2001; Rubenstein et al., 2018). Second, a police chief's voluntary departure is concerning given their ability to foster initial and sustained changes within the department (Goldstein, 1977; Hunt & Magenau, 1993). Third, there is limited research focused on understanding key elements associated with voluntary turnover among police chiefs (Brady, 2017; McIntyre, 1990; Tunnell & Gaines, 1992; Rainguet, 1998; Rainguet & Dodge, 2001). Fourth, research has only begun to disentangle the impact work- and personal-related factors have on voluntary turnover among law enforcement executives (Brady, 2017).

Thus, there is a need to further examine voluntary turnover among these law enforcement administrators as it directly relates to their well-being, and indirectly relates to the welfare of the officers serving under their leadership. In order to understand the measure of their position within modern police agencies, the following is a discussion on the evolution of police chiefs within the United States. This particular section provides context to the historical demands and emerging challenges faced by police chiefs.

Background of the problem

Policing efforts before the 1800s were carried out by community volunteers (i.e., watchmen), and locally appointed sheriffs and constables. Watchmen informed their communities about perceived dangers, such as fires or civil unrest (Uchida, 1993; Walker & Katz, 2002). Constables were tasked with enforcing the law, maintaining order, and supervising individuals within the city watch. Sheriffs were charged with collecting taxes, conducting elections, and other civil matters (Uchida, 1993). This loose system, hinging on volunteers and appointed personnel, functioned as the police until the mid-1800s. The first centralized municipal police department was formed in Boston in 1838 (Walker & Katz, 2002). Directly following, multiple agencies emerged in other large cities (e.g., Chicago, New Orleans, and New York). By the 1880s, all major cities within the United States (U.S.) had municipal police departments (Walker & Katz, 2002). The period of time between the mid-1800s and the 1900s is commonly referred to as the Political Era in American policing (Kelling & Moore, 1988; Oliver, 2017; Uchida, 1993; Walker & Katz, 2002). The nomenclature is derived from the inordinate amount of power and influence granted to local politicians over police departments. As a result, police agencies received organizational directives from localized political parties (Oliver, 2017; Walker & Katz, 2002). During this period, police were largely unprofessional due in part to a lack of formalized leadership. As a result, organizational outputs were plagued with corruption and inefficiency (Walker & Katz, 2002). This political corruption did not go unnoticed; the 1930s marked a changing point for police agencies within the United States (Uchida, 1993; Walker & Katz, 2002).

The 1900s to the 1970s represents the Reform Era in U.S. policing (Uchida, 1993; Walker & Katz, 2002). This era addressed issues found within large municipalities. The focus was placed on reform efforts ushered in by the [1931] Wickersham Commission's *Report on Lawlessness in Law Enforcement*. The Wickersham Report addressed multiple issues plaguing law enforcement including prohibition, corruption, police brutality, and police administration (National Commission on Law Observance and Enforcement, 1931). The public advocacy presented in this report initiated a shift in power from politicians to police chiefs (Katz & Walker, 2002; Oliver, 2017). One recommendation in this report was for experienced executives to manage police agencies instead of political appointees (Uchida, 1993; Walker & Katz, 2002). Consequently, police chiefs were charged with multiple responsibilities and tasks meant to address the problems identified in the report. The late 1970s, however, marked an end to the Reform Era and denoted the beginning of a community-oriented policing model (Uchida, 1993).

The Community Policing Era from the 1970s to 2000s represents the next evolution in U.S. policing. This period addressed issues not examined in previous eras, specifically community needs and relationships (Kelling & Moore, 1988; Uchida, 1993). The primary emphasis concerned partnerships between the police and communities. The overarching idea was to build collaborative networks between agencies and communities in order to address crime- and quality-of-life-related issues. Subsequently, multiple policing strategies and perspectives emerged from this era, including *Broken Windows* (Wilson & Kelling, 1982). This shift in emphasis toward community relations and addressing minor offenses with elevated enforcement practices did not resolve all problems; instead, it seemed to cause, at times, the marginalization of communities and

its citizens (Akbar, 2015; Collins, 2007; Oberman & Johnson, 2015). The early 2000s brought an end to the Community Policing Era due to the terroristic attacks that occurred on September 11, 2001. These unforeseen acts shifted police agencies' focus from community-oriented problems (e.g., drug markets and community relations) to potential international threats (Brown, 2007; Oliver, 2006; Ortiz, Hendricks, & Sugie, 2007).

A shift in policing post 9/11 further illuminated the complexities associated with being a police chief in modern society. The problems addressed in previous eras persisted, including excessive force, unprofessional actions by officers, and corruption. These acts, however, shifted away from common occurrences to more isolated incidents. In addition to administration intricacies, law enforcement executives addressed strained relationships with community leaders, and new issues ushered in by technological advances (e.g., communication technologies and cybercrimes) (Huey, Nhan, & Broll, 2012; Marcum, Higgins, Freiburger, & Ricketts, 2010; Wall, 2007). These persistent and emergent challenges illustrate the complex demands placed upon law enforcement executives. The ability for chiefs to respond to these issues and implement solutions by linking together different individuals and institutions is not an easy task. In contrast, it requires the science of consistency with the art of humanity to be practical. This particular viewpoint echoes Rainquet & Dodge's (2001) police leadership perspective: "police administration is an art and a science that demands quality credentials, solid experience and qualifications, advanced education, and community, organizational, personal, and political skills" (p. 269). As a result, a police chief must ensure that the agency is operating effectively and efficiently while being accountable to both external

stakeholders and internal members (Goldstein, 1977; Matusiak, 2016; Matusiak et al., 2017). Primary roles of present-day police chiefs.

Police administrators are tasked with multiple roles and duties, such as managing budgets and employees (Brady, 2017; Witham, 1985; Witham & Watson, 1983). In order for law enforcement executives to be effective, they must fulfill four primary roles: diplomat-liaison, coordinator, manager of change, and initiator of interactions (Witham & Watson, 1983). As diplomat-liaisons, they must be the spokesperson for their departments, and be available to meet the internal and external needs associated with employees and stakeholders (Brady, 2017; Witham & Watson, 1983). This role implies that chiefs are expected to be managers of change where they foster an environment that welcomes improvement (Witham, 1985; Witham & Watson, 1983). Moreover, they must integrate within the various communities they serve in order to assist with advancing community relations. These organizational leaders must also ensure employee conduct is in alignment with the overall departmental mission (Witham, 1985; Witham & Watson, 1983). Likewise, administrators must be proactive with interactions and develop professional partnerships with key community stakeholders. A central theme found across the four roles is that law enforcement executives are responsible for the organization. The official accountability comes in part from the governing bodies overseeing the agency, such as city officials or city councils, who can influence the chief's tenure (Li, 2016; Li & Brown, 2019; Tunnell & Gaines, 1992). The modern-day police chief position can be stressful and challenging given the need to balance the aforementioned demands and relations. Likewise, these organizational leaders also have to balance requests and relationships found in their personal lives. Thus, these public

officials must consider issues present among front-line officers and navigate the various administrative stressors, while remaining accountable to family-related obligations. Consequently, their level of commitment to the organization is likely to interact with stressors encountered in their professional and personal lives. The ability to understand the intensity these conflicts and commitments have on police chiefs' willingness to leave the organization helps researchers and practitioners understand the complexities associated with this executive position. The next step is to provide a brief synopsis surrounding the scholarship specific to turnover among these administrators.

Turnover research with police chiefs. A minimal amount of research has been dedicated to turnover among these executive leaders (Balfe, 2015; Brady, 2017; Li, 2016; Li & Brown, 2019; McIntyre, Stageberg, Repine, & Mernard, 1990; Murdaugh, 2005; Rainquet, 1998; Rainquet & Dodge, 2001). Turnover estimates among police chiefs within the U.S., however, reveal that most leave their positions after a relatively short tenure. Studies show, on average, that a chief's tenure is less than six years (Fischer 2009; Li, 2016; Peak & Glensor, 1996; Maguire, 1993). Recent work by Fischer (2009) found that approximately 66 percent leave their position within five years, while only 12 percent serve as police chiefs for more than ten years. It is unlikely a high-performing police chief could sustain effective changes within the community or the agency, over a relatively short tenure.

Early qualitative studies examining voluntary turnover among police chiefs found job stress as a salient factor in their willingness to leave the agency (McIntyre et al., 1990; Rainquet, 1998; Rainquet & Dodge, 2001). Chiefs noted the influence work demands had on their inability to satisfy personal obligations, and how stress from the job

was negatively impacting their health (Rainguet, 1998; Rainguet & Dodge, 2001). Subsequent research examined the influence that social-political relationships had on chief turnover. This line of research found that poor relationships with external stakeholders, specifically hiring authorities and politicians, significantly influenced involuntary turnover (Li, 2016; Li & Brown, 2019; Murdaugh, 2005). These latter studies were, however, unable to significantly predict voluntary turnover.

This gap in the research did not go unnoticed, as Brady (2017) recently examined voluntary turnover among 315 Texas police chiefs. Findings revealed that greater work-family conflict and operational stressors were both significant and positively associated with turnover intentions (Brady, 2017). In addition, organizational commitment had a significant and negative relationship with turnover intentions. A limitation associated with the organizational commitment finding was the use of a global organizational commitment measure (Mowday, Steers, & Porter, 1979) instead of a multi-dimensional instrument (Jaros, 2007, 2017; Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001). Consequently, researchers were unable to interpret what particular organizational mindset was significant in reducing a chief's willingness to leave the organization. Regardless of this limitation, Brady (2017) advanced scholarship by being the first to examine turnover intentions among police chiefs. As a result, researchers uncovered areas that needed further attention and discussion. The next phase surrounding police chief turnover research is to expand upon Brady's (2017) work and address turnover intentions among police chiefs, examining the most important features regarding turnover intentions. More specifically, there is a need to examine two aspects: 1) the influence work-family conflict

and organizational commitment have on turnover intentions among police chiefs, and 2) the change in turnover intentions over time.

Purpose of the study

There are many reasons to expand scholarship on voluntary turnover among police chiefs. First, by examining significant factors related to turnover intentions, researchers will be able to better understand the critical factors that influence chiefs' well-being (Brady, 2017; President's Task Force on 21st Century Policing, 2015). Second, it is crucial to understand turnover among law enforcement executives because of the critical roles these individuals perform within police organizations and among communities (Goldstein, 1977; Hunt & Magenau, 1993; Matusiak, 2016; Matusiak et al., 2017). Hence, the limited body of knowledge about police chief well-being and turnover is concerning because research and national discussions have identified that police chiefs are critical institutional members for sustained change within their organizations (President's Task Force on 21st Century Policing, 2015; Goldstein, 1977; Hunt & Magenau, 1993). The current study is directed towards disentangling and documenting attributes associated with turnover intentions among police chiefs.

Thus, the present study serves two purposes. First, it explores the direct relationships between work-family stressors and turnover intentions. Secondly, it measures the impact organizational commitment has on turnover intentions. In accomplishing these purposes, the study expands policing scholarship and provides potential leverage points for retention mechanisms involving these executive leaders.

RESEARCH QUESTIONS

Research Question #1: What are the direct effects of work-family stressors on turnover intentions among Texas police chiefs?

Research Question #2: What are the direct effects of organizational commitment on turnover intentions among Texas police chiefs?

The following chapter provides an overview of the literature on the personal and work-related correlates associated with turnover intentions including work-family conflict and organizational commitment. Chapter three outlines the data source, variable operationalization, methodological approach, and analytic strategy applied to the study. Chapter four presents the results. Chapter five provides a discussion of the findings, practical implications drawn from this study, and possible directions for future research.

CHAPTER II

LITERATURE REVIEW

Introduction

Multiple disciplines have grappled with understanding employee turnover, including but not limited to: organizational psychology (Cotton & Tuttle, 1986; Griffeth et al., 2000; Griffeth & Hom, 2001; Meier & Hicklin, 2007; Mor Barak et al., 2001; Podsakoff, LePine, & LePine, 2007; Rubenstein et al., 2018), medicine (Boamah & Laschinger, 2016; Jansseen, Jonge, & Bakker, 1999; Hearld, Opoku-Agyeman, Kim, & Landry, 2019; Heponiemi et al., 2008; Pfeffer & O'Reilly, 1987; Weil & Kimball, 1995), and education (Gates et al., 2006; Guin, 2004; Ingersoll, 2001; Levin & Bradley, 2019; Meier & Hicklin, 2007; Smith & Ingersoll, 2004). This collective interest across scholarly disciplines is spurred by the impact turnover, both involuntary and voluntary, has on basic and advanced organizational functions (Guin, 2004; Gates et al., 2006; Ingersoll, 2008; Levin & Bradley, 2019; Orrick, 2008). In essence, turnover is a complex phenomenon, which has direct and indirect costs for organizations, organizational members, and citizens.

Researchers engaged in this line of research have argued that voluntary turnover presents additional challenges for organizations. These problems are anchored, in part, on the general notion that these events go largely unplanned by organizations (Hur, 2007, 2013; Meier & Allen, 1997; Orrick, 2002, 2008; Rubenstein et al., 2018; Weil & Kimball, 1995). Furthermore, research has advocated that one's willingness to leave an organization can be viewed as an expression of negative, work-related experiences, which inversely impact their health and wellness (Hur, 2007, 2013; Mor Barak et al.,

2001; Rubenstein et al., 2018). These potential costs may be amplified when considering voluntary turnover among individuals in leadership positions (Hur, 2007; Meyer & Allen, 1997; Orrick, 2008).

Criminal justice scholars have only recently directed their focus toward turnover among criminal justice actors. Additionally, research is relatively limited when examining turnover among police chiefs (Balfe, 2015; Brady, 2017; Hur, 2007, 2013; Li, 2016; Li & Brown, 2019; Orrick, 2002, 2008; Rainguet & Dodge, 2001; Tunnell & Gaines, 1992). Despite the limited number of studies, research has consistently revealed that police chiefs interface with multiple stressors, operate within complex environments, and often leave their positions within five years or less (Balfe, 2015; Li, 2016; Li & Brown, 2019; Tunnell & Gaines, 1992). These short periods of consistent organizational leadership are troublesome. It is additionally problematic due to the lack of understanding surrounding law enforcement executives' well-being and how that translates into their voluntary departures. Taken collectively, prior research has mostly examined key elements associated with chiefs leaving involuntarily (see Li, 2016; Li & Brown, 2019), with little attention directed toward elements associated with a chief's willingness to leave an agency (i.e., turnover intentions) (Brady, 2017).

The current study responds to the lack of empirical discourse devoted to voluntary turnover among these organizational leaders. It accomplishes this task by further disentangling and documenting components associated with turnover intentions among police chiefs. Drawn from past research (Brady, 2017), specific attention is directed toward estimating the effects of work-family conflict and organizational commitment on turnover intentions among these law enforcement executives. As a result, the following

sections unpack turnover scholarship, followed by a discussion of the current body of literature on work-family conflict and organizational commitment.

Defining turnover

Turnover occurs when an employee is no longer employed with an organization, consisting of either a voluntary (e.g., retirement) or involuntary (e.g., termination) departure (Brady, 2017; Griffeth & Hom, 2001; Hom et al., 2017; Orrick, 2008; Wilson, Dalton, Scheer, & Grammich, 2010). The first study to examine this social phenomenon was Fisher's (1917) seminal work examining turnover among factory workers. Since then much research has been completed on this topic (see Hom et al., 2017). Subsequently, empirical knowledge has expanded and allowed researchers to refine the lens used to examine turnover. For example, Hur (2013) argued that researchers need to differentiate voluntary from involuntary turnover, as failure to do so would overlook their different etiologies. In other words, the causal pathways an employee encounters when leaving the organization vary a great deal between termination and retirement.

A clear distinction between the different turnover typologies, voluntary or involuntary, provides scholars a contextual understanding of these events. Involuntary turnover can be viewed as an event that can be potentially planned and accounted for by the organization, whereas voluntary turnover can be employee-initiated and is less likely to be planned for by their employer (Hur, 2013). Moreover, voluntary turnover can be viewed as an expression by employees that they are less satisfied with their jobs, are potentially less committed to the organizations, and may signal the exiting of higher-performing organizational members (Hur, 2007, 2013; Mor Barak et al., 2001). With

these elements in mind, more attention needs to be directed toward understanding voluntary turnover.

Specific to voluntary turnover research is turnover intentions (TI), which refers to the conscious and deliberate willfulness of an employee to leave an organization (Tett & Meyer, 1993). Prior scholarship has identified TI as a robust predictor of actual turnover (Griffeth & Hom, 2001; Hom et al., 2017). Researchers have argued that more effort needs to be directed toward understanding TI, because it captures turnover-related information before an employee's departure. Therefore, it allows organizations the opportunity to enact proactive organizational retention strategies prior to employees leaving. With these working definitions of turnover in mind, the next sections cover the prevalence and consequences of turnover.

Prevalence of turnover

Turnover patterns and rates among law enforcement agencies are largely unknown, with much of the information being derived from individual agencies or statewide assessments (Brady, 2017; Doerner, 1995; Orrick, 2008; Wilson et al., 2010). However, recent studies have tapped into the Census of State and Local Law Enforcement Agencies (CSLLEA) and the Law Enforcement Management and Administrative Statistics (LEMAS), and provided a national turnover estimate ranging from 7.4% to 10.8% for law enforcement officers (Reaves, 2012; Wareham, Smith, & Lambert, 2015). These national averages are lower in comparison to turnover averages among other public service entities, such as medicine or education (Castro, Quinn, Fuller, & Barnes, 2018; Hearld et al., 2019; Heponiemi et al., 2008; NSI Nursing Solutions, 2019). For example, in the *2019 National Healthcare Retention and Registered Staff*

Report, findings indicated a 17.5% turnover rate among registered nurses specifically, and a 19.1% turnover rate for all hospital staff (NSI Nursing Solutions, 2019). Moreover, work by Hearld et al. (2019) examined turnover among hospital CEOs and found that one-quarter of all U.S. hospitals experience a change in CEOs every three to four years. Whereas on the educational front, researchers have noted a national average of 16% turnover among public school teachers (Castro et al., 2018) and 18% among principals (Levin & Bradley, 2019).

The higher turnover rates among other public service positions can, nonetheless, overshadow the importance associated with turnover occurring within police agencies. Despite the lower rates, turnover among police officers is problematic given the influential role these individuals have on fellow officers and community stakeholders (Bittner, 1970; Goldstein, 1977; Hunt & Magenau, 1993; Orrick, 2008; Rubinstein, 1973; Weisheit, Falcone, and Wells, 2005). Moreover, scholars have argued that turnover costs are substantially higher for jobs that require specialized training and where the current individual in that position holds crucial information that cannot be readily passed down to their replacements (Goldstein & Ford, 2002; Griffeth & Hom, 2001; Orrick, 2008). The police chief role embodies such a position that requires significant amounts of training, experience, and nuanced information, which cannot be readily transferred to their replacement (Hunt & Magenau, 1993; Orrick, 2008). In other words, the art and science involved with being a police chief (Rainguet & Dodge, 2001) illustrates the need to better understand law enforcement executive turnover.

Research focused on police chief turnover is still largely underdeveloped, comprised only of a handful of dissertations (Balfe, 2015; Brady, 2017; Li, 2016;

Murdaugh, 2005; Rainguet, 1998), journal articles (Brady & King, 2018; Li & Brown, 2019; Lunden, 1958; Penegor & Peak, 1992; Rainguet & Dodge, 2001; Tunnell & Gaines, 1992), and technical reports (Brady, 2018; King & Campbell, 2013; Li, 2017; McIntyre et al., 1990). From this small but growing body of literature a vague picture can be gathered regarding turnover among these organizational leaders. The first study to report tenure (Lunden, 1958) found these organizational leaders served an average of 4.3 years. Later work by Peak and Glensor (1996) echoed similar findings when they found tenure to be between 3.5 to 4.5 years among chiefs serving 12 of the 15 largest police departments in the country. In total, extant scholarship has shown that the average tenure for a law enforcement executive is relatively short (e.g., < 5 years) (Brady, 2017; Li, 2016; Li & Brown, 2019; Lunden, 1958; King & Campbell, 2013; Penegor & Peak, 1992; Maguire, 2003; Rainguet & Dodge, 2001).

Consequences of turnover

Police chief turnover is an important concern for scholars, law enforcement administrators, and community stakeholders, due to the number of direct and indirect costs associated with this process (Brady, 2017; Li, 2016; Murdaugh, 2005; Orrick, 2002, 2008; Rainguet, 1998). Direct costs can be attributed to separation, replacement, and training costs (Brady, 2017; Orrick, 2008; Rainguet & Dodge, 2001; Wareham et al., 2015). Thus, scholarship has identified direct costs associated with the selection and onboarding procedures for new officers (Orrick, 2008; Warrell, 2000). For example, personnel expenditures alone have been reported to account for nearly 90% of a police department's operating budget with an average annual outflow of \$131,000 per officer (Reaves, 2015). Likewise, tangible costs for agencies can be attributed to expenses

associated with exiting personnel (e.g., exit interviews) and onboarding practices for new officers (e.g., advertising, recruitment practices) (Orrick, 2002, 2008). The tangible costs associated with turnover are manifold (Orrick, 2002, 2008; Reaves, 2015; Warrell, 2000), and those expenses are magnified with the turnover and transitioning process associated with executive officer departures (Orrick, 2008).

Indirect costs associated with experienced personnel are more challenging to account for within an agency (Brady, 2017; Orrick, 2008; Wilson et al., 2010). An example of perceived secondary costs is the “brain drain” effect resulting in a deficiency of experience within an organization (Hur, 2007; Wilson et al., 2010). Subsequently, this organizational brain drain is speculated to impact the strength, cohesion, and decision-making process a department loses when experienced personnel leave their positions (Hur, 2007; Orrick, 2008). To further illustrate this point, *Police Recruitment and Retention for the New Millennium*, by Wilson et al. (2010), argued that maintaining an experienced workforce is important for police agencies. Wilson et al. (2010) drew upon information from the RAND Center on Quality Policing (see RAND Corporation, 2019) regarding turnover among U.S.-based police agencies. Consequently, Wilson et al. (2010) argued that indirect costs can be associated with multiple factors, such as lower morale, loss of knowledge and experience, and disruptions involving community relationships.

Quantifying indirect expenses associated with turnover have only recently started to be explored within the policing literature. For example, work by Orrick (2002, 2008), referenced in Wilson et al., (2010), represents preliminary sources directed toward calculating the indirect cost of police turnover. The potential secondary expenses were identified as a loss of productivity, loss of knowledge and experience, lower productivity,

increased workload, and lower morale (Orrick, 2008). The suggestions presented by Orrick (2002, 2008) are intuitive. However, neither of Orrick's works (2002, 2008) attempted to empirically test these indirect cost propositions.

In response to this gap in the literature, Hur (2007, 2013) examined the influence turnover had on organizational performance. For reference, Hur (2007) was the first study to examine indirect costs law enforcement agencies incur due to turnover. Hur's study accomplished this task by examining sworn officer turnover data, voluntary and involuntary, among 464 municipal police agencies, collected from the Law Enforcement Management and Administrative Statistics (LEMAS). Hur (2007) operationalized organizational performance as crime occurrence rates collected from the UCR Part-I crimes (violent and property). Findings from this study indicated that only voluntary turnover was found to be significantly correlated with organizational performance. More specifically, voluntary turnover had a positive association with both violent and property crime rates. The cross-sectional design found in these studies, however, restricted the ability to identify causality over time. Despite this limitation, Hur (2007, 2013) provided creditability for secondary costs associated with voluntary turnover.

Turnover among law enforcement executives is likely to amplify additional direct and indirect costs. The leveraged expenses are due to the integral functions these administrators perform within agencies (Hunt & Magenau, 1993; Goldstein, 1977; Matusiak, 2016; Matusiak, King, & Maguire, 2017; Rainguet & Dodge, 2001). Likewise, given their position within the agency it can be assumed these individuals can also influence officer morale (Orrick, 2008). Therefore, the transitioning of police chiefs can represent stagnation in organizational directives and officer morale.

A potential method of maintaining employee morale while retaining fidelity to agency goals across multiple police chiefs is through succession planning (Bratton, 2008; Ip & Jacobs, 2006). Succession planning is the process through which organizations plan for the future transfer of top management or leadership responsibilities (Ip & Jacobs, 2006). Business and medical research view succession planning as an essential, proactive strategy meant to identify and develop candidates to assume key leadership roles in the future (Carriere et al., 2009; Griffith, 2012; Ip & Jacobs, 2006; Mendenhall & Oddou, 1991; Trepanier & Crenshaw, 2013). Referencing Griffith (2012), a significant challenge facing every organization is how to sustain leadership capital as executives transition in and out of the position. Moreover, due to the complex operations found within business, medical, and law enforcement organizations, a critical element to consider is how to maintain effective relationships with stakeholders (internal and external) and how to maintain optimal organizational outputs over time.

Despite the importance associated with this administrative process, applying a succession plan within police agencies has rarely been discussed within policing literature (Bratton, 2008; Michelson, 2006). For example, Michelson (2006) notes that few law enforcement administrators develop succession plans. Instead, they leave the responsibility to the human resource department to select and integrate new individuals into the leadership position (Michelson, 2006). Likewise, Bratton (2008) argued that a salient priority for a police chief is to develop a succession plan to maintain continuity across departmental missions and goals. Embedded within the succession plan is the need to identify, train, and mentor potential replacements (Bratton, 2008). A more robust discussion of succession planning is included in the discussion section.

Turnover research specific to police chiefs

The earliest work, by Lunden (1958) in the mid-1950's, examined tenure and reasons associated with organizational departures among 407 Iowa police chiefs. Lunden (1958) argued that short tenure among police chiefs is concerning for police agencies and their communities. This concern stemmed from "the constant and rapid changes in chiefs of police [that] create a certain lack of uniformity and continuity in law enforcement" (Lunden 1958, p. 178). Results indicated that, on average, tenure as police chief was a little over four years on average. In addition, changes in city administration, followed by resignation and retirement, were the most common responses associated with turnover (Lunden, 1958).

Later scholarship examining turnover among police chiefs, conducted about 30 years after Lunden's research (1958), started to explore the pathways one takes to become a police chief and the relationship it has with tenure (Enter, 1986; Penegor & Peak, 1992). Enter's (1986) work examined the impact various career typologies (i.e., ultimate outsiders, outsiders, and insiders) had on an individual's tenure as police chief. For clarification, ultimate outsiders were conceptualized as individuals who became chief with no law enforcement experience; instead, they worked in an unrelated occupation and were hired directly into the leadership role. Conversely, outsiders and insiders were individuals who had law enforcement experience. Insiders were selected from inside the agency and promoted to police chief. Outsiders were individuals who had experience in other law enforcement agencies and were hired externally for the police chief position. Findings from this study found that insiders had the longest average tenure (6.5 years) followed by outsiders (5.4 years) and ultimate outsiders (4.0 years) (Enter, 1986).

Subsequently, Penegor and Peak (1992) compared variations between internal and external hires for police chiefs. They examined tenure, age, salary, educational level, and agency size among a sample of 122 police chiefs (Penegor & Peak, 1992). Results indicated that education was the only significant variable, showing that externally hired police chiefs on average had higher levels of education in comparison to their internally hired colleagues. The authors also noted a slightly longer tenure for internal (7.3 years) vs. external (5.9 years) hires, patterns similar to those Enter (1986) identified. These works highlight the attention devoted to understanding potential differences between internally and externally selected leaders. However, a limitation associated with these studies is the lack of discussions focused on possible reasons internally hired police chiefs averaged longer tenure. One can speculate based on subsequent literature that internally hired chiefs (i.e., promoted) are likely to be more in-tune with the local politics influencing their tenure (Li, 2016; Li & Brown, 2019; McIntyre et al., 1990; Tunnell & Gaines, 1992). In summary, local police chiefs have a greater likelihood to possess a more nuanced view and understanding of local governing bodies and influential stakeholders.

McIntyre et al. (1990) studied the reasons police officers (line-level and supervisor) resigned in Vermont, the first study to focus specifically on voluntary turnover. They found that line-level officers mostly left their agencies for better benefits (salary, retirement, etc.) offered by another employer, or a lack of advancement opportunities at the current department. McIntyre et al. (1990) were able to glean, from a sample of police chiefs (n =3), the reasons why police chiefs left their positions. Three primary themes emerged as significant reasons why the police chiefs left their agencies:

problems with the community (politics), the job (excessive workload), and the justice system (plea bargaining) (McIntyre et al., 1990). This information shows the adverse effect work-related pressures had on voluntary departures among law enforcement executives.

The importance of politics that McIntyre et al. (1990) identified aligns with Tunnell and Gaines (1992) work surrounding political pressures on police executives. In this particular study, they collected surveys from 115 Kentucky police chiefs. They asked these institutional leaders about the perceived pressures they encountered from the mayor, city council members, local business leaders, and state politicians. Tunnell and Gaines (1992) also inquired about their predecessors' departure. Responses indicated little pressure was directed toward them by state representatives. Conversely, most perceived pressures originated from the local governing body (e.g., the mayor or city council). Also, the most prominent reasons previous chiefs left their departments were due to personal reasons, termination by local governing bodies, or resignation based on political pressures. Subsequently, they found a mild inverse relationship between tenure and political pressures (Tunnell & Gaines, 1992). Tunnell and Gaines (1992), along with McIntyre et al. (1990), acknowledged the governmental and political stressors police chiefs encounter and how those pressures influence turnover.

Politics and personal issues remained as significant themes for qualitative work by Rainguet and Dodge (2001). This particular study is derived from Rainguet's (1998) qualitative-based (i.e., case studies) dissertation on turnover among police chiefs (n = 10). Rainguet and Dodge examined the responses given for reasons associated with turnover (Rainguet & Dodge, 2001). One theme that emerged was the influential impact of

political pressures, specifically a lack of support from local leadership, which affected a chief's willingness to leave the organization. Another theme was health and family well-being (Rainguet & Dodge, 2001). More specifically, chiefs in the study drew attention to conflicts between work obligations and family-related responsibilities as a significant reason for them leaving the organization.

In response to Rainguet and Dodge (2001), Murdaugh's (2005) dissertation on turnover among police chiefs further examined the influence political pressures had on involuntary turnover. More specifically, Murdaugh's study used a quantitative approach and a sample of 178 police chiefs to understand the saliency politics had on turnover. It accomplished this task by asking police chiefs about their predecessors' relationship with external stakeholders and the reason for their departure (voluntary or involuntary). Results indicated that the relationships among hiring authorities (governing bodies), media, and employees were significantly related to involuntary turnover (Murdaugh, 2005). In other words, the socio-political environment police chiefs operate within is crucial in predicting involuntary turnover.

Li (2016) and Li and Brown (2019), build from prior scholarship examining turnover among law enforcement executives (McIntyre et al., 1990; Murdaugh, 2005; Rainguet, 1998; Rainguet & Dodge, 2001; Tunnel & Gaines, 1992). These studies examined how the following factors influenced police chief turnover: social relationships with external stakeholders (Li, 2016) and organizational performance (Li & Brown, 2019). Li's (2016) dissertation focused on the political and social relationships involving the previous chief and the reason for their departure from the agency. Specifically, chiefs were asked about the former chief's departure (voluntary- or involuntary-related),

relationship with external stakeholders, and their relationship and performance with employees. Findings from Li (2016) reaffirmed that the chief's social relationship had a significant and negative effect on involuntary turnover. Hence, police chiefs who operated with greater political and social friction were more likely to leave involuntarily (Li, 2016). Moreover, using data from Li (2016), Li and Brown (2019) found that chiefs who viewed their predecessor as having lower-perceived leadership and departmental performance were more likely to depart involuntarily (Li & Brown, 2019). It can be surmised from these studies that police chiefs are more inclined to be removed from their position if they lacked abilities to navigate one's political environment, and/or lacked abilities to effectively manage the people and processes associated with leading their agencies (Li, 2016; Li & Brown, 2019; Murdaugh, 2003).

A large portion of the prior research examining turnover among law enforcement executives was done retroactively. Put simply, researchers examined turnover (voluntary and involuntary) among previous chiefs through the incumbent chief's perceptions (Li, 2016; Li & Brown, 2019; Murdaugh, 2005). This peer-evaluation survey approach (Li & Brown, 2019; Murdaugh, 2005) established links between political pressures and organizational performance on involuntary turnover. It did not, however, fully explain voluntary turnover among police chiefs. This inability to examine one's willingness to leave an organization is concerning given the additional costs associated with voluntary turnover, which impact organizations, external stakeholders, and current employees (Hur, 2007, 2013; Orrick, 2002, 2008). In addition, voluntary turnover may be an indicator of officer well-being in terms of work.

Recent work by Brady (2017) addressed this gap in the literature by studying, for the first time, Turnover Intention (TI) among current law enforcement executives. Brady (2017) collected data from a sample of 316 Texas police chiefs and examined the influence of demographics, operational (e.g., work-family conflict), and organizational characteristics (e.g., organizational commitment), on TI. In essence, it assessed the precursors associated with TI among law enforcement executives (Brady, 2017).

Brady (2017) found significant relationships among personal, operational, and organizational characteristics. More specifically, findings indicated that personal characteristics, such as age and race alone had little explanatory power. However, the inclusion of operational characteristics with personal variables explained 24.1% of the variation in TI (Brady, 2017). Likewise, the addition of organizational characteristics, along with personal and operational variables, enhanced the overall model strength and contextual understanding. The full model revealed that personal characteristics, being married, and supervisory tenure were significant. Notably, chiefs who were married were marginally less likely to rate higher on TI, and chiefs with more supervisory experience were significantly more likely to consider leaving the organization. Regarding operational characteristics, strain-based work-family conflict and job stress were found to be significant and positively related to TI. Conversely, organizational commitment was found to have a significant and inverse relationship with TI (Brady, 2017). These findings, overall, align with prior TI scholarship among criminal justice actors (see Matz et al., 2014).

As with all policing scholarship, Brady's (2017) study had limitations. First, this study did not examine all types of work-family conflict dimensions, as behavior-based

work-family conflict was omitted (Brady, 2017). A more in-depth discussion surrounding work-family conflict items will be discussed later. However, it can be surmised from prior literature (Lambert, 2006) that behavior-based work-family conflict has been linked to TI among criminal justice stakeholders. Secondly, Brady (2017) examined organizational commitment through a global measure versus a more nuanced multidimensional measure (Jaros, 2017; Meyer & Allen, 1991). The use of a global measure is a limiting feature, because scholars argue that organizational commitment is multifaceted and is comprised of multiple factors (Jaros, 2007, 2017; Meyer & Allen, 1991, 1997). The ability to extricate these various commitment areas (emotional, financial, and moral obligations) surrounding the organization is critical in understanding how they impact organizational-based outcomes (Griffeth & Hom, 2001; Jaros, 2017; Meyer & Allen, 1997).

Only recently has research started to examine TI among police chiefs (Brady, 2017). Although extensive, Brady (2017) represents the only study to address this work-related outcome among law enforcement executives. The next step in enhancing scholarship is to identify and isolate significant relationships among demographic, operational (e.g., work-family conflict), and organizational (e.g., organizational commitment) factors associated with TI. In order to construct a robust perspective, inferences must be drawn from criminal justice literature, specifically research directed toward TI among other criminal justice actors. By focusing on the unique stressors and tangentially relatable working environments shared among these various actors, researchers can better understand key elements and relationships salient to TI among police chiefs.

Turnover intentions research among all criminal justice actors

A summary of findings involving TI among criminal justice stakeholders is found in Table 1. These include both police- (Adams & Buck, 2010; Bowman, 2009; Burke, 1988; Frost, 2006; Rivera, 2011; Sachau, Gertz, Matsch, Palmer, & Englert, 2012) and corrections-based studies (Lambert, 1999, 2006, 2010; Lambert & Paoline, 2010; Lee, Joo, & Johnson, 2009; Lee, Phelps, & Beto, 2009a; Leonardi & Frew, 1991; Matz, Woo, & Kim, 2013; Slate & Vogel, 1997; Simmons, Cochran, & Blount, 1997; Udechkwu, 2006). To date, no studies have examined TI among court personnel. Furthermore, only U.S.-based studies examining TI will be discussed. The reason for excluding internationally based studies was to remove any artifact in the results that might be attributed to social or cultural norm variation between U.S. and international samples.

Table 1.

Correlates and Directional Associations with Turnover Intentions among Criminal Justice Personnel

Variables	Turnover Intentions		
	(+)	(-)	N.S. /Other
Age		X	X
Sex	X	X	X
Race	X		X
Education	X	X	X
Married		X	X
Tenure	X	X	X
Job Stress	X		

Variables	(+)	(-)	N.S. /Other
Work-Family Conflict	X		
Family-Work Conflict			X
Organizational Size			X
Collegial Support			X
Organizational Commitment		X	

TI research has only recently started to emerge in criminal justice. The first study to address this work-related outcome was Leonard and Frew (1991), which examined TI among 35 probation officers. Since this study, samples have ranged from small (30-50) (Leonard & Frew, 1991; Rivera, 2011) to larger samples (>1,000) (Lambert, 1999; Sachau et al., 2012). Following suit, the items used within these studies have also ranged from a few variables (Bowman, 2008; Leonard & Frew, 1991) to a more exhaustive set of predictor variables (Brady, 2017; Lambert, 1999, 2006; Lambert & Paoline, 2010). The following section details the findings for specific variables used within criminal justice research to predict TI. Following the TI findings will be an in-depth discussion of job stress (i.e., work-family conflict) and organizational commitment.

Personal characteristics

In general, personal characteristics have had little or no significant effect on TI among criminal justice stakeholders (Brady, 2017; Lambert, 1999; Lee et al., 2009; Simmons et al., 1997). The lack of explanatory power associated with an individuals' age or other demographics is not isolated to criminal justice research, rather these findings mirror the larger turnover scholarship (Hom et al., 2017; Mor Barak et al., 2001;

Podsakoff et al., 2007; Rubenstein et al., 2018). The following section explains the findings associated with demographic characteristics in relation to TI among criminal justice stakeholders.

Age

Prior scholarship has either found a negative relationship (Adams & Buck, 2010; Lambert, 1999; Lambert & Hogan, 2009; Simmons et al., 1997) or a non-significant relationship (Brady, 2017; Frost, 2006; Lambert, 2006; Lambert & Paoline, 2010) between age and TI among criminal justice stakeholders. The research revealed a negative relationship, indicating that older employees are less likely to leave an organization. Lambert (1999) speculated a sunken cost perspective, which implied that individuals are less likely to leave the agency due to the perceived assets associated with organizational tenure and the expected costs associated with leaving the organization. This perspective and the overall findings are intuitive because it can be assumed that older individuals have more investments and social ties (e.g., homeownership, children) that are tied to a particular institution compared to their younger coworkers. The core idea being that these additional ties make it less conducive for older employees to leave an organization in comparison to their younger colleagues.

Sex

Research examining TI among male and female criminal justice stakeholders has mainly found non-significant results (Adams & Buck, 2010; Brady, 2017; Frost, 2006; Lambert, 2010; Lambert & Paoline, 2010; Lambert & Hogan, 2009; Lee et al., 2009; Simmons et al., 1997). This trend also translates into police officer samples (Adams & Buck, 2010; Bowman, 2009; Frost, 2006; Rivera, 2011). This pattern may be attributed to

the relatively low female representation within law enforcement, where nationally, females account for approximately 12% of full-time law enforcement and 3% of police chiefs (Brady, 2017; Reaves, 2015). For example, Brady (2017) examined TI among police chiefs but was unable to decipher the impact gender had on TI due to the relatively small sample size ($n = 10$). Studies that have examined correctional officer samples produced mixed results. Lambert (1999), drawing from a large number of female respondents ($n = 436$), found that women were less likely to engage in TI. While Lambert (2006), using a smaller sample of females ($n = 65$), found that female employees, on average, were more likely to express a desire to leave. Further research and larger sample sizes are warranted to thoroughly examine significant TI differences between men and women, across different criminal justice work contexts.

Race

Research has primarily shown that race and ethnicity are non-significant in predicting TI (Brady, 2017; Lambert, 2006, 2010; Lambert & Hogan, 2009; Lambert & Paoline, 2010; Lee et al., 2009; Matz et al., 2013; Simmons et al., 1997). One study (Lambert, 1999), however, found a significant difference between white and non-white employees. More specifically, Lambert (1999), using a large sample of non-white employees ($n = 424$), found that non-white federal correctional staff were more likely to express higher TI than their white counterparts. Much remains to be examined regarding the influence race and ethnicity have on one's willingness to leave an organization. One element hampering the advancement of race-based research is the under-representation of individuals of color within police agencies (Brady, 2017; Reaves, 2015).

Education

Prior research has found mixed results regarding education and TI among criminal justice stakeholders. For example, studies have found that individuals with higher educational attainment were more likely to exhibit TI (Lambert, 2006; Lambert & Paoline, 2010; Simmons et al., 1997). However, other studies have found no significant relationship (Brady, 2017; Lambert, 2006, 2010; Lambert & Hogan, 2009; Lambert & Paoline, 2010; Matz et al., 2013; Simmons et al., 1997). Specific to policing, education has also produced mixed results (Adams & Buck, 2010; Bowman, 2009; Brady, 2017; Frost, 2006). For example, Frost (2006) examined TI among sworn and non-sworn personnel within a federal law enforcement agency and found a significant negative relationship between education and TI. Scholarship focused specifically on police chiefs (Brady, 2017), however, found no significant relationship between educational level and TI.

Marital status

Research has generally found marital status to be non-significant in predicting TI among criminal justice stakeholders (Lee et al., 2009; Simmons et al., 1997). Lee et al. (2009) examined TI among a sample of federal probation officers and found no significant relationship between being married and TI. Their findings mirror prior work by Simmons et al. (1997), who examined TI among Florida-based probation officers. Recent work by Brady (2017), however, found a marginally significant (.10) inverse relationship with marital status and TI among 316 Texas police chiefs. In other words, married police chiefs were less likely to consider leaving than their single counterparts. Brady (2017) provides a starting point for understanding the influential impact of

marriage on a chief's willingness to leave an organization. Much remains to be examined regarding the influence social ties, such as marriage, have on TI.

Tenure

Tenure has received mixed support from scholars examining TI among police and corrections staff. Prior scholarship (see Frost, 2006; Lambert, 2010; Lambert & Hogan, 2009) has found tenure to be non-significant, while other scholarship (see Brady, 2017; Lambert, 1999; Lambert & Paoline, 2010; Lee et al., 2009) has found tenure to be significant. To illustrate this point, using a sample of 191 federal probation officers, Lee et al. (2009) found a significant positive relationship with tenure at the current department. Whereas, other researchers (see Lambert, 1999, 2006; Lambert & Paoline, 2010) found a significant inverse relationship between a person's time at the department and their willingness to leave. These mixed findings indicate there is more to a person's tenure in relation to TI. As an example, Brady (2017) found that time at the department and time as chief was non-significant; however, the length of time spent as a supervisor was significant and positively related to TI among police chiefs. Further research is needed to understand how this trend in tenure holds across police chief samples.

Organizational size

Organizational size has been a well-documented predictor for organizational-based outcomes within policing (see Maguire, 2003). The idea surrounding organizational size is that larger organizations have greater labor and leadership diversification. This diversification is suspected to insulate the chief from patrol duties, so they can focus on administrative tasks. However, organizational size has rarely been used to examine TI among criminal justice professionals (Brady, 2017). Results from

Brady (2017) found that organizational size was non-significant regarding TI among police chiefs. Given the sparse scholarship regarding organizational size and TI, more research is needed to understand the influence it has on turnover among criminal justice leaders.

Collegial support

Prior meta-analytic studies among public service professionals found a negative relationship between collegial support and turnover (Mor Barak et al., 2001). The importance associated with support from fellow officers aligns with qualitative research examining the occupational roles of police officers (Moskos, 2008; Rubinstein, 1973). Collegial support is the ability to communicate with peers and supervisors concerning daily interactions (Brady, 2017; Mor Bark et al., 2001). Only recently has collegial support been examined among criminal justice professionals (Brady, 2017). Brady (2017) examined the impact collegial support had on TI among 316 police chiefs. Findings from this study found that collegial support had a non-significant impact on a chief's willingness to leave the department. Given the mixed findings surrounding collegial support on turnover (Brady, 2017; Mor Barak et al., 2001), more research is needed regarding collegial support within turnover scholarship.

Job Stress

Research focused on job stress and TI has received empirical support. Scholarship has found a positive association between job stress and TI, meaning as job stress increases so does the likelihood the individual will have higher TI (Brady, 2017; Lambert, 1999, 2006; Lambert & Paoline, 2010; Simmons et al., 1997). When examining job stress among police chiefs, Brady (2017) found that stress, specifically operational

factors, were significantly related to a chief's willingness to leave the department. Items captured within operational factors included, for example, excessive administrative duties, constant changes in policy/legislation, staff shortages, and bureaucratic red tape (Brady, 2017). It should be noted that Brady's (2017) findings concur with earlier voluntary turnover findings (see McIntyre et al., 1990; Rainguet, 1998; Rainguet & Dodge, 2001), which identified a common theme associated with job-related stressors and chiefs selecting to leave organizations. A more in-depth discussion is warranted given the salient nature of work-related stressor in relation to TI.

The following section details research regarding work-family conflict. One reason for this focused effort is based on the *21st Century Policing Report* and its attention to police officer well-being. By evaluating work-family conflict, we start to identify components that influence a chief's well-being and work-related outcomes.

Defining Work-Family Conflict

Work-family conflict (WFC) stressors involve pressures emerging from incongruences between an individual's professional and personal life roles (Allen et al., 2000; Brady, 2017; Greenhaus & Beutell, 1985; Lambert et al., 2010; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Netemeyer, Boles, & McMurrin, 1996; Nohe, Meier, Sonntag, & Michael, 2015; Sachau et al., 2012). Research has argued that there are multiple forms of conflict, some of which have sub-types. More specifically, WFC starts at work and cascades into private matters and family-work conflict implies personal obligations interfere with professional responsibilities (Netemeyer et al., 1996). The underlining supposition is that work can interfere with family responsibilities (WFC) and

family can interfere with work obligations (FWC) (Frone, Yardley, & Markel, 1997; Lambert, 2006; Netemeyer et al., 1996; Nohe et al., 2015).

Research surrounding WFC can be traced back to Kahn et al.'s (1964) work examining organizational stress, which focused specifically on exploring role conflict that arises across multiple occupations. More specifically, they sampled 725 individuals who represented multiple professions (e.g., clerical, manufacturing, etc.). Kahn et al.'s (1964) seminal work focused on the long-term conflicts that arise within the intersection of work and family roles. Results from their study found a significant portion of their respondents, regardless of their occupations, indicated inter-role conflict as a significant source of strain. Subsequently, work by Kahn et al. (1964) laid the foundation for future WFC scholarship.

Greenhaus and Beutell (1985) expanded upon WFC research by arguing that conflict mostly arises around four main dimensions: time-based, strain-based, behavior-based, and family-work related. Greenhaus & Beutell (1985) noted that time-based conflict transpires when the amount of time devoted to work impedes on the performance of family responsibilities. Strain-based conflict follows when strain created by work interferes with one's personal responsibilities. Behavior-based conflict occurs when specific behaviors required or practiced within one role make it difficult to fulfill requirements within another (Greenhaus & Beutell, 1985). An example associated with behavior-based WFC is the suspicious and questioning behaviors associated with work duties being incompatible when used during interactions with family members (Armstrong et al., 2015; Conover, 2010; Johnson, Todd, & Subramanian, 2005; Lambert et al., 2010; Moskos, 2008). The last element stressed by Greenhaus and Beutell (1985)

was the influence family-related roles had on a person's professional responsibilities. Thus, family-work conflict (FWC) implies that time devoted to family responsibilities impacts an individual's ability to satisfy work obligations (Greenhaus & Beutell, 1985; Netemeyer et al., 1996).

Consequently, Greenhaus and Beutell (1985) expanded upon WFC when they reasoned that WFC is comprised of multiple conflict forms. Greenhaus and Beutell advocated for a move away from single measures, such as "your job and your family life interfere with each other," used in prior WFC research (Rice, Frone, & McFarlin, 1992, p. 161). Furthermore, Greenhaus and Beutell (1985) highlighted the need to understand stressor directionality and the significance associated with that form of role conflict.

Netemeyer et al. (1996) responded to this gap in the research and contended that WFC and FWC conflict are two different constructs and thus, should be measured separately. Netemeyer et al. (1996) argued that WFC is a form of inter-role conflict where the general demands of a job interfere with personal obligations, whereas, FWC involves family-related responsibilities interfering with professional obligations (Netemeyer et al., 1996). As such, work-related stress can permeate a person's home life. Alternatively, personal matters can influence a person's effectiveness within the workplace. Moreover, researchers asking about work and family stressors need to decipher stressor directionality to better understand the influence they have on work-related outcomes.

Netemeyer et al. (1996) developed and validated self-reported scales for WFC and FWC through multi-occupational samples (Netemeyer et al., 1996). The samples included educators and administrators, business owners, and real estate agents.

Respondents were asked a series of questions tapping into job demands impacting family life, such as “the demands of my work interfere with my home and family life” (Netemeyer et al., 1996, p. 410). Moreover, some items tapped into family life demands interfering with work-related activities: “demands of my family or spouse/partner interfere with work-related activities” (Netemeyer et al., 1996, p. 410). As a result, Netemeyer et al. (1996) identified a five-item scale associated with WFC and a five-item scale capturing FWC, with average alpha values of .88 for WFC and .86 for FWC across the samples. A limitation, however, with Netemeyer et al. (1986) was the inability to examine specific WFC dimensions (e.g., time, behavior, and strain) (Greenhaus & Beutell, 1985), rather, the study validated the operationalization of WFC and FWC as two different constructs (Netemeyer et al., 1996).

Despite the limitation, Netemeyer et al. (1996) illuminated the utility for researchers to understand and differentiate stressors emanating from work- or family-related matters. The main idea being presented by Netemeyer et al. (1996) was for scholars to discern where stressors originated, rather than aggregating the stressors together (Rice et al., 1992). In sum, WFC items decipher demands associated with work obligations impacting family duties, activities, or responsibilities. FWC items examine familial demands interfering with work-related activities. As a result, scholars have argued that to properly understand WFC, refined measures must be used to capture directionality (i.e., WFC or FWC) and dimensionality (i.e., time, behavior, resource) (Casper et al., 2007; Lambert et al., 2006; Netemeyer et al., 1996). The following section details how scholars have wrestled with the process of measuring WFC and FWC.

Work-Family Conflict Measurement

Overall, WFC measures have varied greatly over time (Netemeyer et al., 1996). Past measurement efforts have ranged from single-item measures (Rice et al., 1982) to 50-item measures (Burke, 1979). Likewise, studies have also blurred work- and family-related items into a single measure (Burke et al., 1979; Cooke & Rousseau, 1984; Thomas & Ganster, 1995). This melding process, in turn, obscures researchers' ability to fully understand directionality involving work- and family-related role stressors (Greenhaus & Beutell, 1985; Netemeyer et al., 1996). The inability to decipher the direction or degree one particular role plays on job-related outcomes limits potential inferences.

The following discussion will address how WFC has been examined and measured within criminal justice research. This discipline specific focus is not meant to discredit other fields of research, it is meant to explain the progression made regarding WFC within criminal justice scholarship. Burke et al.'s (1979) study was the first to examine WFC among criminal justice stakeholders. The researchers sampled 85 Canadian correctional facility administrators and their spouses. More specifically, the administrators' spouses were asked about the degree to which they saw their spouses' current job impacting their family and home life (Burke et al., 1979). Responses were captured through a summation of 50 items (rated on a five-point Likert style scale) that assessed ten potential areas that were negatively impacted (e.g., requirement to relocate, mental and physical state at home, etc.) (Burke et al., 1979). Inferences drawn from this particular measurement are limited because Burke et al. (1979) did not report any item reliability information. Despite this limitation, the ability to examine WFC through the spouse's perception provided researchers a unique lens to examine this stressor.

Later research by Burke (1988) assessed the influence WFC had on TI among 828 Canadian police officers. This study is one of the first to examine the effect of WFC on TI among police officers. As a result, they found a positive relationship between WFC and TI. In order to arrive at that conclusion, Burke's (1988) findings were based on 43 items that tapped into nine areas of personal, home, and family life (e.g., reduced social life, relationship with children, etc.) (Burke, 1988). These items were adapted from Burke et al.'s (1979) earlier work involving correctional administrators. Burke's results (1988) indicated sufficient reliability with an alpha value of .92. Although cumbersome, Burke (1988) provided a basic platform for how WFC was initially measured in criminal justice scholarship and applied toward TI. Burke's (1988) measure, however, suffered from the inability to tease apart and analyze if stressors emanated from work or personal matters.

Building on past research limitations, Boles et al. (2001) addressed directionality and measurement concerns when they examined the impact WFC had on work satisfaction among 144 probation and parole officers. They accomplished this by using Netemeyer et al.'s (1996) WFC instrument. More specifically, WFC was measured through ten (seven-point Likert style) items that tapped into WFC- and FWC-related stressors. Results indicated adequate reliability for both WFC ($\alpha = .94$) and FWC ($\alpha = .82$) measures. A limitation associated with this study was the inability to examine specific dimensions within WFC (i.e., time-based, strain-based, and behavior-based) (Greenhaus & Beutell, 1985).

Work by Lambert et al. (2004) addressed the dimensionality concern when they examined WFC stressors among criminal justice stakeholders. To accomplish this task, they surveyed 272 correctional staff employed at a high-security state correctional

institution in the Midwest. WFC dimensions were assessed through 14 items adapted from previous studies examining WFC among non-criminal justice actors (Bacharach et al., 1991; Higgins & Duxbury, 1992). A factor analysis was conducted on the 14 items revealed four factors from the responses: FWC, WFC strain-based conflict, WFC time-based conflict, and harm from WFC.

Focusing on the construct of harm from WFC, Lambert et al. (2004) noted that no questions explicitly asked about behaviors. However, they were able to identify negative impacts occurring from work creeping into their personal lives. Items within this dimension included: “Work makes me too tired or irritable to fully enjoy my family and/or social life” or “I find that I frequently bring home problems from work.” (Lambert et al., 2004, p. 157). A measurement limitation associated with Lambert et al. (2004) was the lack of discussion involving reliability among the various dimensions, as the alpha values were not reported on the four dimensions. Also, the vague wording found within the harm and conflict dimension creates limited inferences for researchers to reexamine this WFC component.

Later work by Lambert et al. (2006, 2010) examined the impact WFC had on job stress, organizational commitment (Lambert et al., 2006), and burnout (Lambert et al., 2010) among 160 correctional staff members. In these studies, WFC-related items were adapted from prior studies (Bacharach et al., 1991; Carlson et al., 2000; Frone et al., 1992; Triplett et al., 1999). More specifically, 26 items (rated on a five-point Likert scale) were used to tap into WFC-related stressors. Subsequently, four dimensions were identified through confirmatory factor analysis: time-based WFC, strain-based WFC, behavior-based WFC, and FWC with each being a summated index (Lambert et al., 2006,

2010). Time-based WFC involved seven items ($\alpha = .84$); for example, “My time off from work does not really match other family members’ schedules and/or my social needs” (Lambert et al., 2006, p. 386). Strain-based WFC was captured through 11 items ($\alpha = .93$), such as: “I find that I frequently bring home problems from work” (Lambert et al., 2006, p. 386). Behavior-based WFC involved three items ($\alpha = .60$), such as: “The behaviors I learned at work do not help me to be a better parent, spouse, friend and so forth” (Lambert et al., 2006 p. 386). FWC was identified through five items ($\alpha = .71$) that examined how personal matters interfered with work-related goals. For example, one of the family-related items was: “Due to stress at home, I am often preoccupied with family matters at work” (Lambert et al., 2006 p. 387).

Lambert (2004) responded to the call for reduced and refined measurement assessment within WFC and FWC research within criminal justice scholarship. These refined measures, adapted from prior studies (Bacharach et al., 1991; Carlson et al., 2000; Frone et al., 1992; Triplett et al., 1999), laid the foundation for later research examining the influence WFC had on job-related outcomes (Armstrong et al., 2015; Brady, 2017; Lambert et al., 2006, 2010). For example, Armstrong et al. (2015) examined the influence WFC had on job satisfaction among 441 correctional officers across 13 different adult prison facilities. In this particular study, they used 23 items from Lambert et al.’s previous works (Lambert et al., 2004, 2006). Armstrong et al. (2015) noted four factors emerging from the responses, which were validated through confirmatory factor analyses. These themes were: FWC ($\alpha = .78$); WFC time-based ($\alpha = .77$); WFC strain-based ($\alpha = .86$); and WFC behavior-based ($\alpha = .89$). Armstrong et al. (2015), along with Lambert et

al. (2004, 2006, 2010), illustrate that WFC among criminal justice stakeholders is multidimensional.

Recent scholarship by Brady (2017) expanded WFC research to include law enforcement executives. More specifically, Brady (2017) analyzed the influence WFC (i.e., time- and strain-based) and FWC had on TI among police chiefs. Similar to Lambert et al. (2006, 2010), each index was a summative scale. FWC was operationalized using five-items ($\alpha = .795$), such as “My family and/or social life interfere with my job” (Brady, 2017 p. 82). Strain-based WFC was constructed using nine items ($\alpha = .87$), such as “My family/friends express unhappiness about the time I spend at work” (Brady, 2017 p. 84). Time-based WFC was comprised of six items ($\alpha = .89$) directed toward time or scheduling conflicts, such as “My work schedule is stable enough to allow me to plan my family and/or social life” (Brady, 2017 p. 84). In total, WFC is an emerging topical area within criminal justice scholarship. Therefore, despite the relative novelty associated with WFC measures within this line of research, prior findings highlight the importance of understanding the effects of WFC and FWC on work-related outcomes (Armstrong et al., 2015; Brady, 2017; Lambert et al., 2004, 2006, 2010). We now turn to consequences associated with WFC.

Consequences Associated with Work-Family Conflict

WFC has received a great deal of attention across multiple disciplines. This collective body of literature has documented similar findings regarding the negative impact work- and family-related stressors have on work-related outcomes (Howard et al., 2004; Kossek & Ozeki, 1998; Singh & Nayak, 2015). More specifically, both domestic and international meta-analyses summarize the saliency associated with professional and

personal role stressors across cultures and work environments (Byron, 2005; Ford et al., 2007; Kavosi et al., 2018; Kossek & Ozeki, 1998; Nohe et al., 2015).

For example, a recent meta-analysis conducted by Kavosi et al. (2018), found that WFC had a significant and positive relationship with job stress. They further highlighted the saliency of role conflicts, arguing that across contextual environments conflicts within these roles lead to individual, family, and organizational problems (Kavosi et al., 2018). These findings echo earlier work by Kossek and Ozeki's (1998) meta-analysis of 32 U.S.-based studies. More specifically, Kossek and Ozeki found an inverse relationship between WFC and FWC on job satisfaction. In particular, WFC had a slightly greater effect on job satisfaction than FWC. The different strengths of effect between WFC and FWC on job satisfaction reiterates the importance associated with understanding role conflict directionality (Greenhaus & Beutell, 1985; Kossek & Ozeki, 1998; Netemeyer et al., 1996).

Past research has also documented potential links between WFC and voluntary turnover. For example, Rubenstein et al. (2018) expanded upon earlier meta-analytic works (Cotton & Tuttle, 1986; Griffeth et al., 2000; Podsakoff et al., 2007) by incorporating WFC into their analyses. In Rubenstein et al.'s study (2018), they conducted a meta-analysis of 570 voluntary turnover articles spanning 40 years (1975–2012). Consequently, they identified seven prior studies that examined work-life conflict among 12,107 individuals. Results indicated that WFC was significantly and positively related to voluntary turnover. The following is a more in-depth discussion about the impact WFC has on criminal justice stakeholders.

Early work within criminal justice scholarship is represented by Burke (1988), who examined potential antecedents and consequences surrounding role conflict among 828 Canadian police officers. More specifically, Burke (1988) examined the influence work and non-work characteristics had on WFC and then evaluated the influence WFC had on job satisfaction and TI (Burke, 1988). Findings indicated that officer demographics had a weak correlation with WFC, whereas contextual elements (social support, work environment) were strongly correlated with role conflict. Results also found that WFC was significantly related to TI and inversely related to job satisfaction. In essence, officers experiencing conflict between work and family obligations were more likely to be dissatisfied with their jobs and more willing to leave their organization (Burke, 1988).

A limitation of Burke's study (1988) is the lack of sensitivity applied to the WFC measure. Specifically, 43 items were combined to construct the WFC variable. Burke (1988) noted the identified items were meant to examine nine areas: "the relationship with the spouse, [being] preoccupied and tired, reduced social life, relationship with children, family and home life, weekends and vacations, self-development, health and safety, and exemplary behavior" (p. 292). Although insightful, the failure to tease apart work- and family-related conflicts produces limited understanding. The inability to decipher dimensionality limits researchers' abilities to understand what particular role conflict (time, strain) is associated with negative outcomes. As a result, criminal justice researchers started to move away from past research using unidimensional, WFC measures (Burke, 1988, 1989, 1993, 1994), toward more refined measures.

Research by Lambert et al. (2006) incorporated refined WFC measures with a sample of criminal justice stakeholders. This particular study examined the influence work- and family-related conflict had on job stress, job satisfaction, and organizational commitment among 166 correctional officers. WFC was measured using items modified from prior studies. Four dimensions were identified via factor analysis: time-based WFC, strain-based WFC, behavior-based WFC, and FWC (Lambert et al., 2006). Subsequently, results identified the importance associated with parsing out the various constructs of WFC. Time- and behavior-based WFC along with FWC were significantly related to organizational commitment, whereas strain- and behavior-based WFC were significantly related to job satisfaction (Lambert et al., 2006).

In a follow-up study, Lambert et al. (2010) examined the impact WFC and FWC had on job burnout. Findings partially paralleled earlier work (Lambert et al., 2006) indicating that strain-based and behavior-based WFC along with FWC were significantly related to burnout. Time-based WFC was not found to be associated with burnout. Despite these studies examining outcomes other than TI, they still support the perspective that refined measures of WFC are needed to understand their influence on work-related outcomes among criminal justice stakeholders. Furthermore, measures used by Lambert et al. (2006) were applied in recent research directed toward TI among police chiefs (Brady, 2017).

Brady's (2017) research represents the value of incorporating refined WFC measures when seeking to understand and explain occupational outcomes among law enforcement executives. It is the first study to quantitatively examine these particular stressors on TI among police chiefs. This quantitative lens is important due to earlier

qualitative work by Rainguet and Dodge (2001) highlighting family-related issues as a common justification for police chiefs to leave their organizations. Brady (2017) examined the impact WFC (i.e., time- and strain-based WFC) and FWC had on TI. Results indicated that strain-based WFC was positively related to TI. Conversely, other dimensions (i.e., FWC, time-based WFC, and strain-based WFC) were found to be non-significant regarding TI. Brady (2017) also noted that TI were also impacted by marital status, tenure, job stress, and organizational commitment. These findings imply that individuals who are married and have higher organizational commitment levels were less likely to leave the organization, which aligns with prior meta-analytic research (Matz et al., 2014) regarding TI among criminal justice stakeholders.

Work by Matz et al. (2014) represents the first meta-analysis focusing on TI among criminal justice actors. In this particular study, researchers assessed thirteen criminal justice-oriented articles focused on TI among criminal justice stakeholders including those in the areas of policing and corrections. Matz et al. (2014) examined the domains (e.g., personal characteristics and work environment) that account for the strongest association with TI. Results indicated that WFC and FWC had varying effects on TI (Lambert, 2006; Matz et al., 2014). In particular, WFC had a significant and positive relationship with TI; FWC, although positive, was found to be non-significant.

In addition to highlighting the significance associated with WFC and FWC on TI, Matz et al. (2014) noted significant findings surrounding organizational commitment in relation to TI. More specifically, organizational commitment, when measured globally or through multidimensional means (e.g., affective, continuance, and normative), were both found to have a negative association with TI. The next section provides an in-depth

discussion of organizational commitment (Brady, 2017; Lambert, 1999, 2006; Lambert & Hogan, 2009; Udechukwu, 2008).

Organizational Commitment

Defining organizational commitment

Organizational commitment refers to an employee's loyalty to their organization, along with their identification and involvement in the organization (Lambert et al., 2007; Mowday, Steers, & Porter, 1979). For example, Meyer & Hersovitch (2001) refer to commitment as, "a force that binds an individual to a target and can be accompanied by different mindsets that play a role in shaping behavior" (p. 299). As such, commitment is believed to be comprised of different bonds. These bonds can be rooted within multiple factors, such as emotional attachments or the costs associated with leaving an organization (Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001). As a result, scholars have argued that organizational commitment is multifaceted and complex, which varies in significance between individuals (Jaros, 2007; Meyer & Allen, 1991, 1997; Meyer et al., 2001).

Subsequently, organizational commitment is predominantly viewed as a multidimensional construct (Jaros, 2007, 2017; Meyer & Allen, 1991, 1997). Meyer and Allen's (1997) work, *Commitment in the Workplace: Theory, Research, and Application*, addresses the three commonly applied components within organizational commitment: affective, normative, and continuance (Meyer & Allen, 1991, 1997). Affective commitment (AC) reflects a commitment based on emotional ties that are fostered through positive work experiences (Jaros, 2007; Meyer & Allen, 1997). This commitment component can be viewed as the bonds established between officers via the value-

oriented socialization that occurs within agencies (Van Maanen, 1975). Conversely, continuance commitment (CC) is built on the perceived economic and social costs of leaving an organization (Hom & Griffin, 2001; Jaros, 2007, 2017; Meyer & Allen, 1997). In other words, CC is anchored in the actual or anticipated loss of monetary or social gains (e.g., prestige and status) related to an occupational role.

Normative commitment (NC) is a perceived responsibility that binds an individual to an organization (Meyer & Allen, 1991, 1997). The thesis being that individuals are committed to the organization based on moral and obligatory factors (Meyer & Allen, 1997). Work by Jaros (2007) argues that the unidimensional view of NC is incomplete and proposes that NC is actually multidimensional. Instead, Jaros reasons that individuals can perceive an indebted obligation to the agency, or they can view it as a moral duty to remain with the organization. Fundamentally, employees stay with the organization based on what the organization has given them, or they stay with the organization because they recognize it as being morally correct (Jaros, 2007).

There are inherent complexities associated with capturing an individual's organizational commitment. It is likely that one's mindset surrounding organizational commitment varies across individuals (Meyer & Herscovitch, 2001). This variation has prompted scholars to disentangle particular areas associated with a person's commitment, such as emotional or financial costs of leaving an organization. The following section details measurements used to more clearly define organizational commitment. Before venturing forward it should be noted that organizational commitment is a prominent construct that has been shown to have a significant relationship with work-related

outcomes (Griffeth et al., 2000; Griffeth & Hom, 2001; Hom & Griffeth, 1995; Jaros, 2017; Meyer & Allen, 1997; Meyer & Herscovitch, 2001; Podsakoff et al., 2007).

Organizational commitment measurement

Organizational commitment measurement generally reduces into two methodological approaches, a global measure (Grusky, 1966; Hrebiniak & Alutto, 1972; Mowday et al., 1979), or a three-component model (Allen & Meyer, 1990; Jaros et al., 1993; Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001; O'Reilly & Chatman, 1986; Penley & Gould, 1988). A commonly used global measure within organizational literature is the Organizational Commitment Questionnaire (OCQ) (Porter et al., 1974; Mowday et al., 1979). This instrument consists of 15 items constructed on a seven-point Likert-type scale, which was tested across different occupations. More specifically, Mowday et al. (1979) illustrated the utility found with the OCQ when they examined results among 2,563 employees across nine different organizations (e.g., hospital and university), and found sufficient internal consistency across samples ($\alpha = .90$) (Mowday et al., 1979).

Organizational scholars have also found utility in implementing a three-component conceptualization of organizational commitment when examining work related outcomes (Allen & Meyer, 1990; Jaros et al., 1993; Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001; O'Reilly & Chatman, 1986). The utility is that multidimensional constructs allow researchers to tap into different areas (e.g., emotional and economic) where an individual's commitment may be rooted (Meyer & Allen, 1997; Meyer & Herscovitch, 2001). In other words, commitment to an organization is likely to

vary between individuals based on multiple factors, such as moral obligations or financial reasons (Jaros, 2007; Meyer & Allen, 1997; Meyer & Herscovitch, 2001).

A prominent multidimensional instrument used within organizational commitment research is Allen and Meyer's (1990) three-component instrument (i.e., affective, continuance, normative). This instrument serves as a more refined methodological approach to understanding an individual's commitment to an organization (Meyer & Allen, 1997). The utility associated with this instrument rests on the scale's succinctness and reliability across different populations (Meyer & Allen, 1997). Furthermore, items are written in a manner to direct respondents toward a particular commitment area. For example, an affective item is "this organization has a great deal of personal meaning for me," whereas, a normative item is "I was taught to believe in the value of remaining loyal to one organization" (Allen & Meyer, 1990, p. 6-7). In order to refine items within their instrument, Allen and Meyer (1990) distributed a questionnaire with 66 items across three different organizations. Items were removed that did not maintain acceptable reliability across samples. After removing items with limited reliability, 24 items retained acceptable reliability among each scale across populations: affective ($\alpha = .87$), continuance ($\alpha = .75$), and normative ($\alpha = .79$) (Allen & Meyer, 1990).

Work by Meyer and Allen (1991) further supported the transition to a multidimensional approach to measuring organizational commitment. They argued that prior work failed to achieve a consensus on construct definition. Consequently, scholars failed to use measures that corresponded with the definition being applied. This definition and measurement mismatch hampered researchers' ability to synthesize commitment

research (Meyer & Allen, 1991, 1997). In turn, the main premise presented by Meyer and Allen (1991) was to expand upon organizational commitment as a mindset or psychological state concerning an individual's relationship with an organization, and its impact on one's continuance with or departure for an organization (Meyer & Allen, 1991). Subsequently, they argued for a three-component organizational commitment model (Allen & Meyer, 1990) conceptualization, specifically emotional attachment to the organization, supposed costs associated with leaving the organization, and perceived obligations to stay with the organization (Meyer & Allen, 1991, 1997). Therefore, Meyer and Allen's work identified organizational commitment as multifaceted, consisting of multiple components: affective, continuance, and normative organizational commitment (Allen & Meyer, 1990; Meyer & Allen, 1991, 1997).

The three-component model of organizational commitment established by Meyer and Allen has become the dominant platform for understanding work-related outcomes (Jaros, 2007; Meyer & Herscovitch, 2001; Meyer & Parfyonova, 2010). However, Jaros (2007) argued that the original organizational commitment instrument (Allen & Meyer, 1990; Meyer & Allen, 1991, 1997) should be altered to enhance the instrument's overall utility. As a result, Jaros (2007) proposed changes to the organizational commitment instrument (Meyer & Allen, 1997), specifically to modify organizational commitment components (NC, CC, AC) toward a more turnover-oriented outcome. Likewise, the items examining NC should be expanded upon to clearly identify the moral imperative and indebted obligation dimensions captured within this component (Jaros, 2007). To date, no criminal justice study has examined the potential utility associated with using Jaros's (2007) organizational commitment scale to assess its relationship to job-related

outcomes, let alone TI. Due to this gap, more research is required to better understand this effect. The current study responds to this gap by examining the utility associated with this expanded three-commitment model (see Jaros, 2007) and TI among police chiefs.

Organizational commitment impact

Research has revealed significant links between organizational commitment and work-related outcomes (Griffeth & Hom, 2001; Hom et al., 2017; Meyer & Allen, 1991, 1997; Meyer et al., 2001). Moreover, scholarship has implied that when organizational commitment is present, negative outcomes are reduced. Conversely when organizational commitment is absent, issues such as turnover increase (Hom et al., 2017; Jaramillo et al., 2005; Lambert & Paoline, 2010). Recent meta-analyses have also identified an inverse relationship between organizational commitment and TI (Matz et al., 2014; Podsakoff et al., 2007). Therefore, a person's willingness to leave an organization based on diminished commitment is concerning. This apprehension is rooted in the idea that organizations are reliant on a committed workforce to maintain a competitive advantage within the marketplace (Meyer & Parfyonova, 2010).

For public sector organizations, such as police agencies, the interest in retaining technically sound and experienced employees can be magnified, given the tangible and intangible resources surrounding these individuals (Hur, 2007, 2013; Jaramillo et al., 2005; Matz et al., 2014; Orrick, 2002, 2008). Losing an experienced officer impacts the agency not only in terms of training and replacement costs, but also in terms of potential human capital losses (Hur, 2013; Orrick, 2002, 2008). The ability to mitigate turnover within agencies can be accomplished through a more refined understanding of TI.

Matz et al.'s (2014) meta-analytic work on TI among criminal justice professionals (i.e., law enforcement and corrections) highlights the vital role organizational commitment plays on TI. The analysis also reveals the common methodological approach of applying a global organizational commitment measure to understand TI (Brady, 2017; Lambert, 1999, 2006; Lambert & Paoline, 2010; Matz et al., 2013; Rivera, 2011). One study by Udechukwu (2008) applied a multidimensional organizational commitment measure to better understand its relationship with an individual's willingness to leave the organization.

Udechukwu's (2008) study examined the effect of a three-component model of organizational commitment (i.e., AC, CC, and NC) on TI among correctional officers. Results indicated that all three components were significant and negatively related to TI. Furthermore, NC, followed by AC and CC, had the greatest influence on TI. These findings are in contrast to prior research, which has found AC to be the predominant component regarding turnover (Hom et al., 2017; Jaros et al., 1993). Given this unique finding, further research is needed to better understand the ways different components of organizational commitment are related to TI among samples of police chiefs.

Only recently has research addressed the influence organizational commitment has on TI among police chiefs (Brady, 2017). Findings from this study showed that organizational commitment was inversely related to TI. One limitation, however, was the global organizational commitment measure. Thus, researchers were unable to parse out organizational commitment components in relation to TI. The specific position police chiefs hold within agencies amplifies the need to examine organizational commitment

through a multidimensional lens, and how those components influence TI among police chiefs.

Summary

Police chiefs represent a demanding administrative position and occupational role within society. These agency leaders filter organizational members' requests and community stakeholders' demands (Matusiak, 2016, 2019; Matusiak et al., 2017). After considering internal and external enquires, police chiefs establish and disseminate agency directives and organizational goals. Consequently, these organizational leaders play a vital role in immediate and sustained agency reform efforts (Goldstein, 1977). A chief's willingness to leave the agency has the potential to hamper organizational reform efforts, weaken organizational directives, and diminish community ties. Despite the chief's significance, both inside and outside the agency, research is relatively scant regarding their voluntary departure from the agency (Brady, 2017; Li, 2016; Rainguet, 1998; Rainguet & Dodge, 2001).

The limited scholarship surrounding voluntary turnover among police chiefs is concerning given the additional costs associated with replacing these executive leaders (Orrick, 2008). Coupled within this limited discourse is the fact that only recently has research started to examine TI among police chiefs (Brady, 2017), despite the robustness TI grants researchers in predicting actual turnover (Griffeth et al., 2000; Griffeth & Hom, 2001; Hom et al., 2017; Rubenstein et al., 2018). Thus, the ability to isolate and identify key characteristics associated with TI among police chiefs adds value in two ways. First, by better understanding the key relationships associated with TI, possible retention strategies can be implemented in a manner that targets high-performing police chiefs

before they leave their agencies. Secondly, the ability to document key characteristics and relationships associated with TI among law enforcement executives expands empirical discourse and enhances national discussions about well-being among these institutional leaders.

Achieving an improved understanding of TI, begins by building from previous criminal justice scholarship focused on understanding TI among police chiefs (Brady, 2017). Brady (2017) laid the foundation for understanding these social occurrences among police chiefs. Foremost, this study highlighted the importance of commitment and stressors in predicting TI. More specifically, the influence organizational commitment (Mowday et al., 1979) and work-family stressors (Armstrong et al., 2015; Lambert et al., 2006) had on chiefs' willingness to leave their organizations.

The primary purpose of this study is to better understand how work-family conflict and organizational commitment impacts TI among police chiefs. Work-family conflict will be analyzed through a more nuanced lens that includes behavior-based work-family conflict (Armstrong et al., 2015). Likewise, in order to better understand commitment, organizational commitment will be examined through a multidimensional lens (Jaros, 2007) instead of a global measure (Mowday et al., 1979). The data were used to investigate the following research questions:

Research Question # 1: What are the direct effects of work-family stressors on turnover intentions among Texas police chiefs?

Research Question # 2: What are the direct effects of organizational commitment on turnover intentions among Texas police chiefs?

CHAPTER III

METHODS

Turnover among police executives has been largely underexplored (Li, 2016; Li & Brown, 2019; McIntyre et al., 1990; Rainquet, 1998; Rainquet & Dodge, 2001; Tunnell & Gaines, 1992), and even less is known about turnover intentions among police chiefs (Brady, 2017). This gap in the literature is concerning given that research has consistently found turnover intentions to be the most robust predictor of actual turnover (Griffeth et al., 2000; Griffeth & Hom, 2001; Hom et al., 2017; Matz et al., 2013; Rubenstein et al., 2018). To better understand turnover intentions among police chiefs, the current study used a unique set of survey data collected from a panel of active Texas police chiefs. Their responses provide insight into their willingness to leave the organization. The following is a summary of the methodology used to collect data and to measure the dependent and independent variables.

Sample and Data Collection

Data for the current study originated from a data collection project involving Texas police chiefs participating in Texas' state-mandated New Chiefs Development Program (NCDP). As per the *Texas Education Code*, section 96.641, all newly appointed Texas police chiefs must attend NCDP programming within two years of their initial appointment (Li, 2016; Li & Brown, 2019). This training program satisfies the requirements set forth by the Texas Commission on Law Enforcement (TCOLE). NCDP is a program tailored for all newly appointed Texas police chiefs and is delivered solely by the Bill Blackwood Law Enforcement Management Institute of Texas (LEMIT) at Sam Houston State University. The core task associated with NCDP's 40-hour training

block is to provide newly appointed chiefs with professional development modules, such as evidence room management and policy creation. The diversified exposure to essential administrative tasks is directed toward enhancing their ability to manage agency needs while enriching their leadership potential (Li, 2016).

Data used in this study were obtained from paper and pencil surveys administered to chiefs during seven NCDP training sessions occurring between June 26, 2017 and June 24, 2019. NCDP participants were asked to complete and return their surveys at some point during the week-long (40-hour) training seminar held at LEMIT. The survey captured demographic, operational, and organizational items. In total, 337 police chiefs participated in NCDP during this time period and 259 police chiefs completed the initial survey (76.9% response rate), which is a higher than average response rate for policing research (Nix, Pickett, Baek, & Alpert, 2019). Out of the 259 completed surveys, eight surveys were omitted due to a lack of variation in responses. Furthermore, two surveys were removed because the respondent served in a state police agency. Since the current study focuses on municipal and localized police agencies, state police agencies were excluded. The final sample of cases used in the current analysis, obtained during the NCDP sessions at LEMIT, included 249 Texas police chiefs.

Missing Data

In order to take advantage of the full sample of respondents and have greater confidence in results, missing data were addressed in three stages. The first stage was a missing value analysis, which was conducted using SPSS 26 in order to identify the scope and patterns of missing data. Results showed that 0.7% of the values were missing

across all variables in a non-monotonic pattern. Furthermore, 48.6% (n = 121) of the 249 surveys had missing information on at least one variable.

After examining the scope and patterns associated with missing data, data were reviewed to assess if Multiple Imputation (MI) was applicable. The utility associated with MI is that it allows researchers the ability to estimate values that are missing (Allison, 2002; Brady, 2017; Garson, 2015; Rubin, 1996). MI is an iterative process that uses existing values collected from a variable (e.g., years in law enforcement) to estimate multiple predicted values for missing values (Allison, 2002; Brady, 2017; Garson, 2015; Rubin, 1966).

For MI to succeed, prior research states that each variable should have no more than 15% missing information (Brady, 2017; Garson, 2015). One item exceeded the recommended cutoff for missing data. Specifically, 20.9% (n=52) of surveys were missing data on one item used to measure affective organizational commitment: “I would be very happy to spend the rest of my career with this organization” (Jaros, 2007; Meyer & Allen, 1997). Directly following the organizational commitment measure was prior military experience at 12.9% (n =32) cases. Due to the percent missing, the affective organization commitment item (i.e., I would be very happy to... with this organization) was removed from the CFA and multivariate analyses described below. Prior military service was, however, retained for this study. Furthermore, findings from Little’s (1988) Missing Completely at Random (MCAR) test indicated there were significant differences between the missing and non-missing values for the variables used in the present study ($X^2 [8,485] = 9,127.5, p = .001$; Little, 1988). The significant findings highlighted that the data are not MCAR regarding the independent variables in the study.

Thus, the next step accomplished was to understand if the data were missing at random (MAR) or not missing at random (NMAR). More specifically, the items of interest were the variables used in the present study. These variables will be discussed in greater length below. Therefore, MAR was examined with the current study in mind. MAR implies that the pattern of missing data is conditional on other observed variables and not unobserved data, whereas NMAR implies that the missing value patterns can be attributed to an unobserved variable (Garson, 2015; van der Heijden et al., 2006). To determine if the missing data were conditional on other variables, separate variance t-Test in SPSS were used to confirm MAR (Garson, 2015). This procedure created dummy variables (1= missing, 0 = observed) for items (e.g., military experience) that reach a predetermine threshold (i.e., 5%) and examined the differences among continuous variables (e.g., years of service). For example, results indicated that prior military experience was found to be significantly correlated with the respondents' frequency of looking for jobs outside of law enforcement ($t(37.4) = -2.2, p = .03$) and for perceived organizational stressors involving a lack of resources ($t(42.1) = -2.7, p = .01$).

Due to the significant findings, MI is an appropriate process for accounting for the MAR data (Garson, 2015). Missing data were corrected through MI via the Markov Chain Monte Carlo method. This process generates five copies of completed datasets, each providing a different imputation estimate for the missing values across all independent variables within the study (Brady, 2017; Garson, 2015; Rubin, 1996). To account for differences in output among the five imputed datasets along and original dataset, subsequent findings were captured into a single pooled average of parameter estimates and standard errors (Rubin, 1996).

Dependent Variable

The present study focused on one outcome variable: turnover intentions. *Turnover intention* was captured using an adapted version of Brough and Frame's (2004) turnover intention instrument, which was created as a result of qualitative interviews with administrative and line-level officers (Brady, 2017; Brough & Frame, 2004). Turnover intentions were assessed using four questions: a) How frequently have you seriously considered leaving your job in the past six months?; b) How frequently do you actively look for jobs outside of law enforcement?; c) How likely are you to leave your job in the six months for another chief's job?; and d) How likely are you to leave your job in the next six months for retirement? Turnover intentions were captured on a five-point Likert-style scale ranging from "not at all/extremely unlikely" (coded 0) to "very frequently/extremely likely" (coded 4). A reliability analysis was conducted, yielding a Cronbach's α of .614, which indicated adequate internal consistency (Carmines & Zeller, 1979; Field, 2013; Griethuijsen et al., 2015). Therefore, the four items were added together into a summative index ($M = 1.3$, $S.D. = 1.9$) (Brady, 2017).¹

Key Independent Variables

This study explored two key independent variables, work-family conflict and organizational commitment. Work-family conflict was comprised of multiple dimensions and was measured with multiple indicators: time-based, behavior-based, strain-based, and

¹ A summative index was used for the dependent variable because retained factor scores from CFA analyses would yield negative and positive values. Thus, the negative values obtained would not allow the gamma regression models to be estimated. The reason for using gamma regression models is discussed in greater length in the analytic strategy section.

family-work conflict (Armstrong et al., 2015). Organizational commitment was comprised of affective commitment, continuance commitment, and normative commitment (Jaros, 2007).

As a result, confirmatory factor analyses (CFAs) with maximum likelihood estimates and standardized errors were conducted using STATA 16 to assess the measurement and model fit of the key independent and control variables. The purpose of CFAs is to validate the way researchers measure latent variables in particular models (Garson, 2015a). Furthermore, this analytical method examines the reliability of an instrument. In other words, CFA is used to simultaneously estimate and validate measures used in prior research (Van Craen & Skogan, 2016).

This study will start with a hypothesized model, identified through past scholarship, and test it against the data to determine how valid the constructed measure fits reality (Gau, 2014; Garson, 2015a). Statistical and theoretical reasoning will be used for subsequent fit analyses where the scales are a poor fit with the data. The main premise of conducting the CFAs is to understand if the instruments, in their current state, are an accurate measure of the concepts. This study is not intended to recreate or construct new scales.

In order to assess the models, multiple fit indices are reported (χ^2 , RMSEA, CFI, and TLI) to illustrate initial model fit and post-hoc analyses. The core reason of including these fit measures is to better assess goodness of fit regarding initial and subsequent models (i.e., post hoc analyses) (Garson, 2015a; Hoyle & Panter, 1995; Hu & Bender, 1999; Williams, Fletcher, & Ronan; 2007). For example, Hu and Bentler (1999) advocated for researchers to use at least two fit indices when investigating model fit. The

main thrust of these fit measures is to determine if one model fits the data over another model (Garson, 2015a).

The X^2 statistic is the principal measure of model fit resulting from overidentifying restrictions placed on a model (Hoyle & Panter, 1995; Hu & Bentler, 1999; Williams et al., 2007). In other words, the X^2 value should be low enough that it is no longer significant (Garson, 2015a; Hoyle & Panter, 1995). If a model is poor fitting, researchers can examine the chi-square difference between models to assist in determining if the changes improved model fit (Garson, 2015a;). Thus, X^2 forms the basis for model comparisons, as it allows researchers the ability to examine several models together to best determine fit (Williams et al., 2007).

In addition to X^2 , other tests are used to supplement model fit information and to account for sample size complications (Hu & Bentler, 1999). The root mean square of approximation (RMSEA) helps to correct the tendency of the X^2 test to reject models with larger sample data (Hoyle & Panter, 1995; Williams et al., 2007). The core idea is that lower RMSEA values indicate a better fitting model (Garson, 2015a; Hoyle & Panter, 1995). More specifically, good model fit is demonstrated when RMSEA values are less than or equal to .05, adequate fit is less than or equal to .08, and values greater than .10 illustrate poor fit (Garson, 2015a). The comparative fit index (CFI) compares the proposed model against a baseline model using a non-central X^2 (Hu & Bentler, 1999; Williams et al., 2007). As a result, it is less biased by smaller sample sizes ($N < 250$) (Hu & Bentler, 1999), where values range from 0 to 1 with values greater than .90 as acceptable and values closer to .95 as being strongly recommended (Hoyle & Panter, 1995; Williams et al., 2007). The Tucker-Lewis index (TLI) is similar to CFI as values

range from 0 to 1 with values greater than .90 indicating acceptable fit (Garson, 2015a; Hu & Bentler, 1999; Williams et al., 2007). The TLI provides researchers with a measure of parsimony between the estimated model and null models (Hoyle & Panter, 1995; Williams et al., 2007). The net result from these multiple fit indices is to increase the confidence in the estimated models (Garson, 2015a; Hu & Bentler, 1999).

Once the final model for each key independent (i.e., work-family conflict) and control variable scales (i.e., job satisfaction) is determined, standardized factor scores from each case are retained. The reason for retaining these factors scores is based on the idea that the collected values are a better representation of actual scales than summative scores (Distefano, Zhu, & Mindrilla, 2009). In other words, the calculated scores provide a weight to the items with the highest factor loading within a predetermined set of items (Distefano et al., 2009), whereas summative scores provide equal weight to all items.

Work-family conflict. *Work-family conflict* was measured using 23 items, which were adapted from Armstrong et al. (2015, p. 1079-1080) (see Table 2). These items measured the extent to which respondents' work-related responsibilities and duties interfere and create conflict with family commitments (Armstrong et al., 2015; Brady, 2017; Lambert et al., 2006), and how personal responsibilities impacted their work obligations (Armstrong et al., 2015).

The first construct is *time-based work-family conflict* (WFC) (Armstrong et al., 2015, p. 1079-1080). Time-based work-family conflict was measured using five items measured on a five-point Likert-style scale (0 = strongly disagree to 4 = strongly agree). Four of the five items were reverse coded (0 = strongly agree to 4 = strongly disagree). Those five items were: a) My job allows me adequate time to be with my family; b) My

time off from work works well with my family members' schedules and/or my social needs; c) My work schedule is stable enough to allow me to plan my family and or social life; d) I am able to participate in important family or social activities events outside of work; e) My work allows me to still have the energy to enjoy my family and or social life.

Strain-based work-family conflict was operationalized through ten items adapted from Armstrong et al. (2015, p. 1079-1080). These ten items used a five-point Likert-style response scale (0 = strongly disagree to 4 = strongly agree) (Lambert et al., 2010). Six of the items were coded so that low scores reflect disagreement and high scores reflect agreement: 0 = strongly disagree to 4 = strongly agree. Those items included: a) I frequently argue with my partner/family members about my job; b) With all of my work demands, sometimes I come home too stressed to do the things I enjoy; c) Because of this job, I am often irritable at home; d) My job has a bad impact on my home life; e) My family/friends express unhappiness about the time I spend at work; f) My family/friends dislike how often I am preoccupied with work. Four of the items were reverse coded (0 = strongly agree to 4 = strongly disagree). Those items included: a) My work allows me to still have the energy to enjoy my family and/or social life; b) I am able to leave my problems from work at work rather than bringing them home; c) I am able to relax away from work, no matter what is happening in my job; d) I am easily able to balance my work and home lives.

Behavior-based work-family conflict was measured with three-items using a five-point Likert-style scale (0 = strongly disagree to 4 = strongly agree) (Armstrong et al., 2015, p. 1079-1080). All three items were reverse-coded (0 = strongly agree to 4 =

strongly disagree) to indicate higher amounts of incongruencies between behavioral work traits and personal interactions (Lambert et al., 2010). Participants responded to the following items: a) The behaviors I learn at work help me to be a better parent; b) The behaviors I learn at work help me to be a better spouse; and c) The behaviors I learn at work help me to be a better friend.

Family-work conflict was measured using five items, which assessed the extent to which family responsibilities interfere with respondents' work-related roles and responsibilities (Armstrong et al., 2015; Brady, 2017; Lambert et al., 2010; Nohe et al., 2015). More specifically, the five items were adapted from Armstrong et al., (2015, p. 1079-1080) and used a five-point Likert-style response scale (0 = strongly disagree to 4 = strongly agree). Those five items include: a) I sometimes have to miss work due to pressing family issues or problems; b) My family and/or social life interfere with my job; c) Because of stress at home, I am often preoccupied with family matters at work; d) I'm often tired at work because of the things I do at home; and e) I feel that the demands placed upon me at work are unreasonable.

Confirmatory factor analysis was conducted to assess the fit of the survey items on the latent variables (see Figure 1). The fit statistics indicated that the model could be improved ($df = 224$; $\chi^2 = 570.88$; RMSEA = .069; CFI = .83; TLI = .88). Modification indices indicated the model could be improved if the error terms were allowed to covary across Time-based item 1: My job allows me adequate time to be with my family, and Time-based item 2: My time off from work works well with my family members' schedules and/or my social needs. And, to covary the error terms across Strain-based item 9: My family/friends express unhappiness about the time I spend at work and Strain-

based item 10: My family/friends dislike how often I am preoccupied with work. These error terms were allowed to covary because the items were similarly worded (Brown, 2015). The analyses following these changes revealed an improved model fit, highlighted by the significant change in X^2 and other fit indices ($df = 222$; $X^2 = 441.88$; RMSEA = .054; CFI = .93; TLI = .93) (see Figure 2).

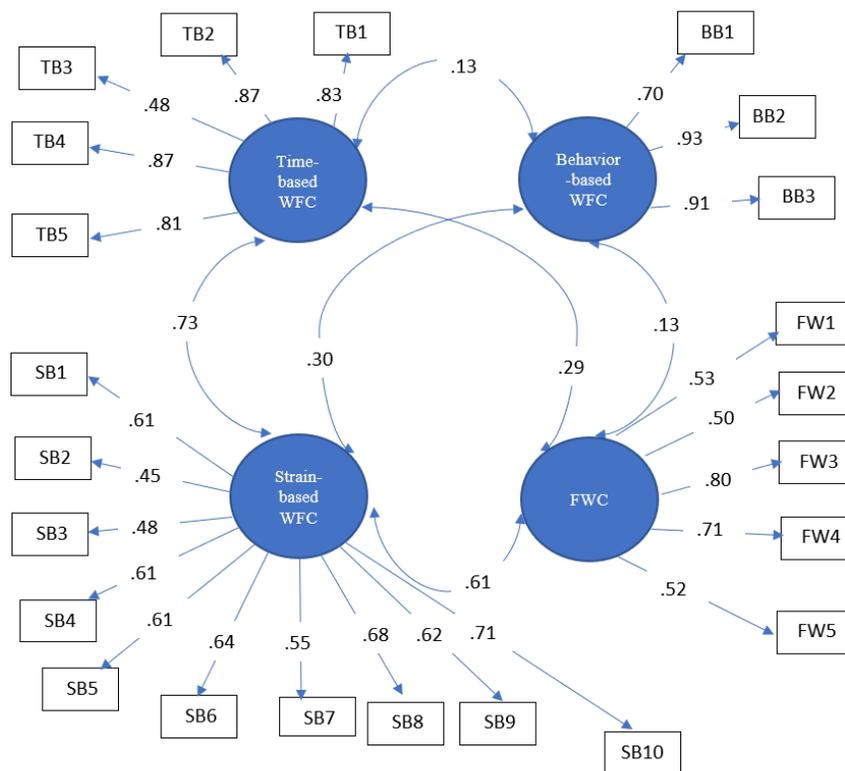


Figure 1. Work-Family Conflict Initial Model

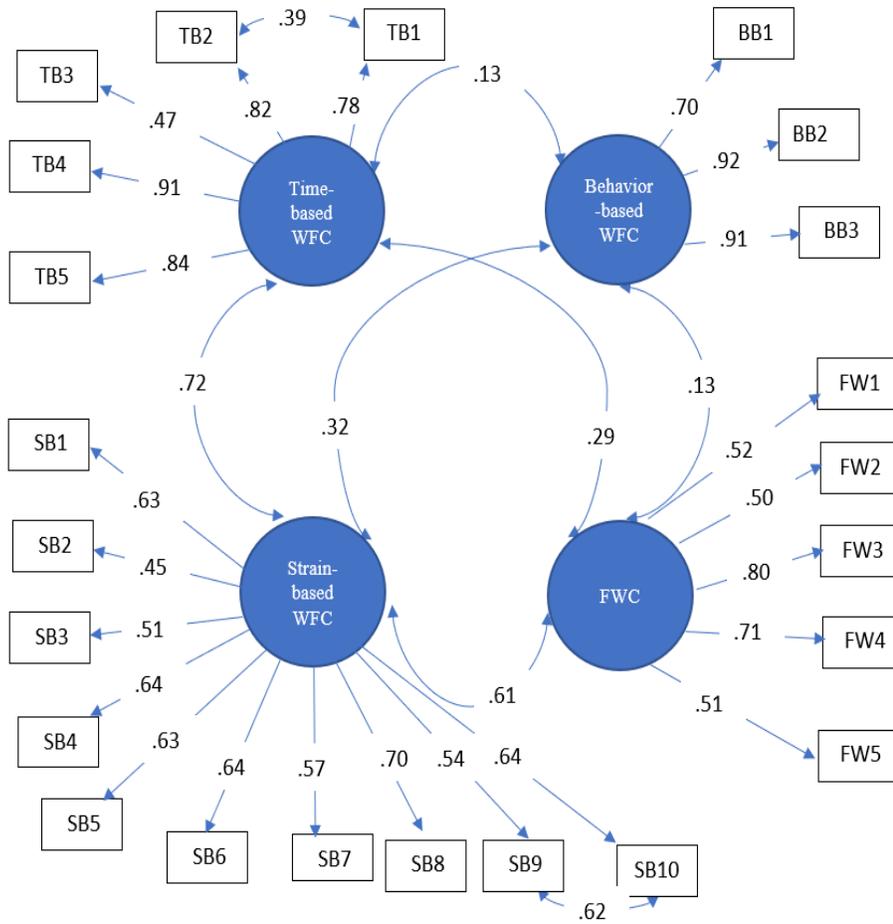


Figure 2. Work-Family Conflict Final Model

Table 2.

Summary of Confirmatory Factor Analysis Results for Work Family Conflict

Scales & Items	Initial	Final
	Loadings	Loadings
Time-based work-family conflict ($\alpha = .868$)		
TB1: My job allows me adequate time to be with my family ^a	.83	.78
TB2: My time off from work works well with my family members' schedules and/or my social needs ^a	.87	.82
TB3: I frequently have to work overtime when I don't want to	.48	.47
TB4: My work schedule is stable enough to allow me to plan my family and/or social life ^a	.87	.91
TB5: I am able to participate in important family or social activities/events outside of work ^a	.81	.84
Strain-based work-family conflict ($\alpha = .841$)		
SB1: My work allows me to still have the energy to enjoy my family and/or social life ^a	.61	.63
SB2: I frequently argue with my partner/family members about my job	.45	.45
SB3: I am able to leave my problems from work at work rather than bring them home ^a	.48	.51
SB4: With all my work demands, sometimes I come home too stressed to do the thing I enjoy	.61	.64
SB5: Because of this job, I am often irritable at home	.61	.63
SB6: My job has a bad impact on my home life	.64	.64
SB7: I am able to relax away from work no matter what is happening in my job ^a	.55	.57
SB8: I am easily able to balance my work and home lives ^a	.68	.70
SB9: My family/friends express unhappiness about the time I spend at work	.62	.54
SB10: My family/friends dislike how often I am preoccupied with work	.71	.64
Behavior-based work-family conflict ($\alpha = .870$)		
BB1: The behaviors I learn at work help me to be a better parent ^a	.70	.70
BB2: The behaviors I learn at work help me to be a better spouse ^a	.93	.92
BB3: The behaviors I learn at work help me to be a better friend ^a	.91	.91
Family-work conflict ($\alpha = .735$)		
FW1: My family and/or social life interfere with my job	.53	.52

FW 2: I sometimes have to miss work due to pressing family/social issues or problems	.50	.50
FW3: Because of stress at home, I am often preoccupied with family matters at work	.80	.80
FW4: I'm often tired at work because of the things I do at home	.71	.71
FW5: I feel that the demands placed upon me at work are unreasonable	.52	.51
	RMSEA	.069
	CFI	.83
	TLI	.88
	DF	224
	X^2	570.88
		441.88

^aDenotes reverse coded item

Organizational commitment. Organizational commitment characterizes an employee's relationship with and continued membership in an agency (Meyer & Allen, 1997). This attribute was viewed as “a force that binds an individual to a course of action relevant to one or more targets” (Meyer & Herscovitch, 2001, p. 301). Scholars have argued that organizational commitment should be measured through multiple components (Jaros, 2007; Meyer & Allen, 1997). Therefore, organizational commitment was captured through Jaros' (2007) Organizational Commitment Scale, which is a three-component model (TCM) of organizational commitment (p. 23–25). These components are affective commitment (AC), normative commitment (NC), and continuance commitment (CC) (Jaros, 2007). Prior literature has supported the use of a TCM to assess work-related outcomes (Allen & Meyer, 1990; Gellatly et al., 2006; Jaros, 2007, 2017; Jaros et al., 1993; Meyer & Allen, 1991, 1997; Meyer et al., 2006; Meyer & Herscovitch, 2001; O'Reilly & Chatman, 1986; Somers et al., 2019).

Affective Commitment. AC involves the emotional ties an employee gains through their experiences with the organization (Jaros, 2007; Meyer & Allen, 1997). AC was

measured with eight items that use a seven-point Likert-style scale (0 = strongly disagree to 6 = strongly agree), adapted from Jaros (2007, p. 23–24) (see Table 2). These items include: a) I am very happy being a member of this organization; b) I enjoy discussing things about my organization with people outside it; c) I really feel as if this organization's problems are my own; and d) This organization has a great deal of personal meaning for me. Four items had to be reverse coded (0 = strongly agree to 6 = strongly disagree): a) I think that I could easily become as attached to another organization as I am to this one; b) I do not feel like 'part of the family' at my organization; c) I do not feel 'emotionally attached' to this organization; and d) I do not feel a strong sense of belonging to my organization.

Continuance Commitment. CC involves the perceived costs of leaving the organization (Jaros, 2007; Meyer & Allen, 1997). CC was measured by six items adapted from Jaros (2007, p. 23), which includes: a) I worry about the loss of investments I have made in this organization; b) If I wasn't a member of this organization, I would be sad because my life would be disrupted; c) I am loyal to this organization because I have invested a lot in it, emotionally, socially, and economically; d) I often feel anxious about what I have to lose with this organization; e) sometimes I worry about what might happen if something was to happen to this organization and I was no longer a member; and f) I am dedicated to this organization because I fear what I have to lose in it. Responses to the six items were denoted through a seven-point Likert-style scale (0 = strongly disagree to 6 = strongly agree).

Normative Commitment. NC involves the perceived obligations an individual develops with their organization (Jaros, 2007; Meyer & Allen, 1997). NC was measured

with six items adapted from Jaros (2007, p. 23–24): a) I feel that I owe this organization quite a bit because of what it has done for me; b) My organization deserves my loyalty because of its treatment towards me; c) I feel I would be letting my co-workers down if I wasn't a member of this organization; d) I am loyal to this organization because my values are largely its values; e) This organization has a mission that I believe in and am committed to; and f) I feel it is 'morally correct' to dedicate myself to this organization. Responses to the six items were denoted through a seven-point Likert-style scale (0 = strongly disagree to 6= strongly agree).

The initial model fit, however, indicated the model could be improved ($df = 167$; $X^2 = 620.63$; RMSEA = .09; CFI = .75; TLI = .75) (Figure 3). Subsequently, modification indices suggested an improved model could be achieved by covarying error terms for Affective Commitment and Normative Commitment items. More specifically, error terms were allowed to covary for Affective items: I do not feel emotionally attached to this organization (AC6) and I do not feel a strong sense of belonging to my organization (AC8). In addition, error terms were allowed to covary for Normative items: This organization has a mission that I believe in and I am committed to (NC4), and I feel it is morally correct to dedicate myself to this organization (NC6) (see Figure 4). In addition to the modification indices, post-hoc analyses revealed reduced loadings ($<.40$) (Yang, 2010) for two Affective items (AC3 and AC4), two Continuance items (CC1 and CC3), and one Normative item (NC1) (see Figure 4).² The changes made revealed an improved model fit ($df = 85$; $X^2 = 230.49$; RMSEA = .07; CFI = .90; TLI = .90).

² The normative commitment item, I feel that I owe this organization quite a bit because of what it has done for me (NC1) had an initial loading of .43. However, after initial and post-hoc analyses that item dropped to .37 resulting in it being removed from the normative commitment scale.

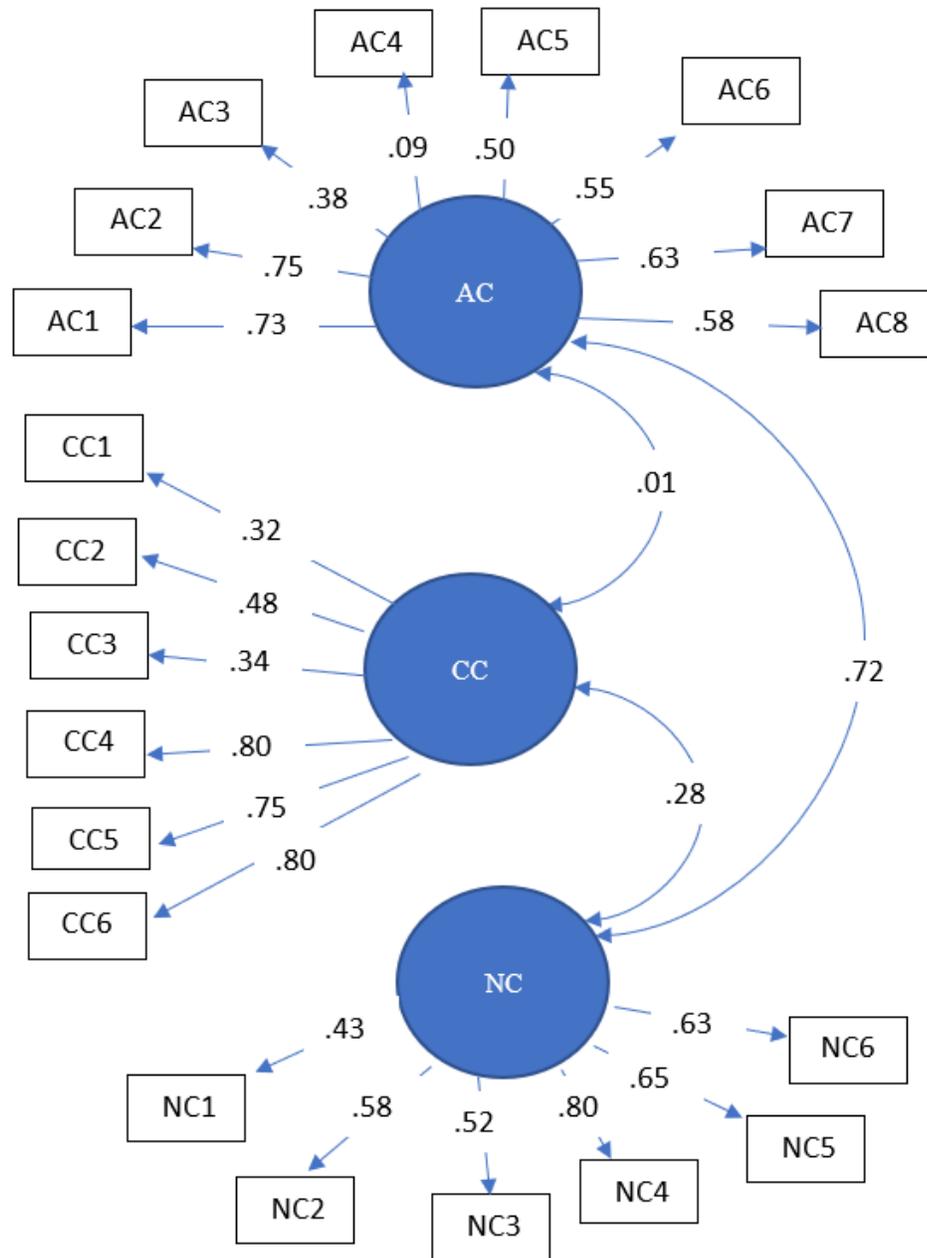


Figure 3. Organizational Commitment Initial Model

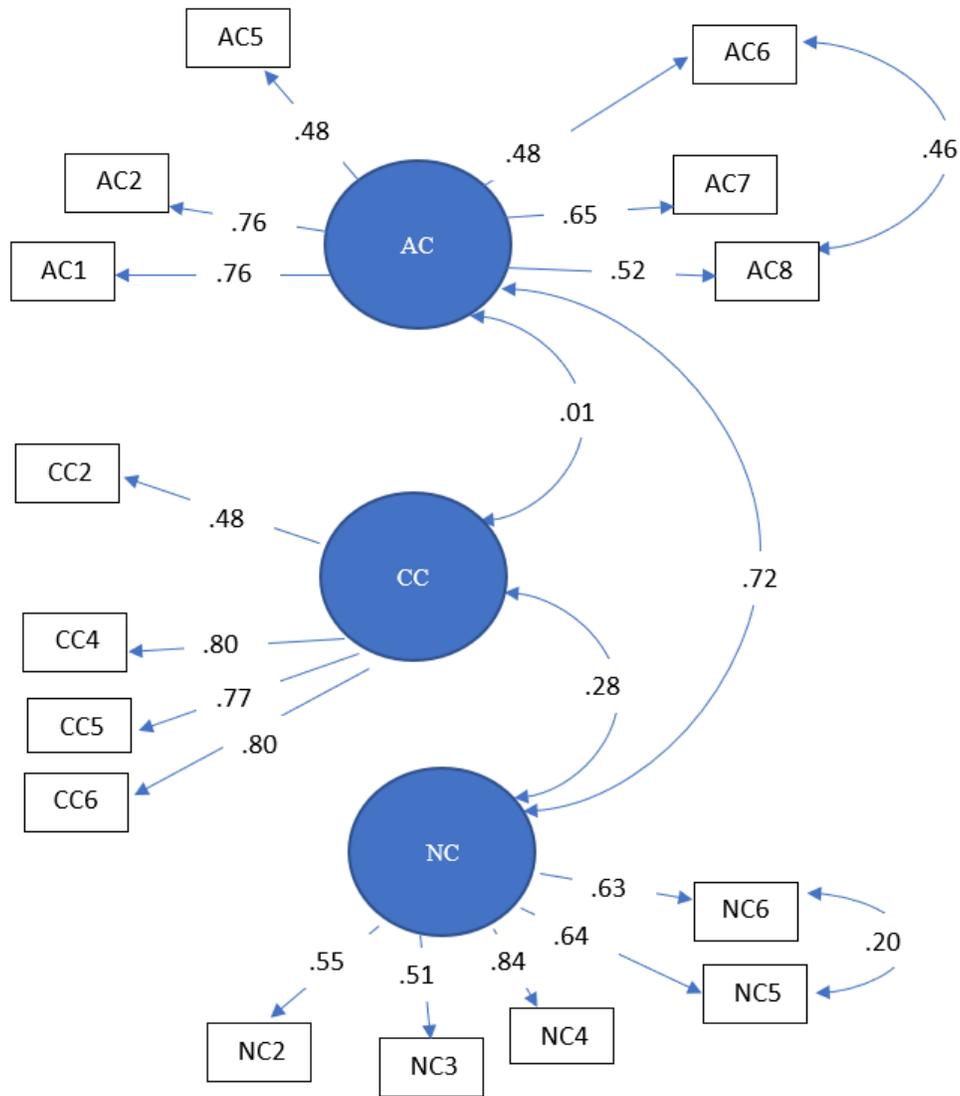


Figure 4. Organizational Commitment Final Model

Table 3.
Summary of Confirmatory Factor Analysis Results for Organizational Commitment

Scales & Items	Initial	Final
	Loadings	Loadings
Affective Commitment ($\alpha = .761$)		
AC1: I am very happy being a member of this organization	.73	.76
AC2: I enjoy discussing things about my organization with people outside it	.75	.76
AC3: I really feel as if this organization's problems are my own	.38	-
AC4: I think that I could easily become as attached to another organization as I am to this one ^a	.09	-
AC5: I do not feel like part of the family at my organization ^a	.5	.48
AC6: I do not feel emotionally attached to this organization ^a	.55	.48
AC7: This organization has a great deal of personal meaning for me	.63	.65
AC8: I do not feel a strong sense of belonging to my organization ^a	.58	.52
Continuance Commitment ($\alpha = .750$)		
CC1: I worry about the loss of investments I have made in this organization	.32	-
CC2: If I wasn't a member of this organization, I would be sad because my life would be disrupted	.48	.48
CC3: I am loyal to this organization because I have invested a lot in it, emotionally, socially, and economically	.34	-
CC4: I often feel anxious about what I have to lose with this organization	.80	.80
CC5: Sometimes I worry about what might happen if something was to happen to this organization and I was no longer a member	.75	.77
CC6: I am dedicated to this organization because I fear what I have to lose in it	.80	.80
Normative Commitment ($\alpha = .754$)		
NC1: I feel that I owe this organization quite a bit because of what it has done for me	.43	-
NC2: My organization deserves my loyalty because of its treatment toward me	.58	.55

NC3: I feel I would be letting my co-workers down if I wasn't a member of this organization	.52	.51
NC4: I am loyal to this organization because my values are largely its values	.80	.84
NC5: This organization has a mission that I believe in and am committed to	.65	.64
NC6: I feel it is morally correct to dedicate myself to this organization	.63	.63
	<hr/>	
	RMSEA	.09
	CFI	.75
	TLI	.75
	DF	167
	X^2	620.63
		230.49

^aDenotes reverse coded item

Control Variables

This study used 15 control variables that are grouped into personal and organizational characteristics.

Personal Characteristics

In total, ten demographic variables were measured: age, race, education, marital status, military experience, family support, hiring origin, length of time in law enforcement, supervisor tenure, and time as chief.³ *Age* was operationalized as a continuous variable that ranged from 27 to 72 years of age, with a median age of 48 (M= 47.8; SD = 8.8). *Race* was originally captured as a six-item list where respondents marked all that applied: White/Non-Hispanic, Black/African American, Hispanic/Latino, Asian American/Pacific Islander, Native American/Alaskan Native, or Other. Due to a

³ *Gender* was not controlled for in the present study because female police chiefs (n =16) accounted for only 6.4% of the overall sample (Cohen, 1992).

lack of variation, however, race was recoded to a dichotomous measure (0 = Non-White; 1 = White), with 32.1% of the respondents being non-white.⁴

Education was quantified as the *highest* level of education completed (1 = High school diploma or GED; 2 = Some college; 3 = Associates degree; 4 = Bachelor's degree; 5 = Graduate certificate; 6 = Master's degree; 7 = PhD; and 8 = JD). Due to minimal variation, this variable was recoded to a dichotomous measure (0 = less than a bachelor's degree; 1 = a bachelor's degree or more), with 42.3% having at least a bachelor's degree.⁵ Marital status describes the respondent's current relationship status (1 = Married; 2 = Divorced; 3 = Widowed; 4 = Separated; 5 = Single, not in a relationship; 6 = In a committed relationship—not married). Limited variation among the responses resulted in it being recoded to a dichotomous variable (0 = not married; 1 = married) with 79.9% of the respondents being married.⁶ Lastly, *prior military experience* was captured as a dichotomous variable (0 = no; 1 = yes), with 33.5% having prior military experience.

The survey also included multiple items to measure the respondent's tenure within law enforcement. These items examined their journey to becoming a chief (i.e., internal or external) and time within law enforcement. *Hiring origin* measured whether the respondent was as an external hire (coded 0) or was an internally appointed chief (coded 1), with 48.2% of the respondents being promoted from within the agency. Respondents were asked to indicate their length of time, in years and months, in law

⁴ *Race* was originally captured as White/Non-Hispanic (67.9%); Black or African American (8.8%); Hispanic/Latino (20.5%); Asian/Pacific Islander (0.8%); American Indian/Alaskan Native (1.6%); or other (0.4%).

⁵ *Level of education* was originally captured as High school diploma or GED (14.5%); Some college (33.5%); Associates degree (9.7%); Bachelor's degree (21.8%); Graduate certificate (0.8%); Master's degree (18.6%); PhD (0.4%); JD (0.8%).

⁶ *Marital status* was originally captured as Married (79.9%); Divorced (4.0%); Widowed (0.4%); Separated (1.2%); Single, not in a relationship (3.6%); In a committed relationship—not married (10.8%).

enforcement and time as a supervisor. In order to standardize the units measuring tenure, each response was recoded and summed to obtain a single continuous measure of tenure in years. This summation process is similar to that used in prior studies that examined the influence tenure had on job-related outcomes (Brady, 2017). For example, chiefs reported both the years and months regarding tenure. Subsequently, the number of months were divided by 12, and added to the number of years reported (e.g., 5 years, 2 months; $5 + (2/12) = 5.17$ years) (Brady, 2017). *Law enforcement tenure* was a continuous measure that referred to the total number of years and months the respondent has been in law enforcement ($M = 22.0$; $SD = 8.9$).⁷ *Supervisor tenure* was a continuous variable that captured the total number of years and months the individual has performed a supervisory role ($M = 10.8$; $SD = 8.6$). Respondents were also asked about their *police chief tenure* or time as chief at their current department ($M = 0.8$; $SD = 1.2$).⁸

Family support was a four-item measure that identified the extent to which police chiefs feel supported by their family concerning issues confronted on the job (Brady, 2017; Cullen, Lemming, Link, & Wozniak, 1985). Respondents were asked to indicate their level of agreement via a five-point Likert-style scale (0 = strongly disagree to 4 = strongly agree): a) Members of my family understand how tough my job can be; and b) When my job gets me down, I know that I can turn to my family and get the support I need. Two of the items were reverse coded (0 = strongly agree to 4 = strongly disagree):

⁷ One respondent indicated having zero years of law enforcement experience, all other chiefs had at least three years of law enforcement tenure.

⁸ Regarding *chief tenure*, the survey also captured if the respondents had been a chief at another agency. Results indicated that 55.0% ($n = 137$) of the respondents did not respond to the question, which made it unusable in the study (Garson, 2015). Therefore, chief tenure is captured as the total time in years as chief at their current department.

a) There is really no one in my family I can talk to about my job; and b) My significant other can't really help me much when I get tense about my job.

For this study, CFA results indicated a just-identified model ($df = 2$; $X^2 = 2.8$; RMSEA = 0.000; CFI = 1.0; TLI = 1.0) (see Table 4). A just-identified model includes all possible interrelationships between variables and will always fit perfectly as it is a summary of the observed data (Wetson & Gore, 2006) (see Figure 5). In order to improve the model, an error term was allowed to covary (Weston & Brown, 2006). Specifically, error terms for two items were allowed to covary: There is really no one in my family I can talk to about my job and My significant other can't really help me much when I get tense about my jobs. As a result, the model fit indices reported an improved model ($df = 1$; $X^2 = 1.7$; RMSEA = .05, CFI = .99, TLI = .97) (see Figure 6).

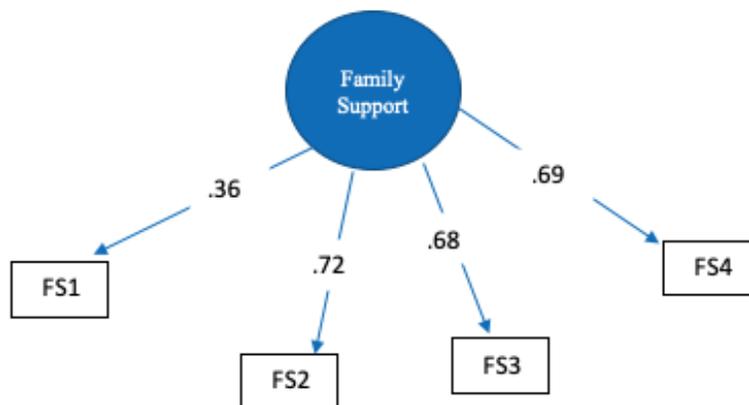


Figure 5. Family Support Initial Model

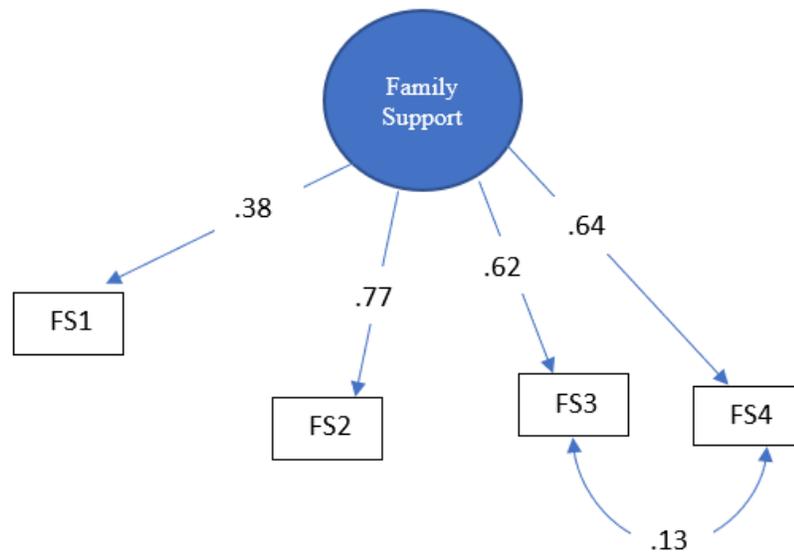


Figure 6.

Family Support Final Model

Table 4.

Summary of Confirmatory Factor Analysis Results for Family Support

Family Support ($\alpha = .688$)	Initial	Final
	Loadings	Loadings
FS1: Members of my family understand how touch my job can be	.36	.38
FS2: When my job gets me down, I know that I can turn to my family and get the support I need	.72	.77
FS3: There is really no one in my family I can talk to about my job ^a	.68	.62
FS4: My significant other can't really help me much when I get tense about my job ^a	.69	.64
RMSEA	.00	.05
CFI	1.0	.99
TLI	1.0	.97

DF	2	1
X^2	(2.8)	1.7

Organizational Characteristics

A total of seven perceptual and structural organizational factors were included in this study as control factors. These organizational-related variables include burnout, organizational job stress, collegial support, and agency characteristics.

Collegial support is a continuous variable that measured the extent to which respondents' feel supported by their coworkers (Brady, 2017; Haines, Hurlbert, & Zimmer, 1991). For this study, collegial support was measured using a six-item instrument developed by Haines et al. (1991). Responses to the six items were denoted through a five-point Likert-style scale (0 = strongly disagree to 4 = strongly agree) where respondents were asked to indicate their perceptions of being supported by their colleagues (Brady, 2017). Items used in this scale included: a) The people I work with are helpful to me in getting my job done; b) I usually try to get along very well with my coworkers; c) I know I can get help from my coworkers when I need it; d) The people I work with are competent; and e) My coworkers respect my work and abilities. One item was reverse coded (0 = strongly agree to 4 =strongly disagree): Coworkers criticize my work to others (see Figure 7). The CFA analysis indicated an acceptable fitting model, therefore the reverse coded item was retained ($df = 9$; $X^2 = 21.16$; RMSEA = .03; CFI = .99; TLI = .99) (see Table 5).

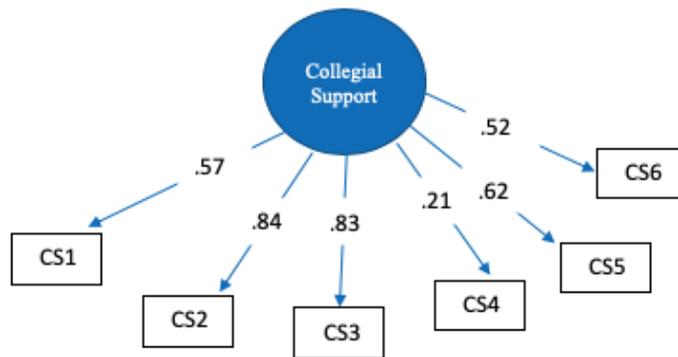


Figure 7. Collegial Support Final Model

Table 5.

Summary of Confirmatory Factor Analysis for Collegial Support

Collegial Support ($\alpha = .748$)	Loadings
CS1: I usually try to get along very well with those I work closely with	.57
CS2: The people I work with are helpful to me in getting my job done	.84
CS3: I know I can get help from my coworkers when I need it	.83
CS4: Coworkers criticize my work to others	.21
CS5: The people I work with are competent	.62
CS6: My coworkers respect my work and abilities	.52
RMSEA	.03
CFI	.99
TLI	.99

DF	9
X^2	21.16

Burnout has been found to be associated with work-related outcomes (Griffeth et al., 2000; Griffeth & Hom, 2001; Hom & Griffeth, 1995). In order to assess the impact burnout has on TI, this study employed items collected from the Oldenburg Burnout Inventory (OLBI; Demerouti, Bakker, Vardakou, & Kantas, 2003; Demerouti, Mostert, & Bakker, 2010; Halbesleben & Demerouti, 2005). Specifically, 16 positively and negatively worded items assessed burnout through four-point Likert-type questions ranging from strongly agree (coded 0) to strongly disagree (coded 3) (Demerouti et al., 2010, p. 222). These 16 items are meant to identify components of burnout:

disengagement and exhaustion (Demerout et al., 2003, 2010; Halbesleben & Demerouti, 2005) (see Figure 8).

Disengagement is comprised of eight items, including four positive and four reverse-coded items (Demerouti et al., 2010, p. 222). The four positive items are: a) I always find new and interesting aspects in my work; b) I find my work to be a positive challenge; c) This is the only type of work I can imagine myself doing; d) I feel more and more engaged in my work. The four reverse-coded items (0 = strongly disagree to 3 = strongly agree) were: a) It happens more and more that I talk about my work in a negative way; b) Lately, I tend to think less at work and do my job almost mechanically; c) Over time, one can become disconnected from this type of work; d) Sometimes I feel sickened by my work tasks (see Table 6).

Exhaustion is comprised of eight items: four positive and four reverse-coded items (Demerouti et al., 2010, p. 222). The four positive items (0 = strongly agree to 3 =

strongly disagree) were: a) I can tolerate the pressure of my work very well; b) After working, I have enough energy for my leisure activities; c) Usually I can manage the amount of my work well; d) When I work, I usually feel energized. The four negative items (0 = strongly disagree to 3 = strongly agree) were: a) There are days when I feel tired before I arrive at work; b) After work, I tend to need more time than in the past in order to relax and feel better; c) During my work, I often feel emotionally drained; d) After my work, I usually feel worn out and weary.

A two-dimensional model of burnout was estimated. Initial results, however, indicated that the *exhaustion* component had limited internal consistency across the eight items (Cronbach $\alpha = .584$), whereas *disengagement* (Cronbach $\alpha = .714$) was found to be acceptable (Field, 2013; Mertler & Vannatta, 2013). Due to the reduced alpha values, a unidimensional model of burnout was estimated.⁹ Prior scholarship has used a global measure of burnout both broadly (McCarty & Skogan, 2012; McCarty, Zhao, & Garland, 2007) and specifically with the OLBI (Sedlar, Sprah, Tement, & Socan, 2015).

The preliminary CFA analysis of the unidimensional burnout indicated a poor fitting model ($df = 104$; $X^2 = 331.07$; RMSEA = .110; CFI = .620; TLI = .561) (see Figure 8). The initial analysis indicated six items had reduced factor loadings ($< .40$) and were removed from future analyses (Yang, 2010). Subsequent analyses revealed that one disengagement item should be removed because of a low factor loading ($< .40$): After work, I tend to need more time than in the past in order to relax and feel better.

Modification indices demonstrated the model could be improved if two items' error terms

⁹ The results for the two-dimension model are available upon request. The finalized alpha values for the two-dimension model further illustrated limited reliability (*exhaustion* $\alpha = .453$; *disengagement* $\alpha = .605$). Likewise, *disengagement* and *exhaustion* were significantly correlated once constructed (.90). Thus, resulting in significant VIF (variation inflation factors) in the later multivariate models.

were allowed to covary: I feel more and more engaged in my work and when I work, I usually feel energized. It seems reasonable to allow those error terms to covary because of similar item wording (Brown, 2015). As a result, model fit indices revealed a better fitting model ($df = 26$; $X^2 = 68.46$; $RMSEA = .05$; $CFI = .93$; $TLI = .94$) (see Figure 9).

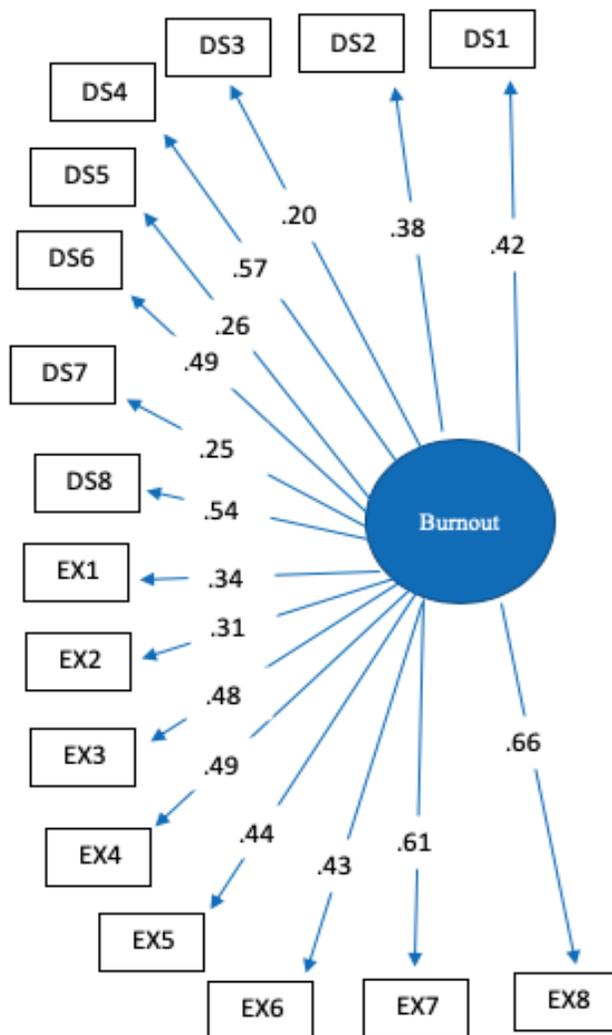


Figure 8. Burnout Initial Model

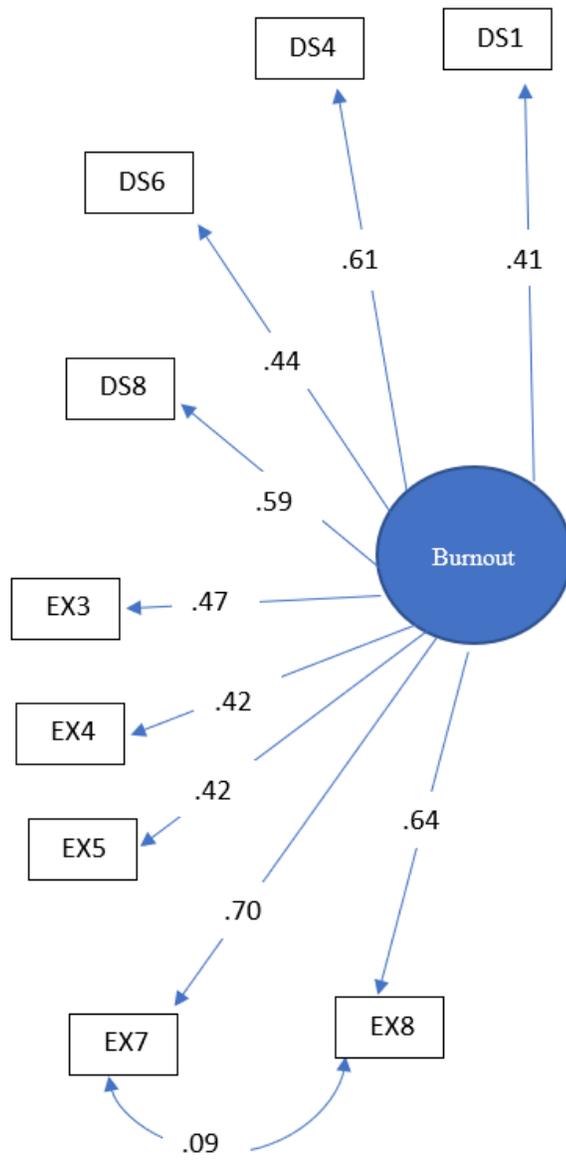


Figure 9. Burnout Final Model

Table 6.
Summary of Confirmatory Factor Analysis for Burnout

	Initial Loadings	Final Loadings
Burnout ($\alpha = .769$)		
DS1: I always find new and interesting aspects in my work	.42	.41
DS2: It happens more and more that I talk about my work in a negative way ^a	.38	-
DS3: Lately, I tend to think less at work and do my job almost mechanically ^a	.20	-
DS4: I find my work to be a positive challenge	.57	.61
DS5: Over time, one can become disconnected from this type of work ^a	.26	-
DS6: Sometimes I feel sickened by my work tasks ^a	.49	.44
DS7: This is the only type of work I can imagine myself doing	.25	-
DS8: I feel more and more engaged in my work	.54	.59
EX1: There are days when I feel tired before I arrive at work ^a	.34	-
EX2: After work, I tend to need more time than in the past in order to relax and feel better ^a	.31	-
EX3: I can tolerate the pressure of my work very well	.48	.47
EX4: During my work, I often feel emotionally drained ^a	.49	.42
EX5: After working, I have enough energy for my leisure activities	.44	.42
EX6: After my work, I usually feel worn out and weary ^a	.43	-
EX7: Usually I can manage the amount of my work well	.61	.70
EX8: When I work, I usually feel energized	.66	.64
RMSEA	.110	.05
CFI	.620	.93
TLI	.561	.94
DF	104	26
χ^2	331.07	68.46

^aDenotes reverse coded item

Job satisfaction is the fulfillment or perceived gratification of needs that are associated with an individual's profession (Hopkins, 1983). Job satisfaction was measured using Hopkin's (1983) job scale. Chiefs were asked to indicate their level of agreement via a five-point Likert-style scale (0 = strongly disagree to 4 = strongly agree): a) I find work stimulating and challenging; b) I find a sense of worthwhile accomplishments in my work; c) I find opportunities for personal growth and development in my job; d) I enjoy nearly all the things I do on my job very much; and e) I like the kind of work I do very much (see Figure 10). CFA results indicated an acceptable model with the non-significant chi-square and other fit indices ($df = 5$; $X^2 = 9.4$; RMSEA = .06; CFI = .99; TLI = .98) (Wetson & Gore, 2006).

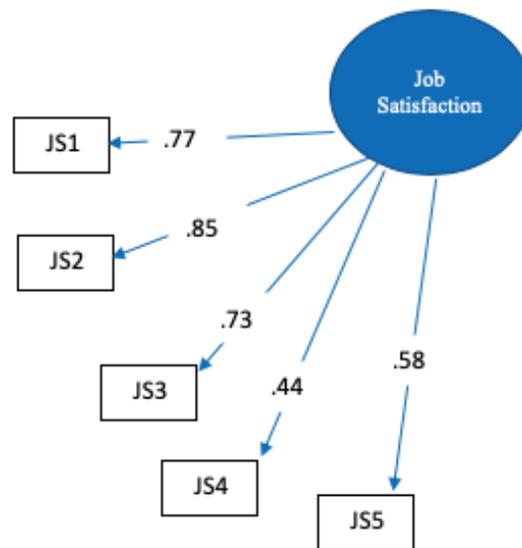


Figure 10. Job Satisfaction Final Model

Table 7.
Summary of Confirmatory Factor Analysis for Job Satisfaction

Job Satisfaction ($\alpha = .798$)	Initial Loadings
JS1: I find work stimulating and challenging	.77
JS2: I find a sense of worthwhile accomplishment in my work	.85
JS3: I find opportunities for personal growth and development in my job	.73
JS4: I enjoy nearly all the things I do on my job very much	.44
JS5: I like the kind of work I do very much	.58
RMSEA	.06
CFI	.99
TLI	.98
DF	5
X^2	9.4

Organizational job stress was assessed through the Organizational Police Stress Questionnaire (PSQ-Org) (McCreary & Thompson, 2013). The PSQ-Org is a 20-item measure that addresses the extent to which a multitude of organizational facets (e.g., lack of resources and bureaucratic red tape) increase stress levels among law enforcement officers (Brady, 2017; McCreary & Thompson, 2006, 2013). These 20 items were analyzed using a seven-point Likert-style scale (0 = no stress at all to 6 = a lot of stress) (see Figure 11). A reliability analysis was conducted where results indicated an acceptable level among the items (Cronbach's $\alpha = .932$) (see Table 8). However, fit indices from the CFA indicated the full model could be improved ($df = 170$; $X^2 = 630.29$; RMSEA = .09; CFI = .83; TLI = .84). Since there were adequate loadings across all 20 items, modification indices were used to improve model fit. The indices showed a better fitting model could be achieved if the error terms were allowed to vary across particular items. More specifically, the model could be improved if the following items were allowed to covary: dealing with coworkers and feeling you always have to prove yourself to the organization, excessive administrative duties and constant changes in

policy/legislation, lack of resources and inadequate equipment. The reason for covarying the error terms is due to the similar wording found in the various items (Brown, 2015).

As a result, subsequent findings indicated an improved model. ($df = 166$; $X^2 = 399.65$; RMSEA: .06, CFI = .92; TLI = .92) (see Figure 12).

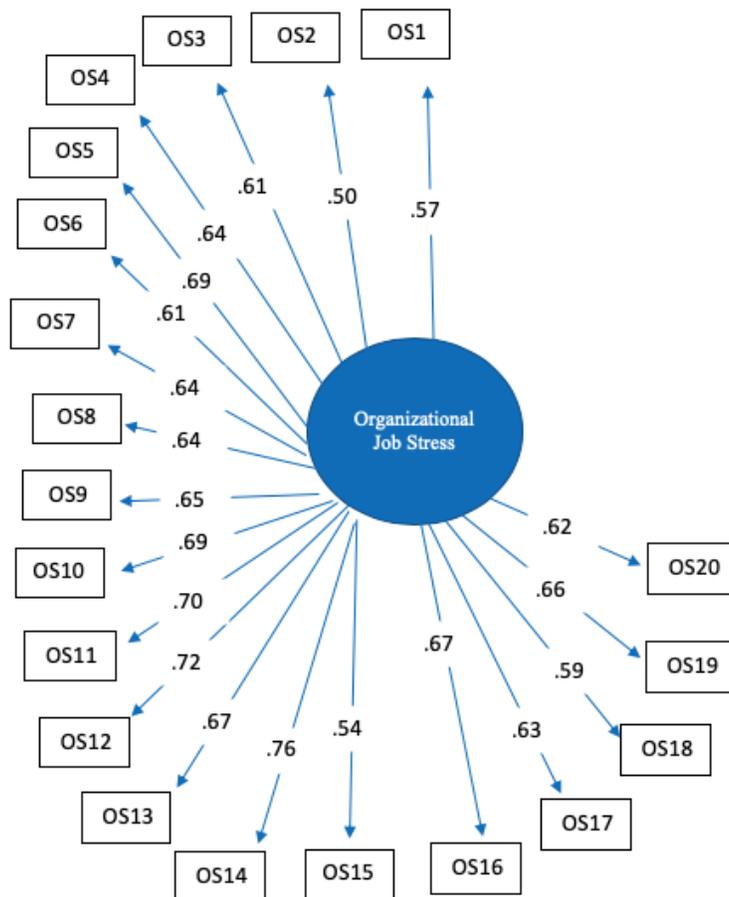


Figure 11. Organizational Job Stress Initial Model

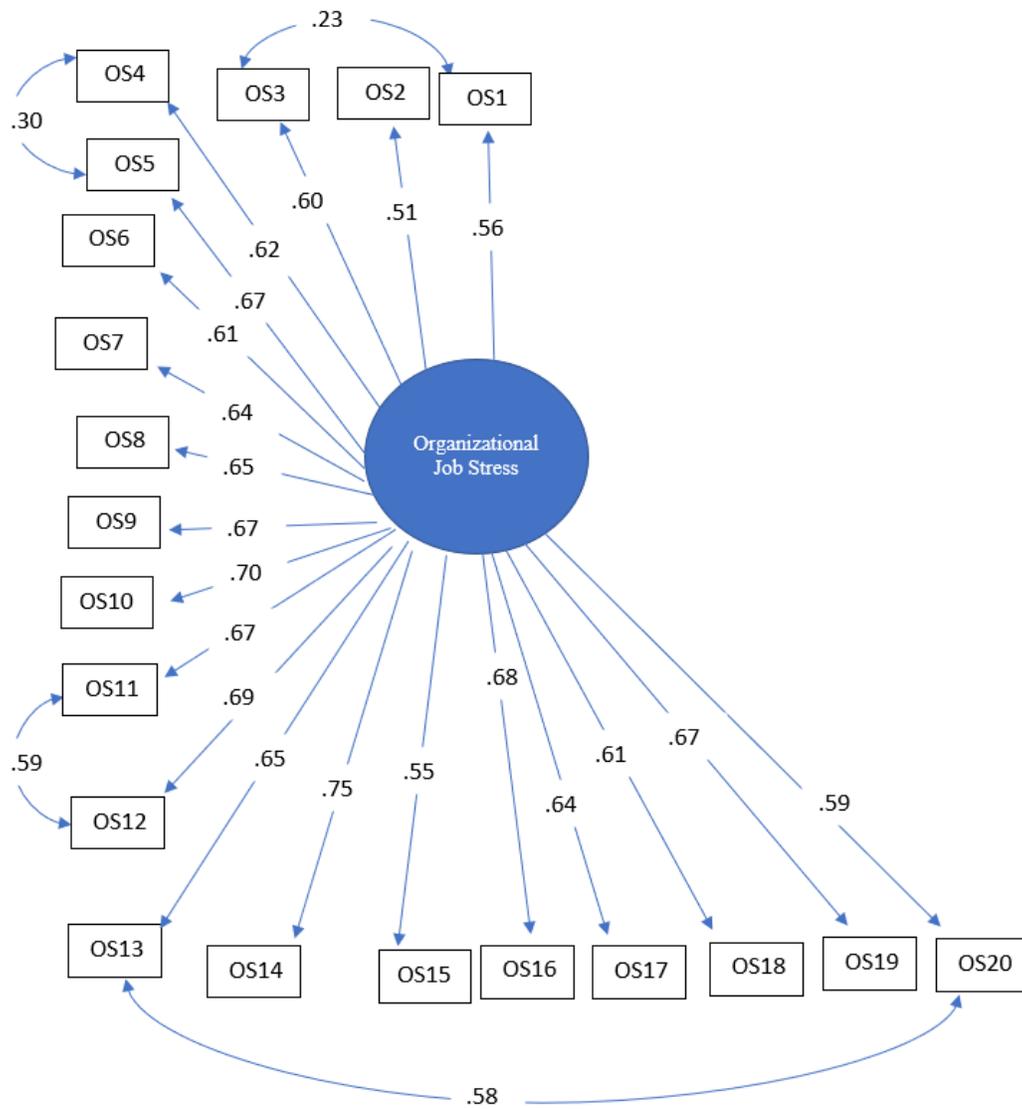


Figure 12. Organizational Job Stress Final Model

Table 8.
Summary of Confirmatory Factor Analysis for Organizational Job Stress

Organizational Job Stress ($\alpha = .932$)	Initial	Final	
	Loadings	Loadings	
OS1: Dealing with coworkers	.57	.56	
OS2: The feeling that different rules apply to different people (e.g. favoritism)	.50	.51	
OS3: Feeling like you always have to prove yourself to the organization	.61	.60	
OS4: Excessive administrative duties	.64	.62	
OS5: Constant changes in policy/legislation	.69	.67	
OS6: Staff shortages	.61	.61	
OS7: Bureaucratic red tape	.64	.64	
OS8: Too much computer work	.64	.65	
OS9: Lack of training on new equipment	.65	.67	
OS10: Perceived pressure to volunteer free time	.69	.70	
OS11: Dealing with supervisors/command staff	.70	.67	
OS12: Inconsistent leadership styles	.72	.69	
OS13: Lack of resources	.67	.65	
OS14: Unequal sharing of work responsibilities	.76	.75	
OS15: If you are sick or injured your coworkers seem to look down on you	.54	.55	
OS16: Leaders over-emphasizing the negatives (e.g., supervisor evaluations, public complaints)	.67	.68	
OS17: Internal investigations	.63	.64	
OS18: Dealing with the court system	.59	.61	
OS19: The need to be accountable for doing your job	.66	.67	
OS20: Inadequate equipment	.62	.59	
	RMSEA	.09	.06
	CFI	.82	.92
	TLI	.84	.92
	DF	170	166
	X^2	630.29	399.65

Scholarship directed toward police agencies' organizational outputs generally frame *organizational size* as the total number of full-time non-sworn and sworn personnel (King, 1999; Maguire, 2003; Matusiak, 2016). Respondents were asked to provide the total amount of full- and part-time employees in their department, both sworn and non-sworn. For this study, organizational size was measured as the aggregate of full-time, sworn and non-sworn personnel (Brady, 2017; Maguire, 2003). Initially, organizational

size was measured as a continuous variable with responses ranging from 0 to 558 full-time staff members, with the median organizational size being 5 full-time personnel ($M = 26.8$; $SD = 64.7$). Due to its skewed distribution, a logarithmic transformation was used on this variable (Field, 2013).

Agency type and *jurisdiction* were both self-reported and categorical. For agency type, respondents indicated the type of agency they represented. Due to a lack of variation, however, this variable was recoded to a dichotomous measure (0 = other, 1 = local), with 71.5% serving a local police department.¹⁰ Jurisdiction captured the perceived metropolitan statistical area that their agency serviced (0 = urban, 1 = suburban, 2 = rural), with 37.9% of the respondents indicating they served a rural jurisdiction.

Analytic Strategy

The analytical strategy for this study consisted of multiple steps. First, univariate analyses were conducted to examine the distributions of the independent and outcome variables. Second, bivariate analyses were conducted, such as independent sample *t*-tests and Pearson's *r* correlations, to identify significant relationships between the independent and control variables and the outcome variable.

The third step in the analytic plan is the multivariate portion. More specifically, generalized linear models (GLMs) using a Gamma distribution were calculated using STATA 16. The following details the main characteristics of a gamma regression and the

¹⁰ Agency type was originally captured as Local (71.5%), County/County Sheriff (0.00%), Constables (0.00%), Independent School District (18.1%), Special police (university, port, airport) (9.2%), State police (0.00%), Other (1.2%).

reason why it was used in this study. Directly following this explanation is a brief overview of the estimated models.

As alluded to above, gamma regression models are couched within the broad class of GLMs. There are three main components associated with gamma regression models, and GLMs overall. First, a random component specifies the conditional distribution for the outcome variable (Y_i for the i th of n sampled observations) (Fox, 2015). In other words, this component specifies the conditional distribution of the response variable. Second, a systematic component relates a parameter to the predictors. Third, a link function is associated with the link between random and systematic components. This link accounts for the non-normal distribution assumption commonly attributed to linear regression (Field, 2013).

For gamma, the canonical link function is the inverse where values for Y_i range from 0 to all positive values (Field, 2013; Fox, 2015). The assumptions of this class of regression models, including gamma, is that the dependent variable does not need to be normally distributed. Similarly, errors terms need to be independent but not normally distributed (Fox, 2015). In addition, the data or cases must be independent of one another. Homoscedasticity does not need to be satisfied within the models. The models do not impose a homoscedasticity requirement because they use a maximum likelihood estimator (MLE) instead of ordinary least squares (OLS) (Dobson & Barnett, 2018; Fox, 2015). Gamma regression models relax some assumptions required of OLS regression (Field, 2013; Fox, 2015).

Gamma regression is commonly used to model outcome variables that are positively skewed and that range from 0 to any positive number. An example of this

modeling is with insurance claims. For example, a large portion of individuals never file a claim but at no point is there a negative file outcome (Czado, Kastenmeier, Brechman, & Min, 2012; Shi, Feng, & Ivantsova, 2015). Thus, gamma regression models were estimated to account for the non-normal distribution of the turnover intention outcome variable in the current study ($M = 1.3$, $S.D. = 1.9$, $Variance = 3.7$) (Dobson & Barnett, 2018; Field, 2013; Fox, 2015). The attributes and core components of GLMs and specifically gamma models, illustrate how this statistical technique best fit the data used in this study.

The main focus of the estimated gamma models is to better understand the direct effects work-family conflict and organizational commitment have on turnover intentions. To properly identify the impact these two factors have on this work-related outcome, potentially relevant control factors will be included within the models (Brady, 2017). Thus, the first series of models will introduce individual level factors with the key independent variables. The second series of models will introduce organizational level variables to the models. This additive-based approach to model building allowed for the assessment of changes in variables across models.

The core reason for this model-building approach is to better understand the influence key predictors had on the outcome variable. Thus, the direct effects of work-family stressors (see Armstrong et al., 2015) on TI are examined with individual and organizational variables taken into account. Likewise, the direct effects of organizational commitment (see Jaros, 2007) on TI are investigated while controlling for individual and organizational variables.

CHAPTER IV

RESULTS

This chapter presents the results from the statistical analyses examining the impact that personal- and work-related factors have on turnover intentions among newly appointed Texas police chiefs. Moreover, special attention is directed toward the influence work-family conflict constructs and organization commitment measures have on TI (turnover intentions). Therefore, this chapter begins with an overview of the sample demographics and bivariate analyses, and then leads into the findings from the multivariate analyses.

Descriptives

Descriptive statistics are presented in Tables 9 and 10. Police chiefs, on average, reported having relatively low turnover intentions ($M = 1.3$, $SD = 1.9$). Likewise, the majority (72.2%) reported having no intention of leaving the organization within the last six months (see Table 9). Approximately a fourth (28.1%) of the respondents indicated, to some degree, that they considered jobs outside of law enforcement. Most chiefs (81.1%) reported that it would be unlikely for them to leave the current organization for another chief's job in the next six months. In addition, 9 out of 10 chiefs (92.0%) reported that it was unlikely for them to retire in the next six months (see Table 9).

Table 9.

Turnover Intentions Descriptive Statistics

	M or % (Freq.)	SD	Median	Min/Max	<i>a</i>
Turnover Intentions	1.3	1.9	0.0	0-16	.614
Items	Not at all/ Extremely Unlikely	Very Rarely/ Somewhat Unlikely	Rarely/ Neither Likely nor Unlikely	Frequently/ Somewhat Likely	Very Frequently/ Extremely Likely
How frequently have you seriously considered leaving your job in the past six months	72.2% (180)	13.7% (34)	10.4% (26)	2.8% (7)	0.8% (2)
How frequently do you actively look for jobs outside of law enforcement	71.9% (179)	18.1% (45)	8.8% (22)	1.2% (3)	0.0% (0)
How likely are you to leave your job in the next six months for another chief's job	81.1% (202)	10.4% (26)	4.8% (12)	2.8% (7)	0.8% (2)
How likely are you to leave your job in the next six months for retirement	92.0% (229)	4.4% (11)	2.8 (7)	0.8% (2)	0.0% (0)

Depicted within Table 10 are the descriptive statistics for the independent variables including summative scale values. The reason for providing summative scale information is to better illustrate the distributions and averages captured by the respondents. For the multivariate analyses, however, factor scores derived from the CFAs for each case are used. Factor scores are advantageous because they offer improved validity over summated scales. Individual items are weighted according to their factor loading when factor scores are calculated, which is not possible through summative scores (DiStefano et al., 2009).

Descriptive statistics for the key independent variables, work-family conflict and organizational commitment are illustrated in Table 10. For work-family conflict measures, respondents reported having relatively low work and family stressors. For example, respondents indicated a one, on average, for each item in the strain-based scale. Time-based work-family conflict was also reported to be relatively low across the sample, with respondents scoring, on average, a 1.4 per item in the scale. Behavior-based, had the highest average score per item (1.7), whereas family-work conflict had the lowest (0.9) per item score across the different work-family conflict scales. Regarding organizational commitment, chiefs reported having relatively high levels of affective commitment ($M = 29.7$, $SD = 5.2$), whereas continuance commitment was the lowest form of commitment among the chiefs ($M = 9.8$, $SD = 5.2$).

In general, respondents were predominantly male (93.6%), white (67.9%), married (79.9%), with a median age of 48 ($M = 47.8$, $SD = 8.8$). Furthermore, approximately 4 out of 10 chiefs (42.3%) held a bachelor's degree or higher, and a third (33.5%) of the total respondents indicated having prior military experience. The chiefs

had, on average, over 20 years of experience in law enforcement ($M = 22.0$, $SD = 8.9$) and approximately 10 years as a supervisor ($M = 10.8$, $SD = 8.6$). The majority of respondents (51.8%) were external hires for the current police chief position and had a median time of 6 months as chief ($M = 0.8$, $SD = 1.2$). Also, of note was that chiefs reported having relatively high levels of familial support ($M = 12.2$, $SD = 2.7$).

Regarding organizational factors, respondents reported, on average, to have high levels of collegial support ($M = 15.5$, $SD = 2.4$) (see Table 10). Police chiefs also reported having low levels of burnout, which was made evident through the average item score (0.9). Conversely, the average chief reported having high levels job satisfaction ($M = 16.1$, $SD = 2.2$). Organizational job stress was also low, on average, with responses being on the lower third (2 out of a 0-6 scale) per item. These varying levels of organizational stress and job satisfaction mirror the variety of agencies these police chiefs serve. For example, chiefs represented agencies from small, zero full-time employees to agencies with 550 full-time employees, with a median organizational size of 5 staff members ($M = 26.6$, $SD = 64.7$). In addition, the majority (71.5%) were municipal police chiefs, with approximately one third (37.9%) of the sample serving a rural jurisdiction (see Table 10). More than 70 percent of the sample was a municipal police chief, with approximately one third (37.9%) of the total sample serving a rural jurisdiction (see Table 10).

Table 10.

Descriptive Statistics (N = 249)

Variables & Attributes	M or % (Freq.)	SD	Avg. Value Per Item	Median	Min/Max	<i>a</i>
Key Independent Variables	-	-	-	-	-	-
Time-based WFC	7.1	3.9	1.4	6.0	0-20	.868
Strain-based WFC	12.7	5.4	1.3	13	0-40	.841
Behavior-based WFC	5.2	2.1	1.7	6.0	0-12	.870
FWC	4.7	2.8	0.9	5.0	0-20	.735
Affective Commitment	29.7	5.2	3.0	30	0-40	.785
Continuance Commitment	9.8	5.2	2.5	9.0	0-24	.788
Normative Commitment	21.4	4.6	4.3	23.0	0-30	.743
Personal Characteristics	-	-	-	-	-	-
Age	47.8	8.8	-	48.0	27-72	-
Race	-	-	-	-	0-1	-
Non-White	32.1% (80)	-	-	-	-	-
White	67.9% (169)	-	-	-	-	-
Level of education	-	-	-	-	0-1	-
Less than a Bachelor's degree	55.8% (139)	-	-	-	-	-
Bachelor's degree or higher	42.2% (105)	-	-	-	-	-
Marital status	-	-	-	-	0-1	-
Not married	20.1% (50)	-	-	-	-	-

Married	79.9% (199)	-	-	-	-	-
Military experience	-	-	-	-	0-1	-
No	66.5% (165.6)	-	-	-	-	-
Yes	33.5% (83.4)	-	-	-	-	-
Hiring origin	-	-	-	-	0-1	-
Inside of department	48.2% (120)	-	-	-	-	-
Outside of department	51.8% (129)	-	-	-	-	-
Law enforcement tenure (in years)	22.0	8.9	-	22.0	0-43	-
Supervisor tenure (in years)	10.8	8.6	-	10.0	0-36	-
Police chief tenure (in years)	0.8	1.2	-	0.6	0-2	-
Family support	12.2	2.67	3.1	12.0	0-16	.688
Organizational Characteristics	-	-	-	-	-	-
Collegial support	15.5	2.4	3.1	15.0	0-20	.804
Burnout	8.5	3.0	0.9	9.0	0-27	.762
Job Satisfaction	16.1	2.2	3.2	15.0	0-20	.798
Organizational Job Stress	41.9	20.7	2.1	41.0	0-120	.932
Organizational size	26.6	64.7	-	5.0	0-550	-
Organizational size (lg)	1.9	1.7	-	1.8	0-6.3	-
Agency type	-	-	-	-	0-1	-
Municipal	71.5% (178)	-	-	-	-	-
Other	28.5% (71)	-	-	-	-	-

Jurisdiction	-	-	-	-	0-2	-
Urban	31.1% (77.4)	-	-	-	-	-
Suburban	31.1% (77.4)	-	-	-	-	-
Rural	37.9% (94.4)	-	-	-	-	-

Bivariate Analyses

Bivariate relationships were measured to examine the relationship between personal- and work-related factors and turnover intentions. The full bivariate correlation matrix is presented in Table 11. The results from the independent samples-test are presented in Table 12. The latter table illustrates if significant differences were obtained between dichotomous variables (i.e., race) and the summative TI scale. Bivariate analyses revealed that turnover intentions were significantly related to personal and work-related factors in the expected directions. Variables involving work-family related stressors, specifically time-based ($r = .20, p < .001$), strain-based ($r = .29, p < .001$), and family-work related ($r = .19, p < .01$), were significant and positively related to one's willingness to leave the organization. Moreover, organizational commitment measures, affective ($r = -.32, p < .001$) and normative commitment ($r = -.17, p < .01$) were significant and inversely related to turnover intentions. Collegial support ($r = -.27, p < .001$) and job satisfaction ($r = -.13, p < .001$) both had significant and inverse relationships with TI. Organizational job stress was found to have a significant and positive relationship ($r = -.30, p < .001$) with the outcome variable. Regarding personal demographics, TI was found to be related to education ($t(247) = -2.06, p = .04$) and marital status ($t(247) = 1.82, p = .07$) (see Table 12).

Table 11.

Bivariate Correlations Matrix

	1	2	3	4	5	6	7	8	9	10	11	12
1. Turnover Intent	1											
2. WFC: Time	.20***	1										
3. WFC: Strain	.29**	.78***	1									
4. WFC: Behavior	.05	.14*	.34***	1								
5. FWC	.19**	.33***	.68***	.17**	1							
6. Affective Commitment	-.32***	-.31***	-.30***	-.07	-.22***	1						
7. Continuance Commitment	.07	.08	.22***	-.13*	.25***	-.03	1					
8. Normative Commitment	-.17**	-.24***	-.18**	-.15*	-.08	.81***	.24***	1				
9. Family Support	.02	-.09	-.16*	-.12†	-.30***	.14*	-.03	.20**	1			
10. Collegial Support	-.27***	-.25***	-.26***	-.02	-.24***	.62***	-.12†	.43***	.14*	1		
11. Burnout:	.21***	.31***	.41***	.05	.31***	-.46***	.16**	-.36***	-.14*	-.36***	1	
12. Job Satisfaction	-.13***	.11†	-.16*	-.02	-.21***	.42***	-.08	.30***	.15*	.37***	-.46***	1
13. Org. Job Stress	.30***	.34***	.45***	.16*	.30***	-.31***	.21**	-.19*	-.09	-.28***	.22***	-.00
14. Age	-.02	.00	-.09	-.01	-.02	-.06	-.22***	-.08	-.01	-.12†	.02	-.01
15. L.E. Tenure	-.00	.01	-.05	.04	-.05	-.02	-.22***	-.05	.02	-.08	.03	-.00

	1	2	3	4	5	6	7	8	9	10	11	12
16. Supervisor Tenure	-.04	-.07	-.08	-.01	-.04	.01	-.13*	-.06	.02	-.04	.06	-.04
17 Chief Tenure	.02	.00	.02	-.08	.06	-.04	.00	-.13*	-.14*	-.08	.12†	-.02
18 Agency Size (lg)	.02	.02	.09	.08	.03	.09	.06	.1	.13*	.03	-.01	.03
	13	14	15	16	17	18						
13. Org. Job Stress	1											
14. Age	-.04	1										
15. L.E. Tenure	-.02	.73***	1									
16. Supervisor Tenure	-.02	.43***	.62***	1								
17. Chief Tenure	.04	-.06	.01	.08	1							
18. Agency Size (lg)	.20*	.04	.20*	.29***	.00	1						

† p < .10; * p < .05; ** p < .01; *** p < .001

Table 12.
Group Difference Test Statistics for Turnover Intentions

Variable	M	SD	<i>t</i>	<i>p</i>
Race				
White	1.18	1.88	1.35	0.18
Non-White	1.54	2.03		
Education				
< B. S.	1.08	1.72	-2.06	0.04*
≥B.S.	1.59	2.16		
Marital Status				
Non-Married	1.74	2.35	1.82	0.07†
Married	1.19	1.80		
Military				
Non-Military	1.17	1.81	-1.46	0.15
Prior Military	1.55	2.13		
Hiring Origin				
Outside	1.22	1.81	-0.61	0.54
Inside	1.38	2.05		
Agency Type				
Local	1.33	1.95	-0.44	0.66
Other	1.21	1.90		
Jurisdiction				
Urban	1.49	2.04	-1.05	0.29
Other	1.21	1.88		
Suburban	1.27	1.77	0.13	0.90
Other	1.31	2.00		
Rural	1.16	1.97	0.88	0.38
Other	1.38	1.91		

Note: *df* = 247; *p*-values are for two-tailed tests: († *p* < .10; * *p* < .05; ** *p* < .01; *** *p* < .001).

Model Diagnostics

Model diagnostics indicated no issue with skewness or kurtosis, as estimates fell within the appropriate ranges (± 2.0) and kurtosis (± 7.0) (Curran, West, & Finch, 1996). A review of the variance inflation factor (VIF) values revealed an average of 2.5 overall, which is under the recommended cutoff of 10 (Field, 2013; Mertler & Vannatta, 2013). Three variables had VIF values greater than 4: normative commitment (4.2), affective commitment (5.0), and strain-based conflict (7.5). This potential multicollinearity issue was further highlighted within the bivariate statistics with each of these variables being significantly related to another concept within its respective area (organizational commitment and work-family conflict).

Multicollinearity becomes a problem because it increases the variances in the regression coefficients, which obscures the importance of independent variables (Merter & Vannatta, 2013). Therefore, separate models were estimated for normative commitment and affective commitment. In addition, strain-based and time-based work-family conflict were placed in separate models. The reason for estimating separate models for these variables was to avoid problems that multicollinearity generates. To further control for this issue, separate models were estimated for organizational job stress because it was found to be significant and moderately related to several of the other organizational control variables. In addition, age was removed from further analysis because it was significantly related to years in law enforcement (.73).

Multivariate Analysis

Tables 13 through 16 presents the results of the GLM (i.e., Gamma) models that estimated the effects that personal- and work-related factors had on turnover intentions.

Models 1 through 3 examine the influence of affective commitment and strain-based work-family conflict on TI. Models 4 through 6 investigate the role affective and time-based work-family conflict has on turnover intentions. Models 7 through 9 focus on normative commitment and strain-based work-family conflict. Models 10 through 12 are normative commitment and time-based work-family conflict models. Thus, the key independent variables were separated out in order to reduce any multicollinearity issues.

In Table 13, Model 1 excluded organizational variables. The results indicated that strain-based conflict had a significant and positive relationship with TI. Conversely, affective commitment had a significant inverse relationship with the outcome variable. Marital status had a significant and negative relationship. Race also had a negative but marginally significant relationship with TI. Education was found to have a significant and positive relationship with the outcome variable. In Model 2, organizational factors are introduced and strain-based conflict and affective commitment both retained a significant relationship. Furthermore, marital status and education were both found to be significant. Lastly, race also retained a marginally significant and inverse relationship with TI. Model 3 removes the organizational-related latent variables and introduces organizational job stress into the model. Strain-based conflict retained a significant and positive relationship with TI. Affective commitment, education, and marital status all retained a significant relationship in the model. Furthermore, family support and organizational job stress were found to have a significant and positive relationship, whereas agency size was found to have an inverse relationship with TI.

Table 14 depicts Models 4 through 6 which examined the influence affective commitment, time-based conflict, and family-work conflict has on TI. Affective

commitment remains significant and inversely related to the outcome variable across all models. For Model 4, behavior -based conflict and race both had a marginally significant and positive relationship with the outcome variable. Marital status and military service both had a significant and inverse relationship on TI. Model 5 introduces organizational level factors. Findings indicate that behavior-based conflict retained a positive but marginally significant relationship, which was inversely mirrored by race. Education and marital status retained significant relationships with TI. Model 6 found that affective commitment education and marital status remained significant. In addition, family support, organizational stress, and agency size were found to be significant predictors in the model.

Table 15 contains Models 7 through 9, which examined the influence normative commitment and strain-based conflict has on turnover intentions. Strain-based conflict and normative commitment were found to be significant. Furthermore, education and marital status were found to be significant. Race was also found to be marginally significant. In Model 8 strain-based work-family conflict and education were found to have a positive and significant relationship with the outcome variable. Conversely, race and marital status had a significant and negative relationship with TI. Likewise, job satisfaction had a negative and marginally significant relationship with the outcome variable. In Model 10, once controlling for organizational stress, strain-based conflict, education, family support, and organizational were all found to have a significant relationship with TI. Conversely, race was found to have a negative and marginally significant with the outcome variable.

Depicted within Table 16 are Models 10 through 12. These particular models

examine the influence of normative commitment and time-based conflict on TI. Model 10 contains only the personal factors. Findings from this model show that time-based conflict, FWC, and education had a significant and positive relationship with the outcome variable. Normative commitment and marital status were found to have a significant and negative relationship on TI. Race was also found to have a marginally significant and inverse relationship with the outcome variable. Model 11 introduces organizational factors and results reveal that race and marital status had a significant and inverse relationship with the TI, whereas education ($b = .80, p < .01$) had a significant and positive relationship with TI. Model 12 introduces organizational job stress. Findings from this model show normative commitment, marital status, and agency size had a significant and negative relationship with TI. Conversely, organizational job stress, family support, and education have a significant and positive relationship with TI.

When examining these tables collectively, results indicate that affective commitment and strain-based conflict were significant factors on TI. Likewise, education, marital status, and race emerged as factors that were relatively significant across models. Furthermore, organizational job stress was found to be significant, whereas other latent organizational factors were not found to be as salient. Likewise, agency size became significant once taking into account organizational stress. Results from this latter finding may not be stable, thus warranting future research. These findings will be discussed in greater length in the next chapter.

Table 13

GLM Regression Results: Personal and Work-Related Factors (Affective Commitment & Strain-based Work-Family Conflict) Associated with Turnover Intentions (N = 249)

Variables	Model 1		Model 2		Model 3	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Time-based WFC	-	-	-	-	-	-
Strain-based WFC	0.48***	0.14	0.48**	0.18	0.37*	0.18
Behavior-based WFC	0.06	0.11	0.07	0.12	0.08	0.13
FWC	-	-	-	-	-	-
Affective Commitment	-0.53***	0.14	-0.41**	0.16	-0.51**	0.17
Continuance Commitment	0.05	0.12	0.12	0.13	0.08	0.13
Normative Commitment	-	-	-	-	-	-
Personal Characteristics						
White	-0.37†	0.21	-0.39†	0.22	-0.38	0.24
Bachelors +	0.74***	0.23	0.85**	0.28	0.81**	0.25
Married	-0.63*	0.26	-0.70**	0.26	-0.79**	0.30
Prior Military Service	0.13	0.27	0.30	0.27	0.12	0.30
Hiring Origin	-0.22	0.24	-0.18	0.26	-0.25	0.31
L.E. Tenure	0.00	0.01	0.00	0.02	-0.02	0.02

Supervisor Tenure	0.00	0.02	0.00	0.02	0.02	0.02
Chief Tenure	0.07	0.13	0.05	0.13	-0.08	0.10
Family Support	0.10	0.10	0.16	0.11	0.27**	0.13
Organizational Factors						
Collegial Support	-	-	-0.06	0.13	-	-
Burnout:	-	-	0.05	0.20	-	-
Job Satisfaction	-	-	-0.18	0.13	-	-
Organizational Job Stress	-	-	-	-	0.74**	0.22
Agency Size (lg)	-	-	-0.08	0.08	-0.19*	0.09
Local	-	-	-0.22	0.27	-0.24	0.29
Urban	-	-	0.15	0.30	0.29	0.31
Rural	-	-	-0.14	0.26	-0.10	0.30
Lg Pseudolikelihood	-241.61		-233.93		-214.30	
AIC	-2.05		2.04		1.87	
(BIC)	(-1132.60)		(-1088.96)		(-1063.81)	

(† p < .10; * p < .05; ** p < .01; *** p < .001)

Table 14

GLM Regression Results: Personal and Work-Related Factors (Affective Commitment & Time-based Work-Family Conflict) Associated with Turnover Intentions (N = 249)

Variables	Model 4		Model 5		Model 6	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Time-based WFC	0.18	0.12	0.14	0.13	0.06	0.14
Behavior-based WFC	0.18†	0.11	0.21†	0.11	0.16	0.12
Strain-based WFC	-	-	-	-	-	-
FWC	0.18	0.12	0.08	0.12	0.12	0.13
Affective Commitment	-0.57***	0.14	-0.42**	0.16	-0.58***	0.17
Continuance Commitment	0.12	0.12	0.20	0.13	0.13	0.14
Normative Commitment	-	-	-	-	-	-
Personal Characteristics						
White	-0.18†	0.11	-0.41†	0.22	-0.35	0.25
Bachelors +	-0.35	0.22	0.84**	0.27	0.82**	0.26
Married	-0.71**	0.23	-0.72**	0.26	-0.80**	0.29
Prior Military Service	-0.66**	0.26	0.40	0.26	0.17	0.28
Hiring Origin	0.21	0.25	-0.20	0.26	-0.16	0.23
L.E. Tenure	-0.28	0.24	0.01	0.02	-0.02	0.02

Supervisor Tenure	0.00	0.02	0.00	0.02	0.01	0.02
Chief Tenure	0.00	0.02	0.08	0.13	-0.07	0.10
Family Support	0.08	0.12	0.15	0.11	0.27*	0.13
Organizational Factors						
Collegial Support	-	-	-0.08	0.13	-	-
Burnout	-	-	0.17	0.19	-	-
Job Satisfaction	-	-	-0.16	0.13	-	-
Organizational Job Stress	-	-	-	-	0.80***	0.22
Agency Size (lg)	-	-	-0.02	0.07	-0.16†	0.09
Local	-	-	-0.18	0.26	-0.19	0.28
Urban	-	-	-0.05	0.28	0.09	0.29
Rural	-	-	-0.20	0.27	-0.16	0.30
Lg Pseudolikelihood	-249.89		-242.48		-219.03	
AIC	2.12		2.12		1.91	
(BIC)	(-1128.22)		(-1088.57)		(-1059.21)	

(† p < .10; * p < .05; ** p < .01; *** p < .001)

Table 15

GLM Regression Results: Personal and Work-Related Factors (Normative Commitment & Strain-based Work-Family Conflict) Associated with Turnover Intentions (N = 249)

Variables	Model 7		Model 8		Model 9	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Time-based WFC	-	-	-	-	-	-
Behavior-based WFC	-0.03	0.11	0.04	0.12	0.01	0.13
Strain-based WFC	0.58***	0.15	0.51**	0.18	0.50**	0.19
FWC	-	-	-	-	-	-
Affective Commitment	-	-	-	-	-	-
Continuance Commitment	0.11	0.14	0.14	0.15	0.14	0.16
Normative Commitment	-0.27*	0.13	-0.16	0.14	-0.26	0.16
Personal Characteristics						
White	-0.41†	0.22	-0.45*	0.22	-0.40†	0.25
Bachelors +	0.66**	0.23	0.80**	0.27	0.76**	0.25
Married	-0.64*	0.26	-0.68**	0.26	-0.75	0.30
Prior Military Service	0.04	0.28	0.30	0.27	0.03	0.32
Hiring Origin	-0.02	0.22	-0.03	0.24	-0.34	0.30
L.E. Tenure	0.01	0.01	0.01	0.02	-0.01	0.02

Supervisor Tenure	-0.01	0.02	0.00	0.02	0.02	0.02
Chief Tenure	0.06	0.15	0.03	0.13	-0.11	0.11
Family Support	0.12	0.10	0.18	0.11	0.32*	0.13
Organizational Factors						
Collegial Support	-	-	-0.14	0.12	-	-
Burnout	-	-	0.11	0.19	-	-
Job Satisfaction	-	-	-0.22†	0.13	-	-
Organizational Job Stress			-	-	0.76**	0.22
Agency Size (lg)	-	-	-0.09	0.08	-0.22†	0.09
Local	-	-	-0.16	0.27	-0.18	0.29
Urban	-	-	0.22	0.30	0.44	0.32
Rural	-	-	-0.16	0.26	-0.01	0.30
Lg Pseudolikelihood	-254.69		-239.70		-224.25	
AIC	2.16		2.09		1.95	
(BIC)	(-1137.79)		(-1032.29)		(-1065.78)	

(† p < .10; * p < .05; ** p < .01; *** p < .001)

Table 16

GLM Regression Results: Personal and Work-Related Factors (Normative Commitment & Time-based Work-Family Conflict)
Associated with Turnover Intentions (N = 249)

Variables	Model 10		Model 11		Model 12	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Time-based WFC	0.28*	0.12	0.15	0.12	0.15	0.15
Behavior-based WFC	0.10	0.10	0.18	0.11	0.10	0.12
Strain-based WFC	-	-	-	-	-	-
FWC	0.23*	0.11	0.08	0.12	0.17	0.13
Affective Commitment	-	-	-	-	-	-
Continuance Commitment	0.20	0.14	0.24	0.16	0.22	0.16
Normative Commitment	-0.32*	0.13	-0.18	0.14	-0.33*	0.16
Personal Characteristics						
White	-0.41†	0.22	-0.48*	0.22	-0.39	0.25
Bachelors +	0.63**	0.22	0.80**	0.27	0.78**	0.27
Married	-0.65*	0.25	-0.70**	0.26	-0.75*	0.30
Military Service	0.12	0.25	0.40	0.26	0.08	0.30
Hiring Origin	-0.07	0.23	-0.04	0.25	-0.40	0.31

L.E. Tenure	0.01	0.02	0.01	0.02	-0.01	0.02
Supervisor Tenure	0.00	0.02	-0.01	0.02	0.02	0.02
Chief Tenure	0.08	0.15	0.06	0.13	-0.09	0.12
Family Support	0.15	0.11	0.17	0.11	0.34*	0.13
Organizational Factors			-0.17	0.12		
Collegial Support	-	-	0.23	0.19		
Burnout	-	-	-0.20	0.13		
Job Satisfaction	-	-	-0.48*	0.22		
Organizational Job Stress	-	-	-	-	0.82***	0.22
Agency Size (lg)	-	-	-0.04	0.07	-0.19†	0.09
Local	-	-	-0.12	0.26	-0.12	0.28
Urban	-	-	0.01	0.28	0.21	0.29
Rural			-0.21	0.27	-0.05	0.31
Lg Pseudolikelihood	-264.47		-249.08		-231.58	
AIC	2.44		2.18		2.02	
(BIC)	(-1133.43)		(-1091.13)		(-1061.76)	

(† p < .10; * p < .05; ** p < .01; *** p < .001)

Chapter V

DISCUSSION

The final chapter connects the previous chapters through a discussion facilitated by the findings of this study. Central to this discussion is the relevancy of work-family stressors and organizational commitment on turnover intentions (TI) among police chiefs. As a result, implications from this study's findings will be discussed in greater detail. In order to accomplish this task, the chapter begins with a summary of the extant scholarship and context surrounding police chief turnover. Directly following the summary will be sections on implications (theoretical and policy-related) concluding with avenues for future research.

Summary of Extant Scholarship

Policing is a complex occupation that has encountered increased political and social scrutiny. This collective inquiry is due in part to historical problems between agencies and communities (Goldstein, 1977; Walker & Katz, 2002), and recent events such as the in-custody deaths of Alton Sterling on July 5, 2016, Freddie Gray Jr. on April 12, 2015, George Floyd on May 25, 2020 and Eric Garner on July 17, 2014 (Bender & Winning, 2020; Mettler, 2019; Ruiz, 2017; Sanburn, 2014). These deaths have spurred national, grassroots efforts for increased transparency and accountability of officers and departments (Bender & Winning, 2020; Brady, 2017). As a result, agency leaders are being called upon to develop effective community-oriented strategies meant to enhance citizen oversight, maintain order, and reduce crime while ensuring the protection of citizens' civil rights (Brady, 2017; Goldstein, 1977; Walker & Katz, 2002). With these tasks in mind, it needs to be understood that policing is a taxing occupation, which

impacts officers of all ranks and jurisdictional boundaries (Brady, 2017; President's Task Force on 21st Century Policing, 2015; Rubinstein, 1973).

Despite the additional roles placed on police chiefs, ranging from administrative tasks (Hunt & Magenau, 1993; Witham & Watson, 1983) to patrol duties (Falcone et al., 2002), few studies have examined the well-being among these agency leaders (Brady, 2017; Rainguet, 1998; Rainguet & Dodge, 2001). This largely absent body of literature is concerning, especially given that the President's Task Force on 21st Century Policing identified officer safety, *at all ranks*, is a pillar for enhancing police practices (President's Task Force on 21st Century Policing, 2015). Therefore, the importance of examining well-being among police chiefs is two-fold. First, research in this area better educates practitioners and informs scholars about issues impacting police chief well-being. Second, this research indirectly benefits line-level officers given the chief's ability to implement departmental well-being mechanisms (Brady, 2017; Goldstein, 1977; Hunt & Magenau, 1993).

Turnover among police chiefs may, however, potentially stifle current organizational programs meant to improve officer well-being and community relationships (Brady, 2017; Orrick, 2008). As a result, prior scholarship has identified how work and personal factors impact police chiefs' well-being and willingness to leave the organization (Brady, 2017; Rainguet, 1998; Rainguet & Dodge, 2001). However, this line of research has only started to quantitatively uncover how tension between work, personal obligations, and commitment to the organization influence turnover among police chiefs (Brady, 2017). To fill this gap within the body of extant literature, the current study focused on the influence organizational commitment and role conflict had

on these organizational leaders' turnover intentions (TI). Subsequently, several findings from the current study warrant further discussion.

Summary of the Current Study

The purpose of the current study was to examine the influence work-family stressors and organizational commitment have on TI among police chiefs. Subsequently, the present study presented two research questions. The first question examined the direct influence work-family stressors had on TI. The second question asked about the impact organizational commitment has on this work-related outcome. In addition, this study examined the current validity of instruments used to examine these factors.

To accomplish these tasks, the current study drew from data collected from 249 newly appointed Texas police chiefs, who served a variety of agencies in terms of agency size and jurisdictional boundaries. Respondents were predominantly white (67.9%) with several years of law enforcement (22.0%) and supervisory experience (10.8%). Chiefs also had varying levels of education with 42.3 percent having at least a bachelor's degree, and approximately a third (33.5%) having military experience. Thus, this diversified sample of police chiefs provided unique insight into TI given their recent appointment within the position.

For example, this study used the same TI measure used in previous TI research (see Brough & Frame, 2004) among police chiefs (Brady, 2017). Therefore, researchers can examine TI variation across two different police chief samples (i.e., newly appointed, or longer serving chiefs). Furthermore, the current study is the second to quantitatively examine TI among police chiefs, as previous research has used open-ended questions about chiefs' reasons for leaving (Rainguet, 1998; Rainguet & Dodge, 2001). Despite the

lack of prior research in this area, much can be gathered from the present study.

Collectively, this sample of police chiefs reported having, on average, low TI ($M = 1.3$, $SD = 1.9$), while Brady (2017) found higher TI levels ($M = 7.3$, $SD = 3.3$) among a sample of Texas police chiefs. The findings from the present study could be an artifact of the different samples and their time with their positions. More exactly, the current study drew from a sample of police chiefs who had limited tenure as chief ($M = 0.8$, $SD = 1.2$), whereas Brady (2017) drew from a more experienced sample ($M = 8.1$, $SD = 7.5$). The next section examines the findings central to the research questions, followed by a discussion on measurement and supplementary findings.

Work-family Conflict Findings

Findings central to the first research question, work-family conflict, produced insightful results. First, the study identified the importance of work-related stressors on TI. More specifically, strain-based conflict was found to be a consistent predictor of TI even when accounting for personal and organizational level variables. This finding aligns with both policing (Brady, 2017) and corrections scholarship (Burke, 1988; Lambert, 2006) and illustrates the influence of how conflict originating from work impacts TI.

Second, the study identified that time conflicts and family-oriented obligations were significant, but once organizational factors were accounted for time and family obligations became insignificant. These findings depart from previous research, which identified no significant relationship between these two factors and TI (Brady, 2017; Lambert, 2006). The current study's results may be indicative of the sample used and the respondents being relatively new to their positions. In other words, they may still be

learning how to delegate tasks and responsibilities to others, so they can better manage their time and other responsibilities (Brady, 2017; Hunt & Magenau, 1993). Another interesting finding in the current study was behavior-based conflict was not found to be significant. The reason why this element was not found to be significant may be due to these individuals having, on average, several years of experience within the law enforcement profession. Subsequently, those work-related behaviors may not be pronounced enough to detect within themselves. More research is therefore warranted to decipher if behavior conflict is related to any other work-related outcome among police chiefs.

There is still more to learn about the impact one's role both professionally and personally has on work-related factors. This study only advanced the literature in relation to TI among police chiefs. More specifically, it demonstrated that strain-based was a significant predictor of TI even when considering organizational factors. Scholars should expand this line of research into other policing administrators (i.e., sheriffs) and correctional leaders (i.e., wardens) to flesh out if these other administrators view work-family conflict in a similar fashion, and how that work-family stressors impact their well-being and work-related outcomes.

Organizational Commitment Findings

Findings central to the second research question, support prior arguments made to examine organizational commitment through multidimensional means (Jaros, 2007; Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001; Meyer & Paryonova, 2010; Somers et al., 2019). The thesis being that commitment is complex and is likely to vary across individuals (Meyer & Allen, 1997). In other words, what establishes commitment

in one person may be different for someone else. This study responds to that body of literature and is the first to apply a three-component model of organizational commitment to examine TI among police chiefs (Jaros, 2007). These three components were affective, continuance, and normative commitment. Affective commitment refers to the emotional attachment or ties individuals develop with others present within the organization (Meyer & Allen, 1997). Continuance commitment involves the perceived costs associated with leaving an institution (Jaros, 2007; Meyer & Allen, 1997). This particular commitment can also be viewed as the anticipated losses (e.g., financially, socially) a person may endure after departing an organization (Jaros, 2007; Meyer & Allen, 1997). Finally, normative commitment identifies the moral responsibility of staying with the organization based on what the company has done for them or the alignment of values between the individual and organization (Jaros, 2007; Meyer & Allen, 1997).

Results derived from the current study identified that affective and normative commitment were significant in predicting TI among police chiefs. More specifically, emotional ties remained significant even when taking into account the influence of organizational stress. Normative commitment, or the perceived moral responsibilities, was found to be significant but not as robust as the emotional connections developed between an individual and other organizational member. The perceived cost of leaving an organization (i.e., continuance commitment) was, however, found to be non-significant across models. These findings suggest that the emotional ties (i.e., affective) and morality component (i.e., normative) are important to police chiefs and their continuation within the department, whereas the perceived costs of leaving the organization was not significant in predicting TI. Therefore, future research should examine the importance of

these three components across other work-related outcomes.

The current study's findings align with the body of criminal justice scholarship devoted to TI among criminal justice actors (Brady, 2017; Lambert & Paoline, 2010; Matz et al., 2013, 2014; Udechukwu, 2008). All prior research has identified a robust and inverse relationship with TI, which aligns with the greater turnover scholarship (Hom et al., 2017). Udechukwu (2008), however, was the only other study to use a three-component model of organizational commitment (Meyer & Allen, 1993) to examine TI. Findings from that study illustrated that all three components were significant and inversely related to TI. The variation in findings may be due to Udechukwu's sample being drawn from field-level correctional officers, whereas the current study draws from administrative-level personnel. Thus, there is a need for further research on more nuanced measures of organizational commitment on TI using different samples.

Thus, the current study establishes that examining organizational commitment through a multidimensional lens is important among policing administrators. More exactly, the current study shows emotional ties and moral responsibility are important elements of a police chief's commitment to the organization. This enhanced understanding can better inform practices meant to assist in the retention of officers at all ranks. Therefore, future research should use a multidimensional lens (Jaros, 2007; Meyer & Allen, 1997) to further explore the impact organizational commitment has on TI among other criminal justice stakeholders. The reasoning behind this position is simple, the current study along with prior research has produced a unified voice: organizational commitment matters.

Measurement

The data used in this study did not fully support the construct validity of the two key independent variable instruments in their current state (Armstrong et al., 2015; Jaros, 2007). In other words, the results indicate that convergent validity occurred among the latent variables, however, discriminant validity was not fully established. For example, affective commitment was found to be significantly correlated with normative commitment (.81), and stress-based work-family conflict was found to be significantly correlated with time-based conflict (.78). These findings are indicative of convergent validity because these latent variables are converging on a larger concept (i.e., organizational commitment). However, these different latent concepts should differ enough to measure distinct concepts (i.e., divergent validity) (Brown, 2015; Garson, 2015a). Subsequently, measuring organizational commitment and work-family conflict through the previously identified models (Armstrong et al., 2015; Jaros, 2007) complicated modeling practices. The reason for these complications are due to the significantly high correlations among latent variables. These significant correlations were most likely due in part to the parameters used by the author to determine model fit.

More exactly, model fit parameters were determined through prior literature (i.e., $CFI \geq .90$) (Brown, 2015; Garson, 2015a). The fit statistics estimated through CFA indicated an acceptable model. In other words, the data fit the predetermined models established by prior literature (Armstrong et al., 2015; Jaros, 2007). However, to determine if sufficient convergent validity was reached on each latent variable average variance extracted (AVE) values were extracted (Mehmetoglu, 2015). Sufficient convergent validity was determined once an acceptable threshold was reached ($AVE \geq$

0.4; Cronbach $a \geq 0.6$) (Fornell & Larcker, 1981). Future research should move toward more restrictive convergent validity values when possible in order to fully determine the robustness of different latent values.

The present study determined that the data did fit the model, however, the family-work conflict and organizational commitment models may be potentially improved in the future. This improvement will be facilitated by the integration of theoretical reasoning on why a particular concept should be reduced or expanded. For example, the current study used a three-component model of organizational commitment comprised of multiple questions per latent variable. However, prior criminal justice research (Udechukwu, 2008) used a three-item questionnaire (Meyer & Allen, 1993) to measure the three organizational components. This variation in measurement makes it difficult to do a direct comparison across samples or measures. Therefore, criminal justice researchers need to use more established commitment measures (Meyer & Allen, 1997; Jaros, 2007) in order to test the translation of these models across samples. Thus, researchers should examine the validity of a three-component model of organizational commitment across different criminal justice stakeholders.

Specific to the work-family conflict measure, the current study found robust correlations between strain-based conflict and time-based conflict, which made it difficult to differentiate their effects if placed in the same model. This finding illustrates that the current model used within correctional officers research (Armstrong et al., 2015; Lambert et al., 2006) may not be an accurate representation of how police chiefs view work-family conflict through confirmatory factor analysis. However, differences between this study and previous confirmatory research (Armstrong et al., 2015; Lambert et al., 2006) may be

an artifact of the current sample. More specifically, the current study draws from a sample of new police chiefs who may be still navigating the new roles and responsibilities; whereas prior research found those factors to be more distinct among chiefs who had been in their positions longer (Brady, 2017).

In summary, the purpose of this study was to test the validity of these instruments (Armstrong et al., 2015, Jaros, 2007) in their current state. Therefore, the focus was not to alter them outside of what has already been established. The reason is that future research, guided by theoretical reasoning and empirical findings, will be conducted to test different models.

Supplementary Findings

In addition to the primary findings from the current study, inferences can be drawn regarding other relevant factors related to TI. First, job stress was found to be a significant predictor of TI in the current study. This finding mirrors previous TI research (Brady, 2017; Lambert, 2006; Lambert & Paoline, 2010; Rainguet & Dodge, 2001). For example, Rainguet and Dodge (2001) found job stress to be a common theme that police chiefs use to provide justification for leaving their organizations. The findings of the current study, along with findings by Brady (2017), support the perspective that chiefs face a myriad of different personal and professional stressors (Brady, 2017; Oliver, 2017; Matusiak et al., 2017). The impact these factors have on the individual is difficult to fully quantify, as issues and situations are constantly in motion. Therefore, future research should examine the impact that stressors and supportive factors have on TI among police chiefs over time.

An interesting finding specific to the current study emerged though, and that is

how agency size became significant and inversely related to the outcome variable once organizational job stress was entered into the model. The organizational size finding implies that chiefs from larger agencies have less TI in relation to chiefs serving smaller agencies when organizational job stress was held constant. The reason for this may be due to the ability to delegate tasks and responsibilities found in larger, more structured agencies (Brady, 2017; Maguire, 2003; Weisheit et al., 2005). In other words, chiefs serving small agencies may be much more “on the ground level” of social and political issues than chiefs serving larger agencies.

Significant findings involving job stress was not limited to only agency size. For example, family support was found to be significant once organizational job stress was held constant. This finding is counterintuitive, as family support was found to be positively related to TI. Researchers interpreting this finding should understand there is likely an interaction effect that maybe occurring with this variable. More exactly, family support significance may be conditioned on agency size. Future research is needed to further examine the impact that job stress and agency size may have on family support, as well as the potential interactions between these factors.

Personal factors were also found to be significant in the current study. More specifically, education, race, and marital status were all found to have significant relationships with the outcome variable. Education was found to have a positive relationship, which departs from previous TI research among police chiefs that found no significant relationship (Brady, 2017). TI research outside of police chiefs has found mixed results specific to education (Frost, 2006; Lambert & Paoline, 2010). For example, Frost (2006) found an inverse relationship among a sample of line-level police officers,

whereas Lambert and Paoline (2010) found it to be a positive predictor of TI among medical and correctional staff. A speculation at this time is that possibly higher education obtainment among administrators provides them with a greater degree of perceived agency in terms of pursuing potential job opportunities. Therefore, more research is needed to better understand the influence that education has on criminal justice actors' decision-making surrounding TI.

Findings involving race and marital status illustrate contrasting results from previous TI research. More exactly, marital status was found to be significant among another sample of police chiefs (Brady, 2017). However, no other TI research specific to criminal justice actors has explored this factor. Policing scholars interested in understanding TI should consider examining this factor in greater detail. The reason is due to the important and documented role spouses have regarding emotional support for law enforcement officers (Oliver, 2017; Reese & Castellano, 2007).

Results from the current study illustrate that white officers were significantly less prone to TI even when controlling for other factors. This is an interesting finding as prior research has largely found non-significant relationships between race and TI (Brady, 2017; Lambert, 2006; Lambert & Paoline, 2010; Lee et al., 2009; Matz et al., 2013; Simmons et al., 1997). Lambert (1999), however, found that non-white federal correctional staff were more likely to indicate higher TI than white correctional officers. It can be speculated that non-white criminal justice actors may perceive additional stressors than their white counterparts (Lambert, 1999). As such, continued efforts are warranted within criminal justice scholarship to better understand the perceptions of stress, commitment, and perceived support and how they vary across racial and ethnic

origins. The premise being to build a more inclusive environment for all individuals within the criminal justice community. Subsequently, the best step in achieving that goal is through sound research and informed national discussions.

Inferences drawn from the present study moves scholarship forward in regard to well-being among criminal justice administrators. It accomplishes that task by examining the influence work-family conflict and organizational commitment had on TI among police chiefs. As a result, this study reaffirmed the saliency of strain originating from their occupation elevating TI. In addition, it documented that commitment borne from emotional ties and perceived moral responsibilities were salient in reducing an individual's intentions to leave their organization. Moreover, the study also illustrated the need for further research regarding how to measure work-life stressors and organizational commitment. In other words, to test different theoretically driven models of these two work-related factors to ensure they hold across different samples.

Furthermore, this study examined the influence work-family conflict and organizational had on TI using a snapshot in time. Researchers should respond to this limitation by examining the influence of role conflict and organizational commitment through a longitudinal design. There is still much to know regarding the narrative of stressors and supportive elements and how those elements unfold overtime regarding work-related outcomes among police chiefs. The next section illustrates how theory could be integrated into this line of study, followed by a discussion on policy implications.

Theoretical Implications

The current study builds on Brady's (2017) initial work on TI among police chiefs. A consistent theme found in that study and the current study is the importance of

organizational commitment, work-family conflict, and job stress on this work-related outcome. Absent within either study, however, is a theory that ties these different factors together. For example, scholars are still undecided on the order of organizational commitment and job satisfaction, is there a particular sequence to these two constructs, or are they reciprocal in nature (Griffeth & Hom, 2001; Meyer & Herscovitch, 2001; Penley & Gould, 1988).

The same type of argument can be raised about what drives work-related factors among criminal justice actors generally, and police chiefs in particular. Therefore, researchers should take notice of this gap in scholarship and quest to shed more light on the subject through empirical research. An example of this work in motion would be to apply theories such as job demands-resources theory (JD-R) or conservation of resources theory (COR) to the equation (Hobfoll, Halbesleben, Neveu & Westman, 2018; Schaufeli & Taris, 2014). These particular theories originate from the business and organizational psychology literature, but their parsimonious nature makes them applicable for policing scholarship.

For example, JD-R proposes that high job demands lead to strain and health impairment, whereas high resources lead to increased motivation and higher productivity. The lynchpin in the theory is how demands are introduced or removed from an individual and how resources (e.g., organizational commitment) influence a particular outcome. The value in this theory is the flexible application in what resources and demands can be put into different predictive models (Schaufeli & Taris, 2014). Thus, researchers can define different stressors, such as organizational and occupational stressors. Likewise, the modeling of resources is also adaptable given than personal or organizational resources

can be introduced into JD-R models (Schaufeli & Taris, 2014).

Alternatively, COR speculates on the integration of stress and how it occurs through three different pathways: (a: when central or key resources are threatened with loss (i.e., defund the police); (b: when central or key resources are lost; or (c: when there is a failure to gain key resources (Hobfoll et al., 2018). An important element about COR is that it emphasizes the stressful nature of events over time, and how those incidents will impact an organizational culture or individual. Furthermore, the theory can be used to speculate that resource loss is more salient than resource gain, and that resources must be invested in order to protect against further losses (Hobfoll et al., 2018).

The reason for adding these theories into the mix is that they draw on already captured variables within datasets. For example, at the individual level, researchers could examine how different resources (e.g., collegial support) and demands (e.g., work-family conflict) could impact one another in relation to a prescribed work-related outcome. COR could also be integrated into studies wanting to understand what influence stressful events might have on employees within a particular working group or organization.

These theories should not be viewed as the only options researchers have to examine well-being and work-related factors. Instead, these theories should be viewed as a starting point to better understand the complex nature of stress, resources, and time on predicting work-related outcomes. The ability to better understand and improve the well-being of all police officers not only benefits the criminal justice discipline, but also the communities these individuals serve.

Policy Implications

The current study has important implications for both individual- and

organizational-level responses. It is important for researchers and practitioners to understand that responses to well-being and work-related outcomes should not be viewed as an “either-or” scenario. Rather, the best approach is to strategically combine both person- and organization-directed interventions (Awa, Plaumann, & Walter, 2010; Brady, 2017; Griffeth & Hom, 2001). In other words, a multiprong approach where organizations and individuals work collaboratively on elements to improve the health and wellness of all organizational members (Brady, 2017).

Person-directed interventions. Person-directed interventions focus on mechanisms that apply to an individual’s work and personal life. Regarding police chiefs, it is important to consider the demands and responsibilities found in their administrative positions, as well as how those tasks may interfere with personal obligations (Brady, 2017; Hunt & Magenau, 1993; Weisheit et al., 2005; Witham & Watson, 1983). Moreover, these executive positions may make it difficult for police chiefs to find guidance and support within their own departments (Brady, 2017; Oliver, 2017; Orrick, 2008). Due to their political environments (Brinser & King, 2016, Matusiak, 2016; Matusiak et al., 2017), police chiefs may have difficulty in establishing connections with community members who comprehend their unique social responsibilities and the external pressures they encounter (Bittner, 1970; Brady, 2017; Brinser & King, 2016; Matusiak, 2016; Matusiak et al., 2017 Orrick, 2008).

Therefore, it may be challenging to find someone who understands the complexities, pressures, and responsibilities of this position unless they have done, or are currently engaged in the work of a police chief (Brady, 2017; Oliver, 2017). A way to overcome that issue is to develop state-oriented or nationally based opportunities for

police chiefs to network and communicate with other police chiefs (Brady, 2017). The idea is to integrate police chiefs into networking and mentorship opportunities, where chiefs can learn about effective strategies meant to improve their health and well-being.

On a national level, organizations such as COPS (Community Oriented Policing Services), which is managed by the U.S. Department of Justice, or the International Association of Chiefs of Police (IACP), serve as two entities ready to assist police chiefs. More specifically, both organizations advocate for improving the health and well-being of all officers and organizational employees (Copples et al., 2019). Also present on the national stage is the Law Enforcement Mental Health and Wellness Act (LEMHWA), which recognizes the needs of law enforcement agencies to take proactive measures in improving current mental health practices. Potential mechanisms advocated for range from crisis hotlines for officers to consistent mental health checks, and peer mentoring programs (Spence, Fox, Moore, Estill, & Comrie, 2019).

The ability to implement networking opportunities and procure additional resources is likely to vary across states. For example, in Texas, police chiefs are mandated by state legislation to complete 40 hours of professional development every two years (Brady, 2017; Li, 2016). These required trainings provide a platform for addressing a host of issues ranging from work-related responsibilities, leadership skills, and legislative updates, while also facilitating networking opportunities (Brady, 2017). Therefore, this study can help bolster the support for police chiefs and state organizations on legislative changes meant to help facilitate state-mandated professional development opportunities.

The crux of this line of thought is that state-based or nationally oriented

professional development strategies can potentially improve their work-related attitudes, thus improving their efficacy as leaders (Brady, 2017; Copple et al., 2019). The reason for extending these professional development opportunities to police chiefs is to help minimize work-related stressors and foster a greater amount of job satisfaction and organizational commitment. These events are designed to promote occupational leaders who are cognizant of work- and family-related stressors and are progressive in addressing those issues (Copple et al., 2019). The ability to learn proactive measures from their peers not only refines their own internal practices, but it also makes them socially aware for the implementation of organizational-based interventions (Copple et al., 2019).

Organization-directed interventions. Chiefs should also implement organization-directed interventions alongside individual-based responses (Awa et al., 2010; Brady, 2017). The reason for these organizational-level interventions is to improve the well-being of police chiefs and the officers under their command. As a result, police chiefs can introduce these programs and become willing participants in the intervention strategies discussed below. The core idea is that both forms complement each other, and as a result, the benefits radiate beyond the police chief's position. Therefore, these organizationally directed initiatives can benefit not only those within leadership positions, but also those serving under their command (Brady, 2017).

The reason for such interventions to be in place throughout the organization is due to policing being an emotionally and physically daunting occupation that consists of addressing complex social issues (Brady, 2017; Burke, 1993; Moskos, 2008; Oliver, 2006; Rubinstein, 1973; Walker & Katz, 2002). Subsequently, officers are at a heightened risk for a myriad of different negative psychological, physiological, and

behavioral outcomes such as substance abuse, suicide, and domestic violence (Brady, 2017; Violanti, 2004; Violanti et al., 2013, 2017). Therefore, addressing officer health and well-being is an area of needed improvement with all agencies, and at all ranks (President's Task Force on 21st Century Policing, 2015). The reason for these focused organizational efforts is to improve social awareness and cultural acceptance of quality of life practices among all officers regardless of rank or agency type.

The promotion and demonstration of these practices in action is through key organizational members, such as police chiefs. The reason for modeling these well-being practices at the executive level is to potentially minimize any perceived stigmatization about seeking help (Copples et al., 2019; Donnelly, Valentine, & Oehme, 2015). Therefore, these organizational leaders can improve upon employee assistance programs (EAPs) (Brady, 2017; Donnelly et al., 2015; Kuhns, Maguire, & Leach, 2015) by offering programs tailored towards improving the mental and physical health of their subordinates.

One potential way to minimize work and family conflict is to address underlying issues that place strain on the individual and families, such as financial concerns (Copples et al., 2019). For example, one theoretically relevant EAP could be a financial literacy course (Bannon, Ford, & Meltzer, 2014; Copples et al., 2019; COPS, 2020; International Association of Chiefs of Police, 2018; Loux, 2014; Ramsey, 2013; Sammer, 2012). This program, open to officers and their families, could be tailored toward avoiding debt and maximizing earning potential through incremental financial steps focused on debt elimination, investing, and retirement planning (Bannon et al., 2014; COPS, 2020; International Association of Chiefs of Police, 2018; Ramsey, 2013). For example, Copples

et al. (2019) noted that this type of programming is currently being used within the Dallas Police Department. More specifically, organizational leaders within that department have established a financial management course, as part of a holistic wellness program meant to address an officer's overall well-being.

The holistic approach noted by Copple et al. (2019) makes sense within policing, as this same initiative has been documented within medicine as a more effective strategy in achieving meaningful physical and financial benefits for employees (Chapman, 2003; Soler et al., 2010). For example, Soler et al. (2010) argued that the dosage and fidelity of these programs are also important in making significant changes. Thus, organizational leaders and interested parties should not view these programs as one-time events; instead, the department led programs should occur with some consistency and duration. (Berry et al., 2010; Copple et al., 2019; Loux, 2014).

Police chiefs interested in adapting a multi-prong approach to improving health and wellness within a department could acquire resources from national outlets (e.g., COPS) or localized state-based training organizations (e.g., LEMIT) (Copple et al., 2019; COPS, 2020; International Association of Chiefs of Police, 2018). For example, agencies could implement a working group within the department to assist in developing work-family policies that benefit all officers (Brady, 2017; Copple et al., 2019). Similar to the police chief peer group mentioned previously, departments could also implement peer support programs and send influential officers within the departments to train-the-trainer events (Brady, 2017; Copple et al., 2019). The idea is that their social statuses (both formal and informal) within the departments help facilitate officer buy-in for the well-being seminars (Brady, 2017; Copple et al., 2019). Thus, these in-house trainers reduce

overall training costs and help to foster a culture where officer well-being is important and readily discussed both administrators and agency leaders.

Agencies wanting to implement training sessions involving officer well-being should advocate for and promote family participation within these well-being workshops. Including families is grounded in the idea that they are the important support networks for law enforcement officers (Brady, 2017; Reese & Castellano, 2007). For example, family members can be an important support system if they are trained to identify negative work-related outcomes, such as burnout and maladaptive coping skills (e.g., substance abuse, gambling, etc.) (Brady, 2017; Stevens, 2008). Likewise, family-inclusive trainings could provide an opportunity for family members to develop an informal or formal support network with other families (Brady, 2017). The core idea of this family inclusive approach is to dispel any perspective where the individual officer is unable to talk about the actions taken while in the performance of their duties (Fuller, 2003; Moskos, 2008; Oliver, 2017; Rubinstein, 1973).

Police chiefs who are receptive to establishing inclusive health and wellness programs have the potential to improve relationships between frontline officers, the officers' families, and administrators (Brady, 2017; Copple et al., 2019). As a result, these programs are also directed at reducing the perceived divide between administrators and line-level officers through open communication and active participation (Reuss-Ianni, 2011). These training seminars, therefore, improve elements involved with leading productive organizations (Berry et al., 2010; Copple et al., 2019).

For example, in the *Harvard Business Review*, Berry et al. (2010) identified that comprehensive workplace wellness programs were associated with higher organizational

commitment, productivity, and lower operational costs. In regard to policing, similar results were obtained by Copple et al.'s (2019) case study of eleven police agencies that implemented mental health and wellness programs. More specifically, the Copple et al. study found that officer morale increased after the implementation of the programs across the different sites. The authors noted that leadership support for the progressive wellness programming is critical for officer buy-in and for driving the entire morale and culture of the department in a positive direction (Copple et al., 2019). The net result is that officers interpret these programs as adding value to their lives and their support network, which further establishes the reasons why they work for that organization. Subsequently, from the boardroom to the briefing room, there is value in imbedding and maintaining organizational focus on improving employee well-being (Berry et al., 2010; Copple et al., 2019).

In summary, police chiefs should consider the dissemination of EAPs beyond physical well-being (Berry et al., 2010; Copple et al., 2019; COPS, 2020; International Association of Chiefs of Police, 2018; Loux, 2014; Sammner, 2012). More specifically, these programs should be progressive and view wellness in a holistic light comprised of multiple issues (e.g., PTSD, finances) (Copple et al., 2019). These programs should also include the officers' families and the potential support network found at home (Brady, 2017; Copple et al., 2019; Stevens, 2008). Chiefs should also avoid discounting the importance of peer support programs and trainers within their own department (Brady, 2017; Copple et al., 2019). Peer support programming can improve the organizational culture within the department by facilitating avenues for officers to seek help and to open up dialog on officer well-being (Copple et al., 2019; COPS, 2020; International

Association of Chiefs of Police, 2018). Since actions speak louder than words, police chiefs should not forget about the inherent value in modeling the importance of these EAPs within the department by being a willing participant. In other words, police chiefs need to lead from the front.

Limitations

The current study is not without limitations. First, inferences drawn from the study should be taken with caution, as this sample only draws from newly appointed Texas police chiefs. Thus, additional research is needed to identify if these findings are generalizable to other police chiefs serving in other states and the extent to which results apply to chiefs at different points in their tenure. The cross-sectional nature of the data also restricts the inferences that can be drawn from this study, such as the interaction of work-stressors and organizational commitment over time (Griffeth & Hom, 2001; Meyer & Allen, 1997). As such, researchers need to examine work-related outcomes through a longitudinal design so temporal connections can be established between different factors (i.e., organizational commitment, job satisfaction, turnover intentions) (Brady, 2017).

This study also had a relatively low number of female police chiefs ($n = 16$), which is indicative of the underrepresentation of females on a national level (Reaves, 2015). In addition, this study lacked sufficient racial and ethnic variation to explore statistically relevant differences between chiefs of different racial and ethnic origins. Subsequently, the intersection of race and gender cannot be fully explored in this study. Future data collection efforts should take into account the need for greater female and racial representation within policing studies (Brady, 2017; Reeves, 2015). The core reason is to increase social awareness and understanding within the law enforcement

community through an enhanced racial and gendered perspective.

This study also used a collection of global and specific measures (e.g., Cullen et al., 1985; Jaros, 2007; Lambert et al., 2010) to identify personal- and work-related factors. This should not be taken as a limitation on face value. However, the ability to substitute multidimensional measures for global measures (e.g., job satisfaction) has been a consistent argument among organizational psychology scholars (Griffeth & Hom, 2001; Hom et al., 2010; Jaros, 2007; Meyer & Allen, 1997). The underlying reason is to clarify what key components may be influencing one's satisfaction or perceived support, as associated with work-related outcomes (Griffeth & Hom, 2001; Meyer & Allen, 1997). For example, Smith et al. (1969) developed the Job Descriptive Index, a measure which assesses five dimensions of job satisfaction. These five dimensions address satisfaction with work, supervisors, pay, promotion, and coworkers (Smith, Kendall, & Hulin, 1969). The ability to substitute these more nuanced measures (Smith et al., 1969) for global job satisfaction measures (Hopkins, 1983) benefits both researchers and practitioners. These refined measures can add to the depth and breadth of what is known about personal- and work-related factors and their influence on well-being and work-related factors.

Addressing these limitations helps to forge a more inclusive perspective of how stressors (i.e., work-family conflict) and retention factors (i.e., job satisfaction) develop or dissipate over time. Thus, scholars responding to the limitations discussed above would greatly enhance policing scholarship. In addition, national discussions and training interventions can be better informed on relevant factors impacting these organizational leaders and their subordinates. Subsequently, these advances would provide a more informed response to issues impacting the well-being and work-related outcomes of

officers at all organizational levels (President's Task Force on 21st Century Policing, 2015).

Conclusions and Future Research Directions

Even in the context of calls to “defund” police, the police are a critical component of modern society, as they are entrusted with the responsibility to protect and serve communities and citizens (Bittner, 1970; Brady, 2017; Goldstein, 1977; Walker & Katz, 2002). As a result, officers and organizations interact with complex systemic problems and emerging issues that span across jurisdictional boundaries (Bender & Winning, 2020; Brady, 2017; Hunt & Magenau, 1993; Goldstein, 1977, 1990; Oliver, 2006, 2017; President's Task Force on 21st Century Policing, 2015; Tunnell & Gaines, 1992; Walker & Katz, 2002). A key link in addressing these challenges rests with the police chief (Hunt & Magenau, 1993; Goldstein, 1977), as these individuals take charge in filtering intraorganizational demands and external stakeholder requests (Matusiak et al., 2017).

Turnover among these leaders can potentially disrupt organizational directives, stifle social relationships, and impact operational budgets (Brady, 2017; Orrick, 2008). Despite these important issues, little research has been devoted to examining these organizational leaders' well-being and willingness to leave organizations (Brady, 2017; Rainguet, 1998; Rainguet & Dodge, 2001). This gap in the research is concerning as scholars have argued that voluntary turnover is viewed, at times, as a negative expression that occurs due to negative interactions and experiences encountered within an occupation (Boyar et al., 2003; Podsakoff et al., 2007; Rainguet, 1998; Rainguet & Dodge, 2001; Rubenstein et al., 2018; Tett & Meyer, 1993). Moreover, national discussion has espoused the need to improve police practices and responses through more

informed discussion surrounding officer safety and wellness at all organizational levels (President's Task Force on 21st Century Policing, 2015).

Therefore, the current study had two goals. The first goal was to further examine the impact work and family stressors (see Armstrong et al., 2015) had on turnover intentions (TI) among police chiefs. The second goal was directed toward a more in-depth analysis of organizational commitment through a three-component model (Jaros, 2007) on TI. In comparison to previous research involving TI (Brady, 2017), these chiefs reported, on average, having lower TI. Despite the lower inclinations to leave their organizations, the respondents provide key insight into this social phenomenon.

The estimated models in this study highlighted the importance of taking into account strain-based work-family conflict. This finding makes intuitive sense given the variety of tasks, requests, and working conditions police administrators interact with during the course of their duties (Brady, 2017; Hunt & Magenau, 1993; Oliver, 2017). Results also illustrated the significant overlap between strain-and time-based conflict, which was not as pronounced in prior TI research among police chiefs (Brady, 2017). This finding makes intuitive sense given that they are relatively new to the police chief role and its responsibilities (Witham & Watson, 1983). Furthermore, results drawn from this study illuminated the importance of affective commitment in potentially reducing TI. This implies that the emotional ties police chiefs establish within a particular organization are particularly salient with reducing TI.

Taken collectively, the findings highlight the conflict that radiate from work-demands and the importance of emotional ties in relation to TI. Thus, there is a need for chiefs to work toward a healthy work-life balance (Brady, 2017). The stressors these

individuals endure are manifold, ranging from complex administrative problems (Hunt & Magenau, 1993; Oliver, 2006, 2017) to line-level officer issues (Weisheit et al., 2005). Subsequently, these organizational leaders should integrate programs that are more holistic in nature, which address multiple areas where strain and stress may develop. The end result is to not only improve their lives, but also the lives of their subordinates—the next generation of police chiefs.

Future studies should continue to expand research involving officer well-being to all levels and divisions within police agencies. In addition, future research should examine what specific factors within the political-social environment enhance one's willingness to leave an organization (Li, 2016; Li & Brown, 2019). Furthermore, research should couple together how police culture (e.g., Ingram et al., 2018; Reuss-Ianni, 2011) and personal- and work-related factors impact TI and other work-related outcomes. An example of this line of research would examine how to reduce mental health stigmas within police culture (Brady, 2017). The underlying reason of this latter research is to increase the dosage and fidelity of the proactive mental and physical well-being practices that are being implemented within police agencies (Copples et al., 2019; Kuhns et al., 2015).

Another area of needed research is to examine how TI and other work-related outcomes vary spatially and temporally. Therefore, research should further develop longitudinal and multistate studies to parse out how different factors impact well-being among these public servants. The idea is to tease apart how such things as work stressors, job satisfaction, and organization commitment develop and predict one another and TI over time (Brady, 2017). The purpose of this focused research is to improve scholarship

and national discussions framed around the mental and physical health well-being of these public servants (Brady, 2017; Copple et al., 2019; Kuhns et al., 2015; President's Task Force on 21st Century Policing, 2015). To put it plainly, more research and national discussions are needed to identify the chief concerns of officer well-being.

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Yang, H. (2010). Factor loadings. In N. J. Salkind (Ed.), *Encyclopedia of Research Design*, Volume 1 (pp. 480-483). Thousand Oaks, CA: Sage.

Joshua T. Shadwick, M.S.
Curriculum Vitae

EDUCATION:

Doctor of Philosophy: Criminal Justice 2020

Department of Criminal Justice & Criminology, Sam Houston State University,
Huntsville, TX

Master of Science: Criminal Justice 2011

Department of Criminal Justice & Sociology, Southeast Missouri State University,
Cape Girardeau, MO

Bachelor of Science: Criminal Justice 2007

Department of Criminal Justice, Missouri Southern State University,
Joplin, MO

RESEARCH INTERESTS:

Justice System's Response to Social Problems; Police Investigations; Wildlife Crime

PUBLICATIONS:

Shadwick, J. T., King, W., Zhang, Y., Matusiak, M., & Campbell, B. (2019). Assessing best practices in crime labs structure, processes, and performance: A partial test of *Gagliardi's 13 Critical Tasks*. *Policing: An International Journal*.

Dierenfeldt, R., **Shadwick, J. T.**, & Kwak, H. (2019). Examining gender and drug-specific arrest counts: A partial test of Agnew's general strain theory. *Deviant Behavior*.

Updegrave, A., **Shadwick, J. T.**, O'Neal, E., & Piquero, A. (2019). "If they notice I'm Mexican": Narratives of discrimination from individuals who crossed the U.S.-Mexico border at ports of entry. *Deviant Behavior*.

MANUSCRIPTS UNDER REVIEW:

Davis, R., Jurek, A., & **Shadwick, J. T.** Investigative outcomes of CODIS matches in previously untested sexual assault kits.

Zhang, Y., **Shadwick, J. T.**, Benton, F., & Vaughn, M. Big data and hate crimes motivated by race and ethnicity: A Google correlate based analysis.

MANUSCRIPTS IN-PROCESS:

Shadwick, J. T., King, W., & Wells, W. Examining perceptions of procedural justice from the executive officer's perspective.

Shadwick, J.T., Ingram, J., & Jones, N. (In-Process) Arresting development: SNA-based examination of operation "Blue Shame".

Dierenfeldt, R., **Shadwick, J.T.**, Caines, M., Radcliff, B., & Morris, A. Street-level colorism: A multi-level analysis of violent outcomes across racial dyads.

RESEARCH REPORTS:

2019 Jurek, A., **Shadwick, J.T.**, & Wells, W. *Policing major cities in Texas*. Bill Blackwood Law Enforcement Management Institute of Texas. College of Criminal Justice. Sam Houston State University.

2018 Jurek, A., **Shadwick, J.T.**, & Wells, W. *Employee care and work place incentives: Report on the Montgomery County Constables Office, Precinct 3 employee survey*. Bill Blackwood Law Enforcement Management Institute of Texas. College of Criminal Justice. Sam Houston State University.

2018 Wells, W., & **Shadwick, J.T.** *Summary information about new chiefs and reasons why their predecessors departed*. Bill Blackwood Law Enforcement Management Institute of Texas. College of Criminal Justice. Sam Houston State University.

2017 Ren, L., & **Shadwick, J.T.** *Combating prescription drug abuse in Montgomery County, Texas: A benchmark report*. Submitted to the Montgomery County District Attorney's Office.

OTHER PUBLICATIONS:

2020 **Shadwick, J.T.** (2020). [*Book Review: The Birth of the FBI: Teddy Roosevelt, The Secret Service, and the Fight over America's Premier Law Enforcement Agency*, Rowman & Littlefield.] *Journal of Criminal Justice Education*, (published online), <https://doi.org/10.1080/10511253.2020.1739724>

2020 **Shadwick, J.T.** (2020). [Review of: Oliver, Willard. (2019). *Depolicing: When Police Officers Disengage*, Lynne Rienner Publishers.] *Policing: A*

Journal of Policy and Practice, (published online),
<https://doi.org/10.1093/police/paaa007>

- 2017 **Shadwick, J.T.** (2017). [Review of the book *August Vollmer: The father of American policing*, by W. Oliver. (2017). Durham: Carolina Academic Press.] *Policing: A Journal of Policy and Practice*, (published online),
<https://doi.org/10.1093/police/pax068>
- 2015 **Shadwick, J.T.** The importance of public support and the thin green line. *Missouri Conservationist*, 76(8), 4.

INVITED PRESENTATIONS:

- 2018 **Shadwick, J.T.** GIS Introduction. Presentation to the Criminal Justice Graduate Student Organization, Sam Houston State University.
- 2017 Ren, L., & **Shadwick, J.T.** Combating prescription drug abuse in Montgomery County, Texas: A problem-oriented approach. Presentation to Montgomery County District Attorney's Office.

CONFERENCE PRESENTATIONS:

- 2019 Benton, F., **Shadwick, J.T.**, Zhang, Y. Understanding the spatial distribution of officer-involved shootings. Academy of Criminal Justice Sciences, Baltimore, MD.
- 2018 **Shadwick, J.T.** A hard pill to swallow: Examining a national sample of federal drug-related convictions surrounding medical doctors. American Society of Criminology, Atlanta, GA.
- 2018 **Shadwick, J.T.**, & Ren, L. Understanding doctor shopping behavior: A multilevel analysis. Academy of Criminal Justice Sciences, New Orleans, LA.
- 2018 Ren, L., & **Shadwick, J.T.** An examination of prescription drug arrests in a Texas County: Trends, characteristics, and implications. Academy of Criminal Justice Sciences, New Orleans, LA.
- 2017 Caines, M., Dierenfeldt, R., **Shadwick, J.T.** *Re-framing the Ferguson Effect: Strain and intra-racial violence in the age of the new media*. Paper presented at the annual meeting of the American Society of Criminology: Philadelphia, Pennsylvania.

- 2017 **Shadwick, J.T., & King, W.** An exploration of police chiefs' perceptions of internal and external procedural justice. Midwest Criminal Justice Association, Chicago, IL.

TEACHING EXPERIENCE:

- 2020 UI 300: Drugs & Society
SEM0: *Instructor*
CJ 115: Introduction to Criminal Courts
SEM0: *Instructor*
CR 110: Introduction to Law Enforcement (Online)
SEM0: *Instructor*
- 2019 CRIJ 2362: Criminological Theory
SHSU: *Instructor*
CRIJ 3378: Introduction to Methods of Research (Writing Enhanced)
SHSU: *Instructor*
- 2016 CRJU 2300: Introduction to Criminal Justice (Online)
UALR: *Instructor*

DISCIPLINE-BASED SERVICE:

- 2018-Present Reviewer for *Journal of Criminal Justice*

UNIVERSITY-BASED SERVICE:

- 2018 Criminal Justice Graduate Student Organization: Treasurer
Sam Houston State University
- 2018 Sam Houston State University graduate student mentor for Christi Gullion
- 2017 Sam Houston State University graduate student mentor for Xinting Wang
- 2017 Sam Houston State University Representative at the 27th Annual Problem Oriented Policing Conference, Houston, TX
- 2015 Student Government Association: Associate Justice
University of Arkansas at Little Rock

PROFESSIONAL EXPERIENCE:

2020-Present Assistant Professor
 Department of Criminal Justice and Sociology
 Southeast Missouri State University

2018 Interviewer/Research Assistant
Measuring the effects of correctional officer stress on the well-being of the officer and the prison workplace and developing a practical index of officer stress for use by correctional agencies.
 PI: John Hepburn, Ph.D., Texas Site Coordinator: Melinda Tasca, Ph.D., Texas Site Co-Coordinator: H. Daniel Butler, Ph.D. Funded by the National Institute of Justice (Award No. 2014-IJ-CX00026). SHSU Subcontract: \$127,194.

2017-Present Police Foundation, Independent Consultant, A new approach to utilizing evidence from sexual assault kits in Texas: Benefits and costs of a universal testing statute. NIJ award number 2016-IJ-CX-0019.

2016-2020 Doctoral Research Assistant:
 Law Enforcement Management Institute of Texas
 College of Criminal Justice
 Sam Houston State University
 - *Projects Included* -
 -Blue Courage Texas Immersion Evaluation
 -New Chief Development Program
 -Montgomery County Prescription Medication Diversion Evaluation
 -Montgomery County Constable Precinct 3 Employee Survey

2015-2016 Doctoral Research Assistant
 Department of Criminal Justice
 University of Arkansas at Little Rock

FIELD EXPERIENCE:

2012-2015 Conservation Agent: Missouri Department of Conservation
 Jefferson City, Missouri

2008-2012 Deputy Sheriff: Montgomery County Sheriff's Office
 Independence, Kansas

PROFESSIONAL MEMBERSHIPS:

2017- Present Midwestern Criminal Justice Association

2016- Present Academy of Criminal Justice Sciences

2015- 2018 American Society of Criminology

HONORS & AWARDS:

2019 ACJS Doctoral Summit Recipient

2016 Summer Research Fellowship Grant (\$6,000), Sam Houston State University

2007 Cum Laude Missouri Southern State University Graduation Status

MEDIA COVERAGE:

2014 **Shadwick, J.** Southeast alumnus protecting wildlife: Natural resources with Missouri Department of Conservation. *Alumni Spotlights*. October 7th, 2014 <http://news.semo.edu/19036/>

PROFESSIONAL DEVELOPMENT:

2019 ACJS Doctoral Summit Attendee

2019 SHSU Graduate & Undergraduate Instructor Academy Attendee

2018 SHSU Teaching & Learning Conference Attendee

2018 Hooked on drugs: Opioids' impact on the justice system. Hosted by the Houston Forensic Science Center at Rice University.

2018 Addressing opioid overdose: Understanding the role of prevention Texas State Board of Social Worker Examiners. Hosted by SAMHSA, College Station, TX.

2017 Prescription Drug Abuse and Addiction, Hosted by Texas's Department of Health and Human Services, College Station, TX.

2017 GIS Workshop on Utilizing GIS Applications, Hosted by ESRI, San Antonio, TX.