Walden University

College of Psychology and Community Services

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Victoria McCann

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Abstract

Generational-Cohorts and Mental Health Help-Seeking Behavior Intentions in Law Enforcement Officers

by

Victoria McCann

MA, Walden University, 2017

BS, Kaplan University, 2014

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Law enforcement is a high-stress, high-risk occupation that can lead to mental health issues. These issues can affect law enforcement officers and the level of service they provide to the public. Traditionally, officers have been found to be resistant to seeking help for their mental health. It was hypothesized that generational turnover may be impacting this positive change found in recent research. The purpose of this quantitative study was to explore the effect of generational cohorts on officers' mental health help-seeking behaviors. The core concepts of the Theory of Planned Behavior (attitudes, subjective norms, internal perceived behavioral control, external perceived behavioral control, and behavioral intentions) were used to generate the research questions. Using analysis of variance in a sample of 103 law enforcement officers, the results of this study indicated overall positive mental health help-seeking behavioral intentions across the generations. Attitudes, subjective norms, internal perceived behavioral controls, and behavioral intentions were not significant when compared to generational cohorts, indicating that other factors may impact this sample's mental health help-seeking behavioral intentions. There were statistically significant differences between generations for external perceived behavioral controls, indicating that barriers to mental health help-seeking are a key concern in this sample. The findings from this study may be used to inform positive social change through psychoeducation, intervention, and prevention programs across generational cohorts of law enforcement officers.

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Dedication

This research is dedicated to Jason S. Taylor, who was an amazing officer, partner, and friend that left this world too soon.

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I would like to thank Dr. Keane and Dr. Xuereb for their guidance during this dissertation process. I would also like to thank my husband, Jeff, for his patience and support throughout this process.

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Chapter 1: Introduction to the Study

Law enforcement is one of the most stressful and taxing occupations in the United States (Wheeler et al., 2018). The elevated levels of stress within law enforcement officers (LEOs) places them at risk for a variety of mental and physical health issues (Jetelina et al., 2020; Velazquez & Hernandez, 2019; Violanti et al., 2017). Additionally, high-stress levels in LEOs have been linked to decreased public service via reduced cognitive function and behavior control (Lucas et al., 2012). Therefore, stress negatively impacts officers and the communities that LEOs serve. Despite the clear need for mental health services to address these concerns, traditional research establishes police culture as a negative influence on help-seeking in LEOs, leading to a gap in service need versus service utilization (Haugen et al., 2017).

However, evidence suggests that help-seeking attitudes and behaviors are slowly improving within law enforcement (Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochov, 2013; Karaffa & Koch, 2016; Meyer, 2000). Current research cites a need for more information on help-seeking in LEOs (Bullock & Garland, 2018; Burns & Buchanan, 2020; Velazquez & Hernandez, 2019) to better understand this phenomenon. One hypothesis within the literature is that generational turnover is a key factor in generating changes within police culture. This study explored generational differences in mental health help-seeking to determine if generational turnover has an effect on help-seeking behavioral intentions within certified LEOs. This chapter provides an overview of the study, as well as background on the research problem, the research purpose and hypotheses, the research design, significance, scope, and limitations.

Background of the Study

The categorization of law enforcement as a high-stress occupation is partly due to the dangerous and traumatic incidents that LEOs are repeatedly exposed to as a part of their job function, which is known as occupational stress (Gutshall et al., 2017). Common occupational stressors for LEOs include violent assaults on their person, high-speed chases, police shootings, witnessing gruesome crime scenes or deaths, or even witnessing serious car crashes (Soomro & Yanos, 2018; Violanti et al., 2016). Organizational stress is also present in law enforcement, with 55% of officers reporting they feel overloaded by work demands (Conn, 2016). Organizational stress stems from the hierarchical nature of law enforcement agencies (LEAs), department rules and regulations, shift work, organizational support, and general daily administrative demands within the organization and profession (Soomro & Yanos, 2018). LEOs frequently report organizational stressors as their highest source of stress, and organizational stress is associated with increased rates of trauma symptoms, general psychological strain, and burnout in LEOs (Violanti et al., 2018). Finally, LEOs are also exposed to personal stressors resulting from their profession, with 40% to 50% of officers reporting that their occupations negatively impact their personal lives (Conn, 2016). LEOs struggle with life-role balance in their off-duty time, often distancing themselves from friends and families, resulting in interpersonal issues that generate additional stress (Chopko et al., 2018). These combined stressors mark LEOs as a high-risk population for various psychological disorders, including posttraumatic stress disorder (PTSD), anxiety, depression, and substance use (Velazques & Hernandez, 2019). LEOs also have a high-risk rate of suicidal ideations

and suicide (Violanti et al., 2017), with twice as many officers dying of suicide compared to line of duty deaths in 2019 (Jetelina et al., 2020). Stress may also manifest somatically, and LEOs are at higher risk for heart disease, diabetes, sleep disorders, and metabolic disorders (Violanti et al., 2017).

In addition to officers' well-being, high-stress levels can impact officer behavior (Conn, 2016) and how they interact with the public. Lucas et al. (2012) found that officers' high-stress levels can lead to inferior public service performance, as it impacts officer judgment, temperament, and decision-making skills. High-stress levels reduce the officer's quality of life and result in increased errors and use of force, directly impacting the public they serve (Baker et al., 2020; Gutshall et al., 2017). While anxiety, depression, and PTSD can reduce work productivity, increase absenteeism (Fox et al., 2012), and decrease emotional and cognitive capacity (Lucas et al., 2012), they can also lead to increased aggression, recklessness, and negativity (Baker et al., 2020; Violanti et al., 2018), which means that stress impacts not only officers' well-being, but also their families and the communities they serve. Mental health services are necessary to combat the challenges faced by LEOs to ensure their safety and indirectly the safety of the communities they serve (Fox et al., 2012; Lucas et al., 2012; Ricciardelli et al., 2018). There is a notable gap between service need and service utilization within the population (Haugen et al., 2017). There is a consensus that more research is needed on mental health help-seeking in LEOs to improve service utilization (Bullock & Garland, 2018; Burns & Buchanan, 2020; Velazquez & Hernandez, 2019).

Police Culture and Mental Health

One of the first studies to note a positive shift in officers' mental health help-seeking attitudes was a graduate study by Meyer (2000). Meyer (2000) hypothesized that officers underutilized mental health services due to negative help-seeking attitudes. However, the findings indicated that officers held neutral attitudes toward mental health help-seeking, meaning they did not hold positive and trusting attitudes, but neither did they have negative attitudes towards help-seeking. Furthermore, Meyer (2000) found that LEOs in the sample did not endorse stigma surrounding mental health help-seeking. In 2013, Karaffa and Tochov published a similar peer-reviewed study. Similarly, they found neutral attitudes towards mental health help-seeking in their LEO sample. Their research also included a scale to measure participants' police cultural identity and strength, finding mixed endorsement of traditional police culture items. They concluded that a positive shift in help-seeking attitudes and heterogeneity in police culture were both present in their sample (Karaffa & Tochov, 2013).

Notably and most recently, Soomro and Yanos (2018) and Jetelina et al. (2020) both found utilization of mental health services is increasing among police officers. At the same time, Edwards and Ketera (2020) and Krakauer et al. (2020) found evidence of reduced public stigma and increased awareness among LEOs. Soomro and Yanos (2018) reported that self-stigma rates for LEOs were equivalent to the general population. There is a consensus that research on and understanding of mental health help-seeking in the law enforcement population is lacking, especially within the United States (Bullock & Garland, 2018; Velazquez & Hernandez, 2019). In the most current research, only five

studies specific to law enforcement and help-seeking were found (Burns & Buchanan, 2020). In their systemic review of stigma and barriers within first responders, Haugen et al. (2017) noted only 14 studies, further highlighting this research gap. LEOs are a subgroup within the first responder population, which is made up of similar professions like paramedics, firefighters, and nurses. None of these studies explored age- or generational-cohorts in relation to mental health help-seeking and LEOs.

Furthering the research gap is the lack of current research and theory development within police culture (Ingram et al., 2018; Paoline & Gau, 2018). Historically, police culture has been found to have a substantial impact on officer behaviors and is often viewed as an obstacle to attempted changes or reforms (Brough et al., 2016). The culture traditionally values Euro-American masculine values and is considered exclusionary and cynical when it comes to outsiders (Paoline & Gau, 2018). The concept of a monolithic, often negative, police culture persists within academia, stemming from ethnographic research from the 1950s, 1960s, and 1970s (Paoline & Gau, 2018; Terpstra & Salet, 2019). However, the monolithic theory of police culture is being challenged in recent research, with findings of increased diversity, globalization, technological advances, and socio-political pressures creating heterogeneity in police culture (Farkas et al., 2020).

Current research indicates that police culture is not as single-minded on the traditional norms of the culture defined in earlier ethnographic research (Brought et al., 2016; Gutschmidt & Vera, 2020). Cockcroft (2019) furthers these findings by discussing the breakdown of traditional socialization methods within law enforcement, including reduced self-identification as an officer, and expanding social networks outside of the

police culture. Likewise, Ingram et al. (2018) posited a new multilevel framework theory on police culture, pointing out a lack of theoretical development and representing a stark departure from historical research. Campeau (2019) argued that generational turnover and the hierarchical nature of LEAs are responsible for the heterogeneity and changes researchers are finding within police culture. Duxbury et al. (2018) strengthened this position, reporting that younger officers drive internal changes within police agencies as older officers retire.

Generational Research and Law Enforcement

Generational research is a growing topic that traditionally focuses on industrial and organizational psychology concerns and work-related constructs (Lu & Gursoy, 2016). Some research has addressed mental health stigma and help-seeking from an age- or birth-cohort perspective; finding significant differences between generations, with older adults reporting less service utilization, more stigma, and more negative help-seeking attitudes (Forbes et al., 2017; Kessler et al., 2015; Mackenzie et al., 2019). Conversely, other studies have found older people hold more positive attitudes towards mental health help-seeking (Berger et al., 2005; Karaffa & Tochov, 2013).

Age is one of the most common predictors of behavioral and attitude differences, and generations are one way to group age- or birth-cohorts to explore such variations and gain an understanding of how group attitudes shift (Pew Research Center, 2015). However, to date, generational research within the law enforcement population has been focused on topics such as hiring, retention, training, job satisfaction, and burnout

(McCafferty, 2003; Mineard, 2006; Winter & Jackson, 2016; Cheeseman & Downey, 2012).

Overall, the above studies indicate that changes are occurring in police culture and that officer views on mental health help-seeking are more positive in recent studies than previous findings. Since LEOs are a high-risk group for various mental health issues that impact both their well-being and the public, exploring factors that can affect help-seeking attitudes is crucial to officers, their families, police agencies, and the public. The research suggests generational turnover as a possible impacting factor for these changes in police culture. However, there have not been any quantitative studies to examine the impact of generational turnover on mental health help-seeking in LEOs. This study examined the effect of generational-cohort on help-seeking attitudes, subjective norms, internal and external perceived behavioral control, and overall behavioral intentions in LEOs, to improve academic knowledge within this population. This study's findings provide data that can be used to inform psychoeducation, prevention, and intervention programs to improve mental health service utilization in LEOs.

Problem Statement

Stress is a consistent facet of police work, and can present in psychological and physiological forms, impacting the officer's ability to function (Violanti et al., 2017). Stress impacts an officer's judgment, temperament, and decision-making skills, directly impacting the public they serve (Baker et al., 2020: Gutshall et al, 2017; Lucas et al., 2012; Violanti et al., 2018). Additionally, the elevated levels of stress officers experience throughout their careers make them a high-risk population for mental health disorders

(Velazquez & Hernandez, 2019). Research shows that LEOs have higher rates of suicide, anxiety, depression, substance use disorders, and suicidal ideations than the general population (Jetelina et al., 2020; Velazquez & Hernandez, 2019; Violanti et al., 2017; Violanti et al., 2018). Researchers routinely report police culture as a negative influence on mental health help-seeking attitudes and behaviors in officers, leading to a gap in service need versus utilization that requires intervention (Haugen et al., 2017). However, more research is needed to generate effective interventions and treatments specific to officers and their culture (Burns & Buchanan, 2020; Haugen et al., 2017; Karaffa & Tochov, 2013; Violanti, 2020). Fishbein (2008) noted that to create effective interventions that promote a behavior within a population, practitioners must understand the variables of behavior intention including; attitudes, subjective norms, and perceived behavior control (Fishbein & Ajzen, 2010).

While research has consistently highlighted police culture as a critical barrier to help-seeking in LEOs (Brough et al., 2016; Edwards & Kotera, 2020; Wheeler et al., 2018), there is evidence that the culture is slowly evolving (Ingram et al., 2018; Paoline & Gau, 2018). Campeau (2019) found that police culture is not as stagnant as earlier research has reported, likely due to generational turnover. A finding bolstered by Ingram et al.'s (2018) results documenting distinct subcultures within law enforcement agencies. Watson and Andrews' (2018) study of U.K. first responders reported more positive help-seeking attitudes than predicted or previously reported during their research. Also, Karaffa and Tochov (2013), Heffren and Hausdorf (2016), and Burns and Buchanan (2020) all found evidence of positive shifts in officers' help-seeking attitudes. Jetelina et

al. (2020) found that 35% of Texas LEOs had sought mental health treatment in the past year, and Fox et al. (2012) reported nearly half of the LEOs they sampled had accessed mental health services during their careers. Cumulatively, these studies indicate that police culture and LEOs are evolving regarding mental health help-seeking.

Similarly, generational research illustrates cultural shifts in the workforce as the millennials take more dominant roles over older generations (Weeks & Schaffert, 2019; Winter & Jackson, 2016). To date, generational research has shown significant differences in attitudes across domains like workplace satisfaction, ethics, training, hiring, stress levels, and retention (Cheeseman& Downey, 2012; Edwards, 2007; McCafferty, 2003; Noblet, 2009; Winter & Jackson, 2016). One study of note within the LEO population was conducted by Hyland et al. (2012) with Irish LEOs. They found younger officers were more likely to seek mental health treatment and that participant age was negatively associated with help-seeking intentions. Conversely, Karaffa and Tochkov (2013) found that older LEOs were more open to mental health help-seeking. Hyland et al. (2012) suggested further investigation of this phenomenon, but no studies were found that explored generational differences and mental health help-seeking in LEOs. Considering these conflicting academic opinions, the evidence of cultural shifts, and the complexity of help-seeking behavioral intentions, more exploration is needed to understand the factors that impact U.S. LEOs help-seeking behaviors to guide successful interventions (Burns & Buchanan, 2020; Haugen et al., 2017; Karaffa & Tochov, 2013; Violanti, 2020).

Purpose of the Study

The purpose of this quantitative study is to examine differences in mental health help-seeking behavioral intentions across three different generations of U.S. LEOs: the baby boomer generation, Generation X, and the millennial generation. This stems from the fact that recent studies have found positive changes in help-seeking attitudes and behaviors, arguing for further exploration of this trend (Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochov, 2013; Karaffa & Koch, 2016; Meyer, 2000). This study compared data from the constructs within the theory of planned behavior, which predict behavior (attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions) with generational status.

Research Question(s) and Hypotheses

Research Question 1 (RQ_1): What is the effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their help-seeking attitudes?

H_{01}: There is no effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their help-seeking attitudes.

H_{a1}: There is an effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their help-seeking attitudes.

Research Question 2 (RQ_2): What is the effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their subjective norms?

H_{02}: There is no effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their subjective norms.

H_{a2}: There is an effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their subjective norms.

Research Question (RQ_3): What is the effect of police officers' generational differences (baby Boomer, Generation X, and millennials) on their perceived behavioral control (self-efficacy) internal?

H_{03}: There is no effect of police officers' generational differences (baby Boomer, Generation X, and millennials) on their perceived behavioral control (self-efficacy) internal.

H_{a3}: There is an effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their perceived behavioral control (self-efficacy) internal.

Research Question (RQ_4): What is the effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their perceived behavioral control (barriers) external?

H_{04}: There is no effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their perceived behavioral control (barriers) external.

H_{a4}: There is an effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their perceived behavioral control (barriers) external.

Research Questions (RQ_5): What is the effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their behavioral intentions?

H_{05}: There is no effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their behavioral intentions.

H_{a5}: There is an effect of police officers' generational differences (baby boomer, Generation X, and millennials) on their behavioral intentions.

Theoretical Foundation

Hyland et al. (2012) applied the Theory of Planned Behavior (TPB) to mental health help-seeking in Irish LEOs. They found the model explained 92.6% of the variance in intentions to participate in mental health counseling. They also noted that participant age and years of service were significant predictors of intentions to participate in counseling, with age being negatively associated and years of service being positively associated. The findings suggest that younger LEOs are more likely to seek mental health counseling. Even as younger LEOs gain years of service, their intentions to participate in counseling increase. They called for further investigation into this phenomenon and noted a need for more research on mental health help-seeking in LEOs (Hyland et al., 2012).

TPB is a well-established and widely used theory in social science research (Long & Maynard, 2014). It is valid across a wide range of health-related behaviors (Montano & Kasprzyk, 2015) and diverse cultures and demographics (Canova et al., 2020). TPB states that the best predictor of actual behavior is behavioral intention (Ajzen, 1991). Behavioral intentions are formed through a combination of attitudes towards the behavior, subjective norms, and perceived behavioral control (Ajzen, 2012). By measuring each of these constructs, researchers can identify and understand each construct's value on a specific behavior within a particular population, making this theory suitable for prevention and intervention creation, as well as behavioral prediction (Montano & Kasprzyk, 2015).

Attitudes

Attitudes towards a specific behavior are highly correlated with actual behavior and are formed by an individuals' beliefs about the consequences of a behavior (Ajzen, & Fishbein, 2005). Attitudes are automatically gathered across an individuals' lifespan via socialization and experiences (Fishbein & Ajzen, 2010). Therefore, attitudes are subjective and may even be biased (Ajzen, 2012), but they provide a rational and cognitive basis for behavioral prediction (Fishbein & Ajzen, 2010). However, the less specific and defined the behavior is, the less correlation between actual behavior and attitudes (Ajzen & Fishbein, 1977).

To adequately measure attitudes and predict behavior, the behavior must be clearly defined for the participants and include specific elements. The four elements required by TPB for the appropriate definition of behavior are action, targeted direction for the action, the context in which the action is performed, and the time when the action is performed (Fishbein & Ajzen, 2010). The action refers to the specific definition of the behavior being measured. The direction refers to the negative or positive affiliations to the action being measured, while the context is the setting of the performed behavior being measured. Finally, timing can refer to either the time allotted for a specific behavior or the instance in time where the behavior and attitudes are being measured (Ajzen & Fishbein, 2005).

Subjective Norms

Subjective norms are individuals' beliefs about important persons or groups within their social circle approving or disapproving of performing the behavior in

question (Ajzen & Fishbein, 2005). Subjective norms are generated through normative beliefs and broader social norms, and stigma (Welbourne, 2007). However, normative beliefs and subjective norms are more restrictive since they include only the beliefs about the specific behavior an individual is considering, and only the beliefs of the people or groups important to the individual regarding the action (Ajzen & Fishbein, 1972). Typically, subjective norms account for less behavioral prediction variance than either attitudes or perceived behavioral control (Ajzen & Fishbein, 2005). However, Hyland et al. (2012) found that subjective norms and self-efficacy accounted for the most variance in predicting officers' intention to seek mental health counseling; illustrating the weight of police culture on the behaviors of individual LEOs (Brough et al., 2016).

Social stigma is defined as the social standards or values assigned to a specific group that are usually negative, allowing individuals to categorize people's behaviors and expectations within the given group (Corrigan, 2014). Social stigmatization of persons with mental health issues complicates and often delays the help-seeking processes (Corrigan, 2004). During a systemic review on stigma and help-seeking behaviors, Clement et al. (2015) found that stigma has a moderate deterrent effect on help-seeking, ranking as the 4th most common barrier to help-seeking attitudes and behaviors.

Additionally, Kessler et al. (2015) and Mackenzie et al. (2019) noted that older adults significantly underutilize mental health services compared to younger adults. They also found that older adults who perceived social stigma against mental illness are more likely to self-stigmatize and are less likely to seek mental health treatment if needed. At the same time, Nousak (2020) found that the millennial generation perceived significantly

less social stigma than older generations. Furthermore, within specialty populations, like the military or law enforcement, the effect of stigma on help-seeking can be profound (Clement et al., 2015). However, McGill (2018) found that millennial police recruits were more open to discussing mental health issues than officers in other generational-cohorts. These findings highlight the critical role that police culture and social stigma in the form of subjective norms can play in LEO help-seeking.

Perceived Behavioral Control

Perceived behavioral control (PBC) considers an individuals' beliefs about their environment, available resources, and available opportunities that may impact their ability to complete a specific behavior (Ajzen, 1991). PBC is measured by exploring a combination of external and internal factors related to a particular behavior (Welbourne, 2007). PBC is an important construct, as it considers that even within voluntary behavior, other internal and external factors can encourage or limit an individuals' actual behavior (Montano & Kasprzyk, 2015). Most importantly, the inclusion of PBC increases the efficacy of predicting behavioral intentions, and therefore actual behavior (Ajzen, 2012). PBC can also be used as a substitute measure for actual control, which can be challenging to measure in many psycho-social research domains (Ajzen, 1991).

According to Fishbein and Ajzen (2010), integrating internal and external factors within the PBC construct of TPB effectively predicts behavioral intentions towards specific behaviors. However, some researchers have argued that PBC is a better predictor variable when internal (self-efficacy) and external (barriers) factors are analyzed as distinct constructs (Armitage & Conner, 2001). Fishbein and Ajzen (2010) rejected this

argument, citing a lack of empirical support for splitting the construct. However, in a police-specific study, Hyland et al. (2012) found empirical support for splitting PBC into two distinct measures; self-efficacy and barriers. Their modified version of TPB explained 92.6% of the variance in Irish LEOs intention to engage in mental health services, with a superior model fit compared to the original 3-factor model proposed by Ajzen (1991). Therefore, this study splits PBC into internal factors (self-efficacy) and external factors (barriers).

The internal factor focuses on the individuals' self-efficacy, which is their belief in their ability and capacity to carry out a specific behavior (Hyland et al., 2012). Ajzen (1991) highlighted the similarities between PBC and Bandura's perceived self-efficacy concept, stating that much of his knowledge about PBC stems from Banduras' systemic research on self-efficacy (Ajzen, 1991). Research has found that higher self-efficacy equates to more perseverance, increased motivation, and increased performance of behaviors (Thompson & Graham, 2015).

The external factor, barriers, examines an individuals' perceptions of available resources and opportunities in their external environments that impact their ability to carry out a specific behavior (Hyland et al., 2012). Common barriers cited in the literature on first responder help-seeking include cultural norms, stigma, confidentiality concerns, fear of negative career impacts, lack of professionals specializing in first responders, minimal mental health knowledge, lack of knowledge of service availability, and unsupportive supervision (Haugen et al., 2017). Scheduling concerns and not knowing where to get help are the most frequently endorsed barriers, while

confidentiality concerns and fear of negative career impacts are the most endorsed stigma items (Haugen et al., 2017).

Conclusion

Hyland et al. (2012) established a modified TPB model as a valid and empirically sound approach to quantitatively investigate help-seeking in LEOs. They also reported that age influenced help-seeking behavioral intentions in their sample of LEOs. However, there is limited research on help-seeking in LEOs, and more studies are needed to gain a thorough understanding of this topic (Burns & Buchanan, 2020; Heffren & Hausdorf, 2016; Hyland et al., 2012; Karaffa & Tochov, 2013). This study addressed this literature gap by examining differences in TPB constructs across three distinct generations of LEOs.

Nature of the Study

A quantitative, nonexperimental design was selected for this study. This design is suitable for the exploration and comparison of gathered data (Belhekar, 2019). Since the research question in this study focused on determining if group differences exist, a one-way analysis of variance (ANOVA) was used to determine if there are statistically significant differences between the three generations within the sample. A one-way ANOVA determines statistically significant differences between three or more means, using categorical and numerical variables (Lobmeier, 2010). This design and methodology are suitable to the research questions since the goal was to explore and compare three distinct generational groups to determine if there are statistically significant differences in their behavioral intentions towards mental health help-seeking

within the TPB framework. Hyland et al. (2012) illustrated the predictive efficacy of TPB on mental health help-seeking in LEOs using structural equation modeling (SEM) and confirmatory factor analysis (CFA). Therefore, this study's approach offers a unique view of the topic and furthered the exploration of generational research within the population to spark hypotheses for future research.

The independent variable will be generations, with three levels [Baby boomer generation, Generation X, and the Millennial generation]. The dependent variables are attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions gathered from the TPB-based scenario scale. The chosen scale is congruent with Fishbein and Ajzen's (2010) scale guidelines and is effective within the population (Hyland et al., 2012). Approval from the Walden Institutional Review Board (IRB) was obtained before data collection (07-19-21-0547181). Informed consent was obtained at the beginning of the survey. Data collection occurred through electronic surveys using purposeful sampling. However, during analysis, stratified sampling was operationalized within each independent variable to meet ANOVA assumptions (Sheng, 2011). Surveys were sent out through a statewide police union via email to certified LEOs. The survey platform and data collection point was Qualtrics, Inc. Qualtrics, Inc. is an online survey creation and data collection service which was selected for its high-security certification to ensure participants' confidentiality and anonymity. Qualtrics holds the following security certifications; ISP 27001, FedRAMP, HITRUST (HIPAA), and SOC2 Type 2 (Qualtrics, Inc., 2021).

Definitions

The below-listed terms were defined based on their application and use within this research study to ensure clarity.

Attitudes: General evaluations and beliefs held by an individual about a specific behavior (Eaton & Visser, 2011; Ajzen, 1972).

Baby Boomer generation: A group of individuals born between the years 1944 and 1964 who share significant life events at critical developmental stages, leading to the following shared characteristics and values; optimism, idealism, materialism, driven, team-oriented (Cogin, 2012; Edge, 2014; Edwards, 2007; Lu & Gursoy, 2016).

Chain of command: The formal order of authority within an organization that acts to organize and distribute communications, organizational directives, and formal or informal organizational culture and norms (Segrest et al., 2020).

Comprehension: The ability to accurately understand a question and associated responses in a given survey (Vercellotti, 2011).

First responders: Persons who employed and professionally trained to respond to various emergency situations to provide safety and protection to individuals, communities, and property. Law enforcement officers are a unique sub-set within the first responder population (Arble et al., 2017).

Generational-cohort: A group of individuals that share birth years and have experienced significant life events at critical developmental stages, leading to shared characteristics and values that remain relatively stable throughout their lifetime (Lu & Gursoy, 2016)

Generational turnover: A term that describes the phenomenon of significant demographic changes within an organization made up of individuals from the same generational-cohort. This term is operationalized in this study as older generational-cohorts retiring from a law enforcement agency, while a newer generation enters the same agency generating internal changes (Campeau, 2019; Edwards, 2007; Duxbury et al., 2018).

Generation X: A group of individuals born between the years 1965 and 1980 who share significant life events at critical developmental stages, leading to the following shared characteristics and values; independent, self-sufficient, autonomous, skeptical, eager to learn, and a desire for work/life balance (Cox, 2016; Edge, 2014; Edwards, 2007; Taylor & Gao, 2014).

Law Enforcement Officer (LEO): Any person employed by any local, state, or federal authority who is certified or trained and whose primary responsibilities include the maintenance of public order and the enforcement of the law through prevention, detection, and investigation of crime and the apprehension of criminals (U.S. Department of Justice, 2021; State of Florida, 2021).

Law Enforcement Agency (LEA): Any agency or unit of government with constitutional or statutory authority to employ persons as officers to protect life and safety (State of Florida, 2021).

Mental health help-seeking attitudes: An individuals' willingness and feelings towards seeking mental health services when needed (American Psychological Association, 2020; Rickwood & Thomas, 2012).

Mental health help-seeking behaviors: Actions an individual takes to find or seek assistance from others to cope with mental health concerns (American Psychological Association, 2020; Rickwood & Thomas, 2012).

Millennial generation: A group of individuals born between the years 1981 and 1996 who share significant life events at critical developmental stages, leading to the following shared characteristics and values; optimistic, confident, liberal-minded, open to change, achievement-oriented, desire for immediate feedback, and information (Cox, 2016; Kohut et al., 2010; Lyons et al., 2007; Zemke et al., 2013)

Perceived behavioral control (PBC): An individuals' belief of their ability to complete a task, which is similar to the concept of self-efficacy, and their belief of barriers present that hinder an individual from performing a specific behavior (Ajzen, 2012).

Police culture: a set of widely shared norms and values that are formed as an adaptation to working in an environment characterized by danger, uncertainty, and coercive authority and serves to manage the strains that stem from this work environment (Demirkol & Nalla, 2020)

Subjective norms: Beliefs that a specific individual or group holds regarding whether or not one should perform a behavior (Fishbein, 2003); also referred to as social norms (Montano & Kasprzyk, 2015).

Assumptions

Assumptions are a standard part of research as they form the basis and functionality of a study when they can be met or shown to be probable (Simon & Goes,

2013). In this study, a survey was used, so the central assumption was that participants answered the survey questions honestly, accurately, and without bias. While I cannot prove this assumption, there is evidence to support that explaining and ensuring anonymity or confidentiality does generate honest and accurate responses from participants (Simon & Goes, 2013). An additional assumption was that the sample will be representative of the overall U.S. LEO population. Since the total target population is only known in estimated numbers, random sampling within the target population for this study was not possible. Instead, Stuart et al. (2017) suggested that non-experiment research designs use stratified sampling to ensure accurate representation of the sample towards the target population. To meet this assumption, this study used stratified sampling and attempted to match the total population demographics as closely as possible given collected data.

A third assumption stemmed from generational research. In generational research, there is an assumption that different generations' formative influences will generate psychological and behavioral differences, through combined biological and socio-cultural forces, that manifest distinct personality differences between established generational-cohorts. While this assumption has not been proven, a growing body of research supports this assumption in the United States of America (Lyons & Kuron, 2013).

Aside from the methodology employed within this study, the theoretical foundation, TPB (Theory of Planned Behavior) also operates under several assumptions which are included in this study and supported across a large body of research (Ajzen, 2012; Canova et al., 2020; Hyland et al., 2012; Montano & Kasprzyk, 2015). Firstly, the

theory assumes that human behavior, while sometimes spontaneous, flows reasonably from the information and beliefs people hold about the behavior in question. Additionally, demographic characteristics and general personality traits are expressed indirectly through TPBs constructs. Finally, there was an assumption the social pressure may influence participants' intentions and behaviors, even if no rewards or punishments were anticipated (Fishbein & Ajzen, 2010).

The use of generational-cohorts within a cross-sectional design also required a theoretical assumption due to the inherent effects of age, time-period, and cohort (APC) entanglement on statistical models and results due to their linear dependency (Bell & Jones, 2014; Mason et al., 1973). Using a cross-sectional design with generational-cohorts controls for time-period effects, but not for age or cohort effects. Since this study explored the effects of generational turnover on mental health help-seeking behavioral intentions, this study assumed Mason et al.'s (1973) theory, which states that progress over time is a result of cohort succession, as there are rarely continuous changes in the world that lead to a shift in attitudes across all ages and cohorts simultaneously.

Scope and Delimitations

The scope and delimitations of research define the parameters for a study and provide readers with the guidelines for inclusion and exclusion criteria within the study as selected by the researcher (Simon & Goes, 2013). This study's scope investigated the effects of generational cohorts on help-seeking behavioral intentions in certified LEOs in the United States. The study also examined differences in attitudes, subjective norms, internal and external PBC, and behavioral intentions across generational cohorts in

certified LEOs in the United States. Delimitating factors for this study included participants of non-LEO occupation and non-certified participants. Participants born before 1944, or after 1996 were also excluded, since the purpose of this study was to examine help-seeking behavioral intentions across three specific generations [Baby boomer, Generation X, and Millennials] within certified LEOs only.

Study participants were all over 18 years old and we all certified LEOs. Included participants also had reported birth years between 1944 and 1996. All participation was voluntary. Participant gender, ethnicity, rank, years of service, and birth year were also collected.

Limitations

A study's limitations are constraints beyond a researcher's control that may impact the study's outcome (Simon & Goes, 2013). One limitation of this study was the use of a self-report Likert scale. Self-report measures rely on the participants' recall and opinion, making them prone to bias, particularly on sensitive or stigmatizing topics. However, self-report measures are suitable for difficult to measure psychological constructs such as attitudes or beliefs (Kimberlin & Winterstein, 2008). Additionally, the limited response options attached to Likert scales can mean that some valuable qualitative information is missed (Delva et al., 2002). However, Likert scales provide a reliable and straightforward format to gather data in a standardized and efficient manner for many psychological constructs, especially when used for group comparisons (Ho, 2017).

A second limitation for this study included the use of a vignette. Vignette-based research is often criticized for artificiality. Artificiality refers to the fact that vignettes are

hypothetical narratives used to elicit a participants' response, hypothetical behaviors, and represent real-world phenomena; however, they are not directly measuring real-world phenomena or actual behaviors (Evans et al., 2015). Similarly, this study focused on the behavioral intentions of participants to seek mental health services, and not the actual behavior of seeking mental health services. This is an important distinction given that vignettes can be considered projective, relieving pressure from participants to respond within the guidelines of social desirability or political correctness (Steiner et al., 2016). However, hypothetical behavior may not translate to actual behavior in the real-world (Evans et al., 2015). Additionally, participants in vignette-based research may not identify with the context of a vignette, and therefore data may not show variation and lead to a failed study (Evans et al., 2015). Therefore, it is crucial that vignettes are well-written and stimulate real-world scenarios for the target population, however there is no way to absolutely confirm or refute how well a participant identifies with a vignette (Evans et al., 2015).

A final limitation to this study included the cross-sectional design of this study. Generational-cohort research naturally includes the confounding constructs of age, time-period, and cohort effects (Bell & Jones, 2014; Rudolph et al., 2017). These constructs are linearly related, making it impossible to empirically identify a causal relationship without a cross-temporal or longitudinal design (Campbell et al., 2015; Mason et al., 1973; Parry & Urwin, 2017). However, time and financial restraints made such an approach to this topic impossible for this study.

Significance of the Study

This study explored generational change associated with the positive shifts in officer help-seeking attitudes and behaviors towards mental health. The study was unique as it bridged the gap between generational research and help-seeking attitudes in LEOs within the theoretical framework of TPB. There is limited research on mental health help-seeking with this population, despite the need for services (Burns & Buchanan, 2020; Haugen et al., 2017; Violanti, 1995). Additionally, there are conflicting academic opinions on cultural change within law enforcement, but Duxbury et al. (2018) and Campeau (2019) hypothesized that generational turnover generates various police cultural changes. However, generational research primarily focuses on the private industry, with only a few studies exploring generational cohorts in public-sector employees (Edwards, 2007). The addition of this quantitative research helps practitioners and scholars understand officers' behavioral intentions towards help-seeking within the currently changing climate of police culture.

Significance to Theory

The Theory of Planned Behavior has a vast amount of established research in predicting and explaining behaviors to inform prevention and intervention programs, but it has only recently been applied to help-seeking behavioral intentions (Bohon et al., 2016; Cuyler & Guerrero, 2019; Hyland et al., 2012; Skogstad et al., 2006). This study has increased quantitative knowledge and the application of TPB towards help-seeking. It also generated an understanding of the most critical TPB constructs for each generation of LEOs in the sample. Understanding the value of each TPB construct on help-seeking

behavioral intentions in LEOs will provide LEAs and mental health professionals necessary information to create customized psychoeducation, service implementation, and intervention plans (Fishbein, 2008; Montano & Kasprzyk, 2015).

Significance to Practice

As current research illustrates, there are still many conflicting views on police culture in the literature (Brough et al., 2016; Campeau, 2019; Sklansky, 2006), so this study also added to academic research on police culture. Additionally, generational research in the LEO population has been limited to topics in the area of industrial and organizational psychology, such as hiring, retention, training, ethics, job satisfaction, and stress levels (Cheeseman & Downey, 2012; Edwards, 2007; McCafferty, 2003; Noblet, 2009 Noblet, 2009 Winter & Jackson, 2016). Therefore, this study further expanded generational research in the law enforcement population. Finally, this study contributed quantitative knowledge to the topic of help-seeking in LEOs, which is particularly valuable since most studies in this area are qualitative (Haugen et al., 2017; Gutschmidt & Vera, 2020). Overall, the data from this study has informed generational, criminal justice, and psychological research.

Significance to Social Change

Law enforcement is a stressful occupation, and stress can manifest in psychological and physiological ways that can impact both officers and the public they serve (Gutshall et al., 2017; Violanti et al., 2017). However, LEOs are traditionally resistant to mental health help-seeking (Haugen et al., 2017). Additional information on help-seeking in LEOs is needed to address this phenomenon (Bullock & Garland, 2018;

Burns & Buchanan, 2020; Velazquez & Hernandez, 2019). Through the TPB framework, mental health service providers, LEOs, and public agencies can gain insight to generate customized prevention and intervention programs to reduce the gap between service need and utilization within the population (Haugen et al., 2017; Long & Maynard, 2014; Montano & Kasprzyk, 2015). By increasing officers' well-being through improved mental health service utilization and education, practitioners and scholars can positively impact officers' lives.

Positive social changes stemming from this study and its contributions to prevention and intervention efforts may also include reducing the higher-than-average stress levels in LEOs; which often result in increased mental illness, and suicide rates in the population (Violanti et al., 2017; Violanti et al., 2018). An additional benefit includes the fiscal savings that improved wellness in LEOs would hold for taxpayers. Increased stress levels can lead to more errors, use of force, and absenteeism in LEOs equating to monetary losses (Baker et al., 2020; Fox et al., 2012). Additionally, high stress levels can lead to physiological and psychological issues that may impact a LEOs' work status (Baker et al., 2020; Fox et al., 2012; Lucas et al., 2012). High stress levels may also add additional financial losses due to the cost of recruiting, hiring, and training new LEOs; which is estimated to exceed $100,000 (Meade, 2016). Finally, the documented negative impacts of stress on LEOs include, increased aggression, recklessness, negativity, errors, and use of force (Baker et al., 2020; Violanti et al., 2017; Violanti et al., 2018). High stress levels also result in decreased judgment, temperament, decision-making skills, and overall emotional and cognitive capacity in LEOs (Baker et al., 2020; Lucas et al., 2012);

all of which directly impact the public they serve (Baker et al., 2020; Gutshall et al., 2017). By increasing mental health service utilization and education LEOs will have more opportunities to learn healthy coping skills for stress management, reducing the deleterious effects of high stress on a LEOs' overall wellbeing (Arble et al., 2017; Maran et al., 2015; Violanti et al., 2017), thereby manifesting as more positive interpersonal relationships, and interactions with the public and the communities they serve, generating positive social change.

Summary

This chapter has addressed the background information about this study and its theoretical orientation. It has introduced the problem, purpose, and research questions that were the focus of this study. The etiology of stress for LEOs makes them a high-risk population for mental health issues. Occupational, organizational, and personal stressors all impact the psychological and physiological health of LEOs. Officers are more likely to suffer from PTSD, mood disorders, substance use, and suicidal ideation than the general population (Velazquez & Hernandez, 2019; Violanti et al., 2017). High-stress levels and mental health issues also impact LEO interactions with the public they serve (Baker et al., 2020; Gutshall et al., 2017), resulting in decreased capacity in a multitude of emotional and cognitive domains, and increased negative behaviors (Baker et al., 2020; Fox et al., 2020; Lucas et al., 2012).

Chapter 1 also established that LEOs are traditionally resistant to mental health help-seeking, but new research is finding positive changes in officers' attitudes and behaviors toward mental health help-seeking (Heffren & Hausdorf, 2016; Jetelina et al.,

2020; Karaffa & Tochov, 2013; Karaffa & Koch, 2016; Meyer, 2000). There is a consensus among academics that more research is needed on mental health help-seeking in LEOs to improve service utilization (Bullock & Garland, 2018; Burns & Buchanan, 2020; Velazquez & Hernandez, 2019). One possible factor driving these positive changes in LEOs help-seeking may be generational turnover. Generational turnover may lead to cultural changes in policing due to the profession's hierarchical nature and chain of command. As older officers retire and new officers take on authority positions, knowledge is lost, and cultural erosion occurs (Campeau, 2019; Farkas et al., 2020; Hu, 2010; Ingram et al., 2018).

This study explored the generational turnover hypothesis by quantitatively measuring the effects of generational-cohorts on help-seeking behavioral intentions in LEOs through a TPB framework. The nature of the study, along with the study's assumptions, scope, and limitations, were also discussed in this chapter. Finally, this study's significance and its contributions to practice, theory, and social change were reviewed in this chapter. The next chapter will provide an in-depth review of the literature related to mental health help-seeking in LEOs, police culture, and generational research that guide this study and will illustrate the literature gap that this study will address.

Chapter 2: Literature Review

Introduction

This study explored the effects of generational-cohorts on help-seeking behavioral intentions among United States LEOs through the Theory of Planned Behavior. The exploration on this topic has been limited to date despite a large gap in service need versus service utilization within the population. This chapter will address the literature search strategy, and the theoretical foundations for this study, the Theory of Planned Behavior. It will also discuss established literature across three areas of research that guided this study, mental health help-seeking, police culture, and generational research.

Literature Search Strategy

The literature search strategy used to inform my research included the following keywords; police, or officers, or cops, or law enforcement AND generations, or generational, or generational differences, or generational-cohort, or birth-cohort OR help-seeking attitudes, or mental health services, or mental health utilization, or mental health stigma or mental health barriers. The searches were completed within the following databases; EBSCO, ProQuest, SAGE, Walden Library Books, Taylor & Francis Online, Thoreau Multi-Database Search, Psychology Databases Combined Search, SocINDEX, PsychTESTS & Health and Psychosocial Instruments Combined Search, Criminal Justice Database, govinfo, Military and Government Collection, Science Direct, and Political Science & Business Source Combined Search. Research results were limited to the past five years initially, however due to the paucity of research found, parameters were

increased in 5-year increments until theoretical and conceptual saturation was reached (Galvan & Galvan, 2017).

Theoretical Foundation

Ajzen (1991) proposed the Theory of Planned Behavior (TPB) as an extension of the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1979). TRA was developed to understand the relationships between attitudes, intentions, and behaviors (Fishbein & Ajzen, 2010; Montano & Kasprzyk, 2015). TRA states that the intention to perform a specific, voluntary behavior is a function of an individuals' attitudes towards the behavior and the subjective norms perceived by the individual surrounding the behavior (Ajzen, 2012). Attitudes stem from the individuals' beliefs about the attributes and potential outcomes of performing the specific behavior (Montano & Kasprzyk, 2015). Subjective norms are the individuals' beliefs about what peers and other significant persons in their lives think about the specific behavior (Romano, 2015).

Since many behaviors are not wholly under volitional control, TPB adds the construct of perceived behavioral control (PBC), increasing the theory's predictive efficacy (Ajzen, 1991). Behavioral intention, which is formed as a function of attitudes, subjective norms, and PBC, is the driving force of actual behavior (Ajzen, 2012). To date, research has demonstrated that by combining the key constructs of TPB, 40-45% of behavioral intention variances can be accounted for (Long & Maynard, 2014). PBC is the individuals' self-efficacy assessment and their perception of barriers to a specific behavior (Bohon et al., 2016). The central assumption of TPB is that any behavior is immediately preceded by behavioral intention (Montano & Kasprzyk, 2015). TPB does

not directly assess or measure external variables such as demographics or culture. Instead, the theory states that external variables are expressed indirectly through attitudes, subjective norms, and PBC (Montano & Kasprzyk, 2015). TPB posits that a specific behavior can be predicted and explained by measuring these constructs (Long & Maynard, 2014).

Ajzen (1991) noted that each construct's importance and weight vary across behaviors, situations, individuals, or populations. For example, Bohon et al. (2016) used TPB to examine mental health help-seeking in American college students. They found attitudes and PBC were the strongest predictors of behavioral intention. However, Schomerus et al. (2009) found attitudes and subjective norms were the strongest predictors of behavioral intentions in their German sample. Since TPB constructs are the determinants that proceed behavior, it is suited to prevention and intervention research (Long & Maynard, 2014). Furthermore, each construct is measured independently, allowing researchers to identify and prioritize each construct for customized prevention or intervention programs within a population (Montano & Kasprzyk, 2015).

TPB has established a long history of valid results within social science research (Long & Maynard, 2014). It is also one of the most widely known and used research models in psychology (Ajzen, 2012). TPB is valid across diverse cultures, demographics, and populations (Canova et al., 2020) and effectively predicts a broad range of health-related behaviors (Montano & Kasprzyk, 2015). Meta-analytic reviews beginning as early as 1998 have shown strong correlations, ranging from .59 to .66, between behavioral intention predictions and TPB constructs (Ajzen, 2012). In 2001, Armitage and Conner

examined this relationship across 48 independent studies and various behaviors and populations, finding a mean correlation of .47. However, TPB has only recently been applied to mental health help-seeking in research (Hyland et al., 2012).

Skogstad et al. (2006) is one of the earliest research applications when considering mental health help-seeking intentions. They found TPB explained 44% of the variance in intentions to seek counseling within New Zealand Prisoners (Skogstad et al., 2006). In an opposing population, Bohon et al. (2016) explored TPB and help-seeking in college students with depression and found it explained 93% of the variance in intentions. TPB has also been applied to mental health help-seeking within the military and police populations. Cuyler and Guerrero (2019) reported TPB explaining 50.8% of the variance in help-seeking intentions for active U.S. military members. While Hyland et al. (2012) explored TPB and mental health help-seeking in Irish LEOs, finding that it explained 92.6% of the variance in intentions to seek counseling.

Both Bohon et al. (2016) and Hyland et al. (2012) achieved significantly higher predictive rates than the other two studies discussed by separating the PBC construct into two distinct measures; internal (self-efficacy) and external (barriers). Armitage and Conner (2001) first suggested splitting this construct after their diverse meta-analytic study. However, Fishbein and Ajzen (2010) rejected the idea of splitting the PBC construct, arguing that hierarchical integration represents the most accurate operationalization of the theory. Hyland et al. (2012) compared the original model and the modified model during their study with LEOs, finding a superior model fit when PBC was split. Additionally, they reported self-efficacy as the most significant factor in

predicting behavioral intentions to seek counseling within their sample of Irish LEOs. This result would have been missed without splitting PBC (Hyland et al., 2012). This finding, in particular, is vital since Ajzen (1991) noted that the weight or value of each TPB construct would vary across populations and understanding the most crucial construct within a population will allow for the implementation of customized prevention and intervention plans (Montano & Kasprzyk, 2015).

Conclusions

The Theory of Planned Behavior was developed to explain and predict non-volitional behavior (Ajzen, 1991) and has a robust empirical base in social science research (Long & Maynard, 2014). TPB is effective across various behaviors (Canova et al., 2020), cultures, demographics, and populations (Montano & Kasprzyk, 2015). More recent research has extended the theory from health-related inquiries into mental health help-seeking with reliable findings (Bohon et al., 2016; Cuyler & Guerrero, 2019; Hyland et al., 2012; Skogstad et al., 2006). While there is a debate over splitting the PBC construct for the most effective prediction of behavioral intentions, Hyland et al. (2012) established TPB as a valid theory for research within LEOs. Their findings also highlight the benefits of using the modified TPB model suggested by Armitage and Connor (2001) for police studies to improve prediction efficacy and future intervention planning.

Literature Review

Due to law enforcements stressful nature, mental health issues are common (Violanti et al., 2017). They can impact the quality of work LEOs provide to their communities and the officers' quality of life (Gutschall et al., 2017; Lucas et al., 2012).

Attitudes towards mental health help-seeking have improved incrementally since the 1990s in America (Mojtabai, 2007). The use of mental health services has also significantly increased, with the Millennial generation reporting more mental health problems than any previous generation (Twenge et al., 2010). A generational-cohort analysis of the National Comorbidity Survey data between 1990-2003 supported overall positive changes in attitudes toward mental health help-seeking. The Millennial generation shows the most positive attitude improvements (Mojtabai, 2007).

Recent research has also demonstrated cultural shifts within policing (Campeau, 2019; Hu, 2010; Ingram et al., 2018); specifically, in regard to mental health help-seeking (Burns & Buchanan, 2020; Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochkov, 2013). There is debate over why these cultural changes are occurring, but some scholars point to generational turnover as the etiology of police cultural changes (Campeau, 2019; Hu, 2010; Ingram et al., 2018). Early research in policing focused on defining and describing police culture through ethnographic studies (Brough et al., 2016). However, researchers noted difficulties when trying to access the population for further studies due to cultural norms and suspicion of outsiders (Woody, 2005). Research within the police population picked back up again in the 1970s and has since focused on industrial and organizational psychology concepts, policy interventions, police reform, and organizational functions such as crime reduction and community interactions (Greene, 2014). Police-based research is uniquely intertwined with political issues, further complicating its history and findings in America (Walker, 2004). In the 21st century, researchers began to explore generational research and mental health help-

seeking in depth across populations. However, there is still a limited understanding of help-seeking within LEOs, despite growing interest in the phenomenon (Burns & Buchanan, 2020). This stems from LEOs traditionally resisting mental health help-seeking (Haugen et al., 2017).

Mental health help-seeking and LEOs

Help-seeking is a crucial step between the onset of mental health issues and obtaining treatment. Mental health help-seeking has been periodically monitored and measured within the general population since the 1950s by the Centers for Disease Control and Prevention (Mojtabai, 2007). Help-seeking attitudes are defined as an individuals' willingness and attitude towards seeking mental health services when needed and are a key construct in predicting behavior intentions, and therefore actual behavior. Help-seeking behaviors are generally defined as the actions an individual takes to find or seek assistance from others, but there is no standardized definition of the term (Rickwood & Thomas, 2012). Within the context of mental health, help-seeking behaviors can include professional and non-professional sources of mental health assistance to cope with mental health concerns (Rickwood & Thomas, 2012).

Historically, mental health help-seeking among LEOs was considered rare despite the need for mental health services (Violanti, 1995), mainly because qualitative studies noted a robust cultural stigma attached to mental health help-seeking (Blum, 2000). However, Burns and Buchanan (2020) reported only five studies specific to LEOs and help-seeking. Most of the mental health research in law enforcement populations has focused on interventions and exploring specific stigma types or barriers, not help-seeking

attitudes, or behaviors (Burns & Buchanan, 2020; Haugen et al., 2017). Similarly, Haugen et al. (2017) located only 40 quantitative studies within the first responder population exploring stigma or barriers towards mental health treatment. Of the 40 studies, 22 were intervention studies, and only 12 were police specific. Research finds that about one in three first responders will experience stigma regarding mental health concerns, and one in eleven will experience barriers to obtaining mental health care (Haugen et al., 2017). In 2006, Berg et al. found less than 10% of officers with mood disorder symptoms sought professional psychological services. Bullock and Garland (2018) also reported a consistent theme of structural barriers and stigma stemming from upper management within departments still exists.

Karaffa and Koch (2016) found evidence of pluralistic ignorance within police culture. Pluralistic ignorance defines a phenomenon where individuals in a peer group may act in accordance with group norms, even though they disagree with the group norms. The presence of pluralistic ignorance among officers indicates that individual LEOs may not hold negative views on mental health help-seeking but may act as if they do to avoid being shunned by other important police culture members (Karaffa & Koch, 2016). However, Karaffa and Koch (2016) also found that over half of their sample had sought mental health services in the past, compared to the previous 2006 findings of 10% service utilization (Berg et al., 2006). Heffren and Hausdorf (2016) reviewed help-seeking behaviors in LEOs with PTSD and found that 56.9% of their participants sought mental health assistance. Karaffa and Tochkov (2013) also noted that officers' attitudes towards seeking mental health services were neutral and not negative for both male and

female LEOs during their quantitative study using the Attitudes Towards Seeking Professional Psychological Help-Short Form (ATSPPH-SF). They also noted that older LEOs in their sample were more open to help-seeking (Karaffa & Tochkov, 2013). These findings are directly opposed to Hyland et al. (2012) and Berg (2006), which both found younger LEOs are more open to help-seeking.

Two qualitative dissertations focusing on help-seeking in LEOs noted positive changes. McGill (2018) found that Millennial LEOs are more open to discussing mental health than previous LEOs. Faulkner (2018) reported that LEO participants repeatedly noted that there is still a stigma against mental health help-seeking, but "things are changing" in police culture. Her study highlighted quotes from multiple study participants who utilized mental health services and acted as advocates for mental health help-seeking within their agencies, further illustrating the weight of police culture on mental health help-seeking in LEOs (Faulkner, 2018).

Within these studies only a few on this topic have used a quantitative design. Heffren and Hausdorf (2016), Hyland et al. (2012), and Berg (2006) all used quantitative designs. Heffren and Hausdorf (2016) used multiple linear regression to explore mental health help-seeking behaviors in LEOs who had experienced traumatic incidents within the past year. However, the data was collected at a single department, and the response rate was meager at 22%, limiting the generalizability of the findings. Hyland et al. (2012) also used a quantitative design, with structural equation modeling (SEM) and confirmatory factor analysis (CFA). Their convenience sample was drawn from a single LEA. However, the surveys' return process limited confidentiality and anonymity since

surveys were collected by hand through the LEOs chain of command. Hyland et al. (2012) noted a lack of demographic diversity within their sample and called for additional research with more diverse samples. Hyland et al. (2012) also reported a statistically significant relationship between age and help-seeking in LEOs. Finally, Berg (2006) conducted the most comprehensive quantitative study on the topic with Norwegian LEOs using logistic regression. While their sample was representative of the Norwegian police union's demographics, it was not representative of the nation's total police population. Additionally, they used online surveys to obtain a response rate of just over 51% but cited unknown distribution errors, potentially including confounding variables.

Police Culture

Police culture is considered a set of widely shared norms and values formed as an adaptation to working in an environment characterized by danger, uncertainty, and coercive authority, which function to manage the strains that stem from this work environment (Demirkol & Nalla, 2020). Police culture significantly impacts LEO attitudes and behaviors (Brough et al., 2016). Research has traditionally defined police culture as pervasive, negative, and resistant to change (Cordner, 2017). During the 1950s, 1960s, and 1970s, ethnographic studies painted a picture of an unyielding culture with a strong distrust of outsiders. Finding that the culture subscribes to western-masculine values while emphasizing physical toughness, solidarity, and control of emotions within officers (Hakik & Langlois, 2020; Skolnick, 1966; Van Mannen, 1973). While some of these traits remain present within police culture, new research provides evidence that

police culture is more heterogeneous and diverse than previously reported (Brough et al., 2016; Ingram et al., 2018). Generalizable traits within police culture that continue to endure include a subscription to masculine values, solidarity, and control (Brough et al., 2016). However, Cordner (2017) found evidence for positive police culture changes, including more positive attitudes and opinions overall. Cordner (2017) also noted a lack of homogeneity in individual and organizational domains, indicating that LEOs have distinct opinions across individual officers and agencies on police culture and its traditional traits. Massive external and social changes such as increased diversity, new technologies, generational turnover, political pressure, increased police reforms, increased public scrutiny, and the rise of globalization have influenced police culture; resulting in an erosion of the previous monolithic culture theory (Campeau, 2019; Farkas et al., 2020; Walker, 2004). The magnitude of these many changes has led to a breakdown in the traditional socialization process within police culture, reducing the uptake of conventional norms, beliefs, and values in LEOs (Cockcroft, 2019). Despite these changes, there is a consistent message in the academic literature that police culture is monolithic, static, and negative (Silvestre, 2017).

Overall, research on police culture is criticized for a lack of theoretical development and empirical work (Demirkol & Nalla, 2020). Recent research finds that early police cultural studies are oversimplified (Silvestre, 2017) and often incorrectly interpreted with sections of earlier research analyzed outside their original context (Reiner, 2016). Ingram et al. (2018) argued that the monolithic model of police culture is not valid. Similarly, Crank (2014) found that police culture is diverse since it emerges

from an organizational setting and is neither inherently good nor bad. Instead, he found that police culture acts as a central organizational fixture in LEOs' lives, meaning that police culture is not monolithic and varies across LEAs and LEOs (Crank, 2014). Ingram et al. (2018) proposed a multilevel framework that views culture as a product of individual and group-level influences, beliefs, and experiences. Therefore, police culture is distinct across different officers, their units, and their agencies. The multilevel framework argues that individual, occupational, environmental, and organizational factors influence how police culture is expressed through individual officer behaviors (Ingram et al., 2018). Cordner (2017), Pauline and Gau (2018), and Gutschmidt and Vera (2020) also provided evidence of distinct subcultures and changes in policing. Reiner (2016) stated that sub-cultures exist within police culture, and that LEO attitudes, perspectives, and a variety of other factors have a multi-directional impact on both individual LEO behaviors and overall police culture.

Finally, Demirkol and Nalla (2020) empirically tested values associated with police culture's monolithic theory using confirmatory factor analysis (CFA). They found no empirical support for the theory concluding that police culture is heterogeneous. Furthermore, they reported a lack of knowledge on the etiology of these cultural differences in LEOs, suggesting future research on factors that may impact LEO attitudes across time, situations, and groups (Demirkol & Nalla, 2020). Generational turnover could be such an impacting factor; since it functions as a long-term, cultural change agent (Hu, 2010; Lyons & Kuron, 2013; Mannheim, 1952) and is critical in law enforcement due to its hierarchical nature (Campeau, 2019; McCafferty, 2003). Duxbury et al. (2018)

supported this hypothesis and reported that younger officers generate internal changes within police culture as they replace older, retiring officers. Given these facts, there is a clear debate over police culture's current status and its impacts on officer behavior and norms. Generational turnover may help explain cultural changes in law enforcement due to its hierarchical nature and organizational structure (Campeau, 2019; Hu, 2010; Lyons & Kuron, 2013; Mannheim, 1952).

Generational Research

Since Mannheim's (1952) introductory theory on generations, there has been sporadic exploration on the topic (Edge, 2014). However, the 21st century brought new life to generational research. As generational research expands, there are mixed results, with many scholars stating this is primarily due to how generations are delineated in research (Parry & Urwin, 2017; Weeks & Schaffert, 2019). This variability, coupled with the inherently nebulous nature of defining generational-cohorts, places the concept in a similar light as research in many other debated psychological and social concepts, like culture, stigma, intelligence, and ethics (Campbell et al., 2015). Conversely, Rudolph et al. (2017, p.1) argued that generational research is “much ado about nothing” and that the theoretical assumptions for generational research have little empirical support. They suggest that generational-cohorts are social constructs “willed into being” to serve a need for organization and categorization (Rudolph et al., 2017, p.12). However, as Campbell et al. (2015) pointed out, just because a construct is difficult to define or measure explicitly does not mean it isn’t authentic or worth investigating. Lyons and Kuron (2013) lend further support to this argument, stating that the exact boundaries used to define

generational-cohorts are not critical since generational trends are significant and should reveal themselves regardless of concrete demarcations. Campbell et al. (2015) further argued that there is variance within and between various cohorts in research on traits of interest, and in most cases the variance is larger within groups than between groups, making generational-cohorts similar to other cohort-based research such as gender, ethnicity, or even geographical location.

Alternatively, Bell and Jones (2014) found that even if generational-cohorts do exist, the linear interaction effects of age, time-period, and cohorts (APC) make proving their effects impossible. However, Mason et al. (1973) argued that pairing two constructs of APC with the assumption that they have an equal effect on a dependent variable then comparing the results with a cross-temporal or cross-sectional designs, the effects of generational cohorts can be empirically evaluated. However, cross-temporal data is not always available, or feasible to obtain due to time or financial restrictions (Parry & Urwin, 2017). In cases where priori data is not available, empirical evaluation with reasonable reliability is possible if the results across two distinct models of the APC constructs are compared (Mason et al., 1973). For example, regression coefficients on cohorts alone are much larger than those associated with age or period alone, and the difference between any total coefficient and a single dimension coefficient is largest when cohort dimensions are excluded. Therefore, examining changes in variance across age or time against cohort variance can provide additional information for analysis of the pure cohort effect. While causal relationships cannot be proven in this method, they can be useful for examining pure cohort effects. The results can also be used as a baseline for

future cross-temporal research designs if the social composition of the cohorts remains consistent, or is controlled for over time (Mason et al., 1973). Campbell et al. (2015) agreed, finding that the key to generational research is segregating the age effect which can be done empirically through cross-temporal data comparisons, but that to capture all APC constructs cross-sectional and cross-temporal designs are both necessary. They argued that cultural changes are driven by both time-period and cohort effects, mirroring Mason et al.'s (1973) theory of paired APC constructs across time. Similarly, Parry and Urwin (2017) stated that while the theoretical foundations for generational research has validity, only by building a large base of empirical research on the topics within generational-cohorts for inductive and longitudinal analysis will the debate over the phenomenon end.

Generational research and LEOs

The concept of generational turnover is critical in law enforcement due to its hierarchical nature (Campeau, 2019; McCafferty, 2003). In law enforcement, older and longer-serving organization members typically hold management and leadership positions, impacting organizational culture and social norms formally and informally (Demirkol & Nalla, 2020). Campeau (2019) further argued that the phenomenon of generational turnover best explains the cultural shifts in policing towards heterogeneity. As younger officers advance into management and leadership positions within an agency, they choose which cultural norms, myths, and ideas they will encourage or ignore, generating changes within the organization (Campeau, 2019). Hu (2010) supported the concept of generational turnover as a change agent in police culture through knowledge

transfer and loss mechanisms. Hu (2010) found that younger officers and recently retired officers have different views on what knowledge is essential and functional within an agency. He concluded that as older officers leave an agency, knowledge is lost, for better or worse, creating changes within an agency. Mannheim (1952) further supported the hypothesis of generational turnover as a cultural change agent. He argued that younger generations are the first to modify their behaviors and beliefs based on external stimuli, creating changes since they are still forming as a cohort by either rejecting or accepting pre-existing norms (Lyons & Kuron, 2013; Mannheim, 1952). Together these studies indicate that generational turnover may have a positive impact on LEO opinions on mental health help-seeking overtime, as younger generational-cohorts begin to replace older generational-cohorts within an agency.

A generational-cohort is defined as a group that shares birth years and experiences significant life events at critical developmental stages leading to shared characteristics, beliefs, and values that remain relatively stable throughout their lifetime (Lu & Gursoy, 2016). These shared traits act as a basis for group members' individual attitudes and behaviors (Lyons & Kuron, 2014). Generational research has an expansive breadth and depth within the workforce, considering that it is still a developing field (Weeks & Schaffert, 2019). Furthermore, from these studies, it is clear that generational differences impact individual perceptions, values, organizational culture, and the change process (Cheeseman & Downey, 2012; Lyons & Kuron, 2013; Mineard, 2006; Weeks & Schaffert, 2019; Winter & Jackson, 2016).

However, the majority of generational research has been almost entirely focused on the private industry and its workforce, which is distinct from police culture and LEAs (Edge, 2014; Edwards, 2007). Several generational-cohort studies focus on changes in personality constructs and specific mental health disorders across generations, such as narcissism or depression, finding evidence of changes (Curran & Hill, 2019; Stewart & Bernhardt, 2010; Twenge, 2013; Twenge et al., 2012). A single graduate study was located that explored mental health knowledge across generational-cohorts in the general U.S. population. Avera (2017) found that generational-cohorts in the general U.S. population did have statistically significant mental health knowledge differences. Both Generation X and the Millennial generation members were significantly better at identifying mental illness than participants in the Baby boomer generation (Avera, 2017).

The few studies conducted within the public-sector are mixed across various first responder occupations, rather than solely exploring LEOs (Cheeseman & Downey, 2012; Edwards, 2007; Piatak, 2017; Winter & Jackson, 2016). A single graduate study was located that explored mental health stigma and a single generational-cohort of LEOs (McGill, 2018). This qualitative study assessed mental health stigma within Millennial generation police recruits and concluded that they are more open to discussing mental health issues than previous generations. The study did not include any other generational-cohorts for direct comparisons of the data (McGill, 2018). The remaining public-sector, generational-cohort studies located during this literature review explore workplace issues such as job satisfaction and retention, hiring and recruitment, or training; leaving the implications of generational turnover in both first responders as a whole and police

officers specifically, largely unexplored in the mental health domain (Cheeseman & Downey, 2012; Edwards, 2007; McCafferty, 2003; Mineard, 2006; Winter & Jackson, 2016).

The workforce is currently made up of the Baby boomer generation, Generation X, and the Millennial generation (Glass, 2007). Until recently, the Baby Boomers have held most upper management and leadership roles (Lu & Gursoy, 2016). Presently, the Millennial generation is beginning to take on positions of responsibility and leadership, with the Baby Boomer generation retiring at an unprecedented rate (Fry, 2018). This workforce turnover undoubtedly generates cultural and organizational changes, evidenced through generational studies across industrial & organizational domains, as well as personality traits (Cheeseman & Downey, 2012; Curran & Hill, 2019; Edwards, 2007; Hu, 2010; Junginger, 2008; Mineard, 2006; Twenge, 2013; Weeks & Schaffert, 2019; Winter & Jackson, 2016). However, no current studies link generational research and mental health help-seeking in LEOs. As such, this study used the following years as boundaries, following the age-based concept of generations in Mannheim's theory of generations (1952). The dates are also in line with the U.S. Census Bureau (2015) and the Pew Research Center, the largest, nonpartisan research group focusing on generational research and social trends in America (Pew Research Center, 2021).

Baby Boomer generation (1944-1964)

The Baby boomer generation is the largest birth-rate generation to date and is a diverse group that grew up in a time of economic prosperity (Lancaster & Stillman, 2002). Baby boomers were shaped by the cultural experiences of the Cold War, the

Vietnam War, the assassinations of John F. Kennedy and Martin Luther King Jr., and the space race (Edwards, 2007). They are considered an optimistic, idealistic, driven, and team-oriented generation. They strive for personal gratification and growth, along with overall health and wellness (Edge, 2014; Glass, 2007). Baby boomers are often considered workaholics since they have a strong drive to succeed and are motivated by economic prosperity and title-based recognition (Cogin, 2012; Edge, 2014). Researchers suggest this drive stems from their generation's large size, leading to competition amongst generation members for employment and promotions (Edwards, 2007). The Baby boomer generation's retirement is considered one of the most significant challenges in the U.S. workforce to date (Fry, 2018).

Generation X (1965-1980)

Generation X is the smallest of the three generations this study examined and is a bridge between the Baby boomer generation and the Millennial generation (Katz, 2017). The generational traits include independence, self-reliance, skepticism, and an eagerness to learn (Edge, 2014; Taylor & Gao, 2014). Some of the shared events that shaped Generation X include the rise of two-income families, increasing divorce rates, economic uncertainty, the Challenger explosion, and the introduction of cable TV, and the AIDS epidemic (Edge, 2014; Edwards, 2007). Generation X also saw the beginnings of the technological age, with the introduction of music videos, the internet, and home computers, creating a need for immediate feedback (Twenge et al., 2010). Their introduction to the technological age also causes them to place value on social networking (Edge, 2014). Additionally, they desire a balance between work and personal

time, distinguishing themselves from the Baby boomer generation since the rise of technology meant they could work from anywhere, at any time (Glass, 2007). Generation X prefers autonomy and independence at work and in their personal relationships (Cox, 2016).

The Millennial generation (1981-1996)

The Millennial generation is regarded as the most ethnic and racially diverse generation to date (U.S. Census Bureau, 2015), leading them to social activism, like the Baby boomer generation (Cox, 2016). It is also the least religious generation and is more similar in size to the Baby boomer generation than Generation X. The traits that define the Millennial generation include optimism, confidence, liberal-mindedness, expressiveness, and openness to change (Kohut et al., 2010). Millennials share several key historical moments, including the globalization of our economy, the rise of terrorism, and the boom of technology and the internet, making them one of the most interconnected generations in the workforce (Cheeseman & Downey, 2012; Kohut et al., 2010). The Millennial generation also had the smallest families in American history and the lowest child-to-parent ratio resulting in constant support and supervision (Glass, 2007; Zemke et al., 2013). Due to these experiences, Millennials are achievement-oriented and willing to work for rewards but need constant feedback and communication (Lyons et al., 2007; Zemke et al., 2013). The Millennial generation is now the largest living generation in the United States and the workforce, despite being second in birth rates due to the Baby boomer generation's aging (Cox, 2016; U.S. Census Bureau, 2015).

Summary

This chapter addressed the literature informing this study and its theoretical orientation, along with the literature search strategy employed to locate the research used. There is limited theoretical development and understanding of contemporary police culture and the change process within police culture (Campeau, 2019; Farkas et al., 2020; Ingram et al., 2018; Pauline & Gau, 2018). Since police culture is a strong influence on individual LEO behavior (Brough et al., 2016), understanding the socialization and acculturation processes are critical to the formation of officers' help-seeking behavioral intentions. Generational turnover may be one mechanism responsible for the changes evidenced in the established mental health help-seeking and police culture research (Campeau, 2019; Hu, 2010). While it is apparent that negative views on mental health help-seeking still exist in police culture, LEOs are beginning to express more positive views and behaviors (Bullock & Garland, 2018; Faulkner, 2018; Jetelina et al., 2020; Karaffa & Koch, 2016). However, more research is needed to understand this phenomenon (Burn & Buchanan, 2020; Heffren & Hausdorf, 2016; Karaffa & Tochkov, 2013). The next chapter will discuss the research design and methodology selections that were used in this study. It will also address the reasoning behind these selections and the ethical procedures employed for the study.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study is to examine three different generations of U.S. LEOs' [the Baby Boomer generation, Generation X, and Millennial generation] help-seeking behavioral intentions. This stems from the fact that recent studies have found positive changes in help-seeking attitudes and behaviors in LEOs, arguing for further exploration of this trend (Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochkov, 2013; Meyer, 2000). The variables examined will include the attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intention scores across the three generations. This chapter will discuss the research design and rationale, along with defining and describing the variables. It will also discuss the methodology, threats to validity, and ethical procedures for this proposed study

Research Design and Rationale

A quantitative, nonexperimental design was selected for this study, as this design is suitable for exploring and comparing gathered data (Belhekar, 2019). The research questions sought to determine if group differences exist between the generational-cohorts in this study. Therefore, a one-way ANOVA (analysis of variance) was selected for the data analysis plan. One-way ANOVAs determine statistically significant differences between three or more means (Lobmeier, 2010). This design and analysis approach is an appropriate fit for the research questions, as the goal was to explore and compare the data gathered from the three generational-cohorts to determine if statistically significant differences exist in their behavioral intentions towards mental health help-seeking within

the TPB framework. The independent variable was generations, with three levels; the Baby Boomer generation, Generation X, and the Millennial generation. The dependent variables were the scale data gathered from the TPB-based scenario scale [attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions]. There were no time or resource constraints within this research design outside of the time to gather and analyze the data.

In addition to fitting the research questions, this study's design and methodology present a unique view on the study topic. Hyland et al. (2012) validated the selected scale within the police population using structural equation modeling (SEM) and confirmatory factor analysis (CFA), extending the use of TPB into help-seeking. Berg et al. (2006) used logistic regression to explore a wide variety of help-seeking behaviors, including both professional medical and psychological services. Heffren and Hausdorf (2016) examined the effects of prior traumatic experiences on mental health help-seeking in LEOs using multiple linear regression. Hyland et al. (2012), Karaffa and Tochkov (2013), and Berg et al. (2006) noted differences in LEO help-seeking by age, indicating more appropriate help-seeking behaviors among younger LEOs. However, none of these quantitative studies explored the reasoning for these findings, and none of these studies analyzed generational effects on mental health help-seeking in LEOs. This study addressed this gap by determining if there are statistically significant differences in mental health help-seeking behavioral intentions across three different generations of LEOs. It also analyzed which of the TPB constructs are most valued by each distinct generational-cohort.

Methodology

Population

This study's target population was certified LEOs employed within the U.S. born between 1944 and 1996. It is estimated that between 750,000 and 760,000 certified LEOs are currently employed in the U.S. However, an exact count and exact demographic data are unknown (Banks et al., 2016). The target population demographics are estimated at 88.2% males and 11.8% females (Federal Bureau of Investigation, 2011). The population is approximately 12% African-American, 12% Hispanic, 72% Caucasian, and 4% other. Officer age ranges from 18 years old to 75 years old (Morin et al., 2017).

Sampling and Sampling Procedures

Since the desired sample for this study is specific to certified LEOs, surveys were only sent from the participating police union to certified LEO members. Each participant was assigned a generational-cohort based on their birth year. Inclusionary criteria included certified LEOs within the United States, and participants with birth years between 1944 and 1996. This study's exclusionary criteria included non-certified members at the partner site, certified LEOs from outside the United States, and participants born before 1944 or after 1996. Once a generational-cohort was assigned, stratified sampling was used within each generational-cohort before analysis to ensure equal representation of each generational-cohort (Ruel, 2019).

Statistical power is the probability of a statistical test finding a statistically significant difference when such a difference actually exists, avoiding a Type II error (Cohen, 1992). The researcher predetermines the alpha value, and 0.05 or 0.01 are

commonly used (Rajaretnam, 2016). The alpha value refers to the probability that a statistical test will result in a Type I error, resulting in the incorrect rejection of a null hypothesis (Rajaretnam, 2016). The effect size refers to the strength of the relationship between two variables, indicating the practical impact of statistically significant differences found in a study (Lakens, 2013). To identify the appropriate sample size, this study's parameters included a statistical power of 0.80 to 0.95, an alpha of 0.05, and a medium effect size of 0.25. The required computations were completed using the G*Power program, and the target size for the sample population of this study was a minimum of 90 and a maximum of 144 participants (Faul et al., 2007; Lakens, 2013).

Procedures for Recruitment, Participation, and Data Collection

Participants were recruited through a statewide police union that agreed to assist in this research study. The union was approached via telephone and in-person to explain the research study's purpose and obtain permission to conduct the research. The assisting police union was asked to email a link to the study survey to all certified LEO members. Participation in the study was voluntary. The study's purpose and instructions on how to complete the survey were provided in the email.

This research's target population traditionally resists research efforts due to confidentiality concerns about sensitive topics like mental health treatment (Cockcroft, 2019; Gutschmidt & Vera, 2020; Violanti, 2020). For this reason, the Qualtrics, Inc. platform was selected for data collection, storage, and analysis. Qualtrics, Inc. holds multiple federal and international security standards to ensure confidentiality and anonymity for the participants who volunteered for this research study (Qualtrics, Inc.,

2021). The survey email also contained confidentiality and anonymity information on the security standards held by Qualtrics, Inc

Informed consent information was provided on the initial page of the survey before any data collection occurred. Participants clicked a choice box to denote their consent to participate in the study. The survey contained the TPB-based scenario scale, which is valid within the population (Hyland et al., 2012). The TPB-based scenario scale includes a short scenario and sixteen Likert-style questions consistent with the guidelines of Ajzen and Fishbein (2010). Participant gender, ethnicity, rank, years of service, and birth year were also collected. Participants were provided with my contact information at the end of the survey for any questions or comments. However, no follow-up or debriefing was requested of the participants by the researcher. The data collected in this research was primary data, gathered through the survey directly from participants. The data was stored on the Qualtrics, Inc. secured server until analyzed. Once the study was finalized, it was published through ProQuest. A copy of the study results were provided to the participating union to disseminate to members via email.

Instrumentation and Operationalization

This study gathered demographic data and used a modified TPB-based scenario scale from Hyland et al. (2012) (See Appendix B). There are no standardized questionnaires for the measurement of TPB constructs. Instead, questions for each construct are developed based on the specific behavior being explored. A specific definition of the behavior in question is required to achieve this alignment, using the TACT principle (Oluka et al., 2014). TACT is an acronym for action, target, context, and

time; the inclusion of these items is required for accurate predictions of actual behavior (Fishbein & Ajzen, 2010).

Demographics

The information gathered through the demographic questions was used to analyze and explore the relationship between the independent and dependent variables. These questions gathered self-reported information on participants' birth year, ethnicity, gender, rank, assignment type, and years of service. The operational definitions for these variables are listed below:

Birth year: The year in which the participant was born in.

Ethnicity: Defined as African-American, Hispanic, Caucasian, or other.

Gender: Defined as male or female.

Rank: The formal employment status of a participant within a LEAs' hierarchical structure.

Assignment type: The type of daily job, or unit within their LEA to which the participant is currently assigned (Patrol, investigative, other specialized unit).

Years of service: The number of years the participant has worked as a certified LEO.

TPB-based scenario scale

The TPB-based scenario scale (See Appendix A) was developed by Hyland et al. (2012) to assess the efficacy of TPB in predicting behavioral intentions of LEOs to engage in counseling. It is a self-report inventory, which was administered in an electronic format. The scale takes about 15 minutes to complete (Hyland et al., 2012).

Permission to use and modify the TPB-based scenario scale was obtained from the publisher prior to data collection. The TPB-based scenario scale consists of a fictitious scenario, followed by sixteen Likert-style questions.

The included scenario for the scale is fictitious (Hyland et al., 2012). It uses the elements of action, target, context, and time within the TPB guidelines for scale generation to accurately predict behavior from behavioral intentions (Fishbein & Ajzen, 2010). The scenario used within the scale describes an individual who responds to a child abuse investigation six weeks ago. The individual then begins to experience psychological and behavioral changes. The individual's friend suggests they seek out a medical opinion. The doctor suggests that the individual makes an appointment with a professional psychologist within the week. The individual's friend makes an appointment and urges the individual to see a psychologist. The participant is then asked to position themselves as the individual in the scenario and respond to the questions that follow. The TPB-based scenario scale uses an indirect measurement approach, asking the participant to place themselves into a third-party position to assess the dependent, interval level variables of this study [attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions]. Indirect measures provide insight to deeply held attitudes on stigmatizing topics, focusing on implicit attitudes and beliefs that a participant may not otherwise divulge (Blanton & Jaccard, 2006).

The pilot test for this scale consisted of 252 Irish LEOs. The study's participant demographics included 171 males and 88 females, ranging from 20 to 57 years old. Participants' ethnicity was not reported; however, years of service were reported, with

79.5% of participants reported two years or less of service. The service location was also reported and split almost evenly between rural and suburban, with only 16.6% reporting their work locations as urban. Finally, participants' residential status was reported, 43% were married, 26.6% resided with parents, 3.1% reported living with other family members, and 27% reported living alone (Hyland et al., 2012). Structural equation modeling (SEM) was used first to compare the model fit of the modified Armitage-Conner (2001) model and the original TPB model proposed by Ajzen (1991). The results indicated that the original model had a poorer model fit (RMSEA= 0.06, SRMR= 0.06, CFI= 0.89, TLI= 0.86). Confirmatory factor analysis (CFA) was completed to assess construct validity, finding a good fit between the same and theory (RMSEA= 0.07, SRMR= 0.07, CFI= 0.86, TLI= 0.83). CFA is a commonly used method to investigate construct validity and offers a level of statistical precision that can confirm sub-domains within a measure (Knekta et al., 2019). The convergent validity was tested using chi-squared ($x2= 270.68$, $df=134$, $p< 0.05$). Internal reliability was also assessed for each construct using Cronbach's alpha with values ranging from 0.69-0.88 (Hyland et al., 2012). There was no test-retest reliability data provided.

Operationalization of variables

Gender was coded 1 for male, 2 for female. Ethnicity will be coded 1 for African-American, 2 for Hispanic, 3 for Caucasian, 4 for other/multi-racial. Rank was coded 1 for operational staff (road patrol, or other non-supervisory specialty unit assignments), 2 for investigative units, 3 for middle management (sergeant, lieutenant), 4 for upper

management (captain, major, assistant chief/undersheriff, chief/sheriff). Years of service was not coded.

The attitudes subscale captures the participants' beliefs about the value of seeking mental health services. It consists of three items to measure attitudinal factors ($\alpha = 0.69$). The values are rated on a 7-point bipolar scale with differential endpoints and adjective pairs. Responses were coded and assigned corresponding integers one to seven for analysis. Higher scores indicated more positive attitudes toward mental health help-seeking (Hyland et al., 2012).

The subjective norms subscale captures the degree to which the participants believed other important persons in their life would want them to participate in counseling. It consists of four items to measure subjective norms ($\alpha = 0.88$). The values are rated on a 7-point bipolar scale with differential endpoints and adjective pairs. Responses were coded one to seven for analysis. Higher values indicated more perceived normative influences (Hyland et al., 2012).

The PBC construct is broken into two subscales, internal and external factors, measuring the participants' beliefs on their ability to seek mental health counseling if needed and barriers prohibiting them from seeking mental health counseling. Three items measure the internal factors ($\alpha = 0.79$), and three items measure the external factors ($\alpha = 0.61$). Higher scores indicated greater self-efficacy for the internal subscale and greater perceived control for the external scale. The internal subscale has a single unipolar question with values ranging from 1 to 7 and two questions rated on a 7-point bipolar scale with differential endpoints and adjective pairs. The external subscale has two

unipolar questions with values ranging from 1 to 7 and a single question rated on a 7-point bipolar scale with differential endpoints and adjective pairs (Hyland et al., 2012). All items in this subscale were coded one to seven for analysis.

The behavioral intentions subscale assessed the participants' intentions to engage in mental health counseling if needed. This subscale is measured by three items (α= 0.77). The values are rated on a 7-point bipolar scale with differential endpoints and adjective pairs. Responses were coded one to seven for analysis. Higher scores indicated stronger intentions to engage in mental health services (Hyland et al., 2012).

Data Analysis Plan

The data analysis plan for this study operationalized analysis of variance (ANOVA) to explore the effect of participants' generation [Baby Boomer generation, Generation X, and Millennial generation] across the dependent variables [attitudes, social norms, perceived behavioral controls, and behavioral intentions]. Data analysis occurred using the Qualtrics, Inc. software to avoid moving the collected data from their secure server and ensure confidentiality and anonymity. Descriptive statistics were analyzed to describe the sample's demographics (Hancock et al., 2019). Each research question was answered through a one-way ANOVA using the independent variable, generation with three levels [Baby Boomer generation, Generation X, and Millennial generation] and the corresponding dependent variable [attitudes, subjective norms, internal and external perceived behavioral control, and behavior intentions]. Hypotheses were accepted or rejected based on the between-subjects F-ratio statistics and statistical significance (p=

0.05) (Howell, 2011; Sheng, 2011). Cohen's d was used to determine effect size; the desired effect size was set at medium (d= 0.25) during the G*power analysis.

However, non-normality and unequal variances are a reality in psychology research due to its complexity. Furthermore, the effect of non-normality on power increases when sample sizes in groups are unequal but decreases as sample size increases. Similarly, with more than two groups the impact of unequal variances can lead to larger Type I error rates (Delacre et al., 2019). As the cell sizes could not be maintained and unequal variances were present based on available data collected in the study, Welch's F-test was used for hypothesis testing. In the presence of non-normality, Welch's F-test provides the smallest departure from a 5% Type I error rate. In the presence of unequal variances Welch's F-test is also more effective and accurate than the F-ratio statistic (Delacre et al., 2019). Post-Hoc testing was also completed for each research question.

Pre-analysis, data was screened to ensure the ANOVA assumptions were met. ANOVA assumptions include the following six assumptions; two or more categorical groups within the independent variable, interval/ratio level measurement for the dependent variable, no significant outliers, independence of observations and variance, approximately normal distribution, and homogeneity of variances (Salkind, 2010).

Level of measurement for variables

Through the research design, the independent variable [Generations] includes three nominal categories [Baby Boomer generation, Generation X, and the Millennial generation]. The dependent variables [attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions] are interval-level data gathered

from the TPB-based scenario scale. In social research, Likert scales are commonly used, and the data obtained is treated as interval-level. The chosen scale is a 7-point, Likert-style survey, mimicking a true scale to provide more precise results (Wu & Leung, 2017). This scale also uses composite scores across multiple questions within the survey, further strengthening the interval-level classification, making it suitable for ANOVA analyses (Joshi et al., 2015).

Outliers and missing data

Data was screened for outliers using box plots and standard deviation analyses (Aguinis et al., 2013). Outliers are data falling +/-3 standard deviations from the mean (Osborne & Overbay, 2011). Outliers in data that result from errors were corrected if possible. All other outliers were reviewed on a case-by-case basis. However, unless there are extreme outliers, robust tests were used for interpretation. Common error outliers are errors in coding or input, data falling outside the range of possible values, and data gathered from a non-target population (Osborne & Overbay, 2011).

The data was also screened for missing values. If missing values were identified, a missing value analysis module was completed to test for randomization. Missing data with MCAR and MAR mechanisms are considered ignorable non-responses, and no action was taken (Yuan et al., 2012). In the case of MCAR and MAR mechanisms, ad hoc procedures still generate consistent parameter estimates with only minor impacts on estimates and standard errors (Cole, 2011). If missing data accounted for less than 5% of the data set, case-wise deletion was used (Cole, 2011). However, if the missing data accounted for more than 5% of the data set, Maximum Likelihood (ML) was used to

generate the missing values. This technique results in consistent, unbiased, and efficient replacement values (Cole, 2011). ML is also preferred in smaller sample sizes and non-normative sample distributions (Yuan et al., 2012).

Independence

Independence of observations assumes that the observed data from a sample is not influenced or related to each other. This assumption is typically addressed through randomization; this study was established through stratified random sampling (Sheng, 2011). Independence of variance was assessed using intraclass correlation (ICC) analysis. a cut-off of .8 was selected, and a statistically significant result indicates independence of variance (Koo & Li, 2016; Sheng, 2011).

Normal distribution

Normality was tested through the Shapiro-Wilk normality test. If the Shapiro-Wilk test is statistically significant, the Kruskal-Wallis test will be used for omnibus testing as it accounts for non-normal data.

Homogeneity of variances

Homogeneity of variance assumption was tested through the Levene test. If the Levene test was statistically significant, the Brown-Forsythe robust test of equality of means will be used for omnibus testing since it accounts for heterogeneous variances and distributions in data (Sheng, 2011).

Research Questions

RQ_1: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes?

H_{01}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes.

H_1: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes.

RQ_2: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms?

H_{02}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms.

H_2: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms.

RQ_3: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal?

H_{03}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal.

H_3: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal.

RQ_4: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external?

H_{04}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external.

H_4: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external.

RQ_5: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions?

H_{05}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions.

H_5: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions.

Threats to Validity

External Validity

External validity refers to the generalizability of research findings (Salkind, 2010). In this study, gender, ethnicity, rank, years of service, type of assignment, and birth year were collected, allowing for replication in other studies and similar populations. However, since participation in this study was voluntary, it was challenging to ensure that sample characteristics represent the target population, which may threaten external validity also (Edmonds & Kennedy, 2019). This study used the most common definitions for generational-cohorts, the Baby Boomer generation (1944-1964), Generation X (1965-1980), Millennial Generation (1981-1996) (Mannheim, 1952; Pew Research Center, 2021; U.S. Census Bureau, 2015). However, in current literature,

researchers define generational-cohorts differently (Edge, 2014; Fishman, 2016; Lyons et al., 2013), which may limit the generalizability or replicability of this study's findings.

External validity can also be impacted by the appropriate fit between the research design and methodology (Huitt et al., 2019). Using a one-way ANOVA to determine statistically significant differences between three or more categorical, independent, and interval-level dependent variables is appropriate (Salkind, 2010). In this study, the dependent variables were measured using Likert-style scales, which could threaten external validity. Joshi et al. (2015) stated that if multiple Likert-style items are combined to generate a composite score, the data can be operationalized as interval-level data. However, there is debate over the use of Likert-style scales as ordinal-level versus interval-level variables, and hence their suitability for use in statistical analyses can be challenged (Wu & Leung, 2017).

Finally, the use of vignettes in research can impact external reliability. A poorly written vignette that does not accurately reflect a real-world situation within the target population can lead to false responses and diminish generalizability (Evans et al., 2015). To address this issue, the vignette was modified with permission, to resemble a real-world situation more closely for U.S. LEOs. The vignette modification focused on replacing witnessing a crash, with responding to a child abuse call, since responding to child abuse calls are ranked as the most frequent occupational stressor among U.S. LEOs (Violanti et al., 2016).

Internal Validity

Internal validity is the extent to which you can confidently state that changes seen in the dependent variable are caused by manipulating the independent variable without other influencing factors (Salkind, 2010). One of the most significant internal validity threats is selection bias due to non-randomized designs (Flannelly et al., 2018). To address this concern, this study will employ stratified sampling within each generational-cohort. History may also impact this study's internal validity since repeated experiences with a measure can result in differential effects on the participant responses (Huitt et al., 1999). Since participants in this study are anonymous, there is no way to verify if they have prior experiences with TPB-based scales.

Another threat to internal validity is the study's use of generational-cohorts due to the inherent linear relationship between age, time-period, and cohorts (APC). Since no amount of mathematical manipulation can result in solutions for these confounding variables, it was not possible to separate the effects of age and generational-cohorts in the study's cross-sectional design (Bell & Jones, 2014; Rudolph et al., 2017). Additionally, there is no priori data on this topic that could be used to cross-temporal analysis. Therefore, this study functioned on the assumption that empirical evaluation is possible with reasonable reliability when two distinct models of APC constructs are compared, providing guidance on interpreting generational-cohort effects. However due to this assumption, no causal relationships could be established (Campbell et al., 2015; Mason et al., 1973).

A final threat to internal validity is testing. When measuring participant attitudes on stigmatizing subjects, like mental health help-seeking in LEOs, there is a concern for deceit (Flannelly et al., 2018). Confidentiality is crucial to obtaining accurate and unbiased responses on stigmatizing topics (Holbrook, 2011). Confidentiality refers to when a researcher uses methods to prevent others from accessing information that may identify participants and is standard practice (Kennedy, 2011). The highest security levels were employed via the Qualtrics, Inc. survey platform to address this concern. The security was also clearly explained to ensure participants of confidentiality, as evidence within established research finds that explaining and ensuring confidentiality will generate the most honest and accurate responses from participants (Simon & Goes, 2013).

Construct Validity

Construct validity examines the relationship between the selected instrument and the constructs and theory being explored. Evidence for construct validity is commonly based on an accumulation of studies using the operationalized scale (Kimberlin & Winterstein, 2008). However, factor analysis is also a common method of establishing construct validity, as validity is not a property of an instrument but rather its interpretation and use (Knekta et al., 2019). The TPB-based scenario scale operationalized in this study used CFA to confirm validity. Knekta (2019) stated that CFA is appropriate when a preexisting survey is used that has already established accumulated studies within a similar population. The TPB-based scenario scale has not

been operationalized on a broader scale or within distinct groups of LEOs, and there is no accumulation of studies using this scale to verify Hyland et al.'s (2012) findings.

However, TPB-based scales have been widely used in many social research areas and are found valid if the elements of action, target, context, and time are used, all of which are addressed in the chosen scale (Fishbein & Ajzen, 2010; Hyland et al., 2012). Additionally, The Cronbach's alpha values for the scale questions were provided for each measured construct; attitudes ($\alpha = 0.69$), subjective norms ($\alpha = 0.88$), perceived behavioral control ($\alpha = 0.76$), and behavior intentions ($\alpha = 0.77$) (Hyland et al., 2012). All the values fell within the normal range indicating congruency between defined behavior in the scale and the behavior under investigation (Fishbein & Ajzen, 2010) and indicating good internal reliability (Kimberlin & Winterstein, 2008).

Ethical Procedures

Social researchers have a duty to ensure consent and safety for all research participants and to ensure accurate findings are published and shared to further academic knowledge (American Psychological Association, 2016). Following these ethical requirements, approval was obtained from the Walden University IRB (07-19-21-0547181). This study used survey research, so the risk to participants was minimal. Furthermore, this survey's content addressed help-seeking and not distressing topics, such as terrorism, sexual and physical violence, intimate partner violence, traumatic injuries, or bereavement (Labott et al., 2013). The survey was designed to ensure confidentiality and anonymity, so undue influence on participants' responses was eliminated. No open-ended questions were used that could solicit identifying information. No information

unrelated to this study was requested. Additionally, this study's data is only reported in aggregate to further ensure confidentiality and anonymity (Turcotte-Tremblay & Mc Sween-Cadieux, 2018).

Before obtaining consent, all participants and partner agencies were informed in writing of the research purpose, benefits, and potential harms. My contact information was also provided to participants to address any questions or concerns regarding the study before obtaining consent. Participants had the option to discontinue the survey at any time. No incentives were provided for participation in this study. No participants were under 18 years old as the population for this study is certified LEOs; therefore, protected groups of individuals were eliminated.

All gathered data was securely stored and later analyzed within the Qualtrics, Inc. platform, which is encrypted, and password protected. Qualtrics, Inc. is one of the most secure survey tools available, holding the following security certifications; ISP 27001, FedRAMP, HITRUST (HIPAA), and SOC2 Type 2 (Qualtrics, Inc., 2021). Post-analysis, the data was stored for five years on a password-protected external hard drive in a secured location. After five years, data will be destroyed following ethical guidelines (American Psychological Association, 2016). The results of this study were published on Proquest, and copies of the research were provided to partner agencies to disseminate via email to all certified LEO members or employees. There are no other issues that may have posed conflicts for this study.

Summary

This chapter addressed the quantitative research design and rationale, the methodology, and the population and sampling process. The data collection, storage security process, and the data analysis plan for this study were also discussed. Ensuring confidentiality and anonymity within the LEO population is imperative for accurate responses since the population traditionally resists research efforts due to confidentiality concerns about sensitive topics like mental health treatment (Cockcroft, 2019; Gutschmidt & Vera, 2020; Violanti, 2020). The TPB-based scenario scale was described, and its use as an interval scale was justified for statistical analyses. Additionally, threats to validity and ethical procedures were discussed.

Chapter 4: Results

Introduction

This chapter presents the results of this study, stemming from the exploration of the effects of generational-cohort on mental health help-seeking behavioral intentions within the theoretical framework of TPB. Recent research has highlighted improved attitudes and behaviors toward mental health help-seeking in LEOs, but not an etiology for these findings (Burns & Buchanan, 2020; Jetelina et al., 2020; Karaffa & Tochov, 2013; Heffren & Hausdorf, 2016; Meyer, 2000; Soomro & Yanos, 2018). Generational turnover is one hypothesis as to why these cultural shifts are occurring in law enforcement (Campeau, 2019; Cockcroft, 2019; Duxbury et al., 2018; Farkas et al., 2020; Hu, 2010; Ingram et al., 2018). Generational turnover describes the phenomenon of significant demographic changes within an organization stemming from the transition of older generations retiring and newer generations taking on leadership roles that generate internal and cultural changes within the organization (Campeau, 2019; Edwards, 2007; Duxbury et al., 2018).

The nature of this study was a quantitative nonexperimental design using one-way analysis of variance (ANOVA) to determine if statistical differences existed between generational-cohorts in LEOs' mental health help-seeking attitudes across TPB constructs [attitudes, social norms, internal and external perceived behavioral control, and behavioral intentions]. Due to the cross-sectional design of this study and a lack of priori data on this topic, there was a concern for APC entanglement in the statistical model. Therefore, a linear regression model was also operationalized using year of birth as an

independent variable across the TPB constructs. The linear regression analysis was used to support analysis of the ANOVA model in accordance with Mason et al.'s (1973) theory, which argued that empirical evaluation of generational-cohorts can occur with reasonable reliability if the results across two distinct models of the APC constructs are compared. The research questions answered in this study were as follows:

RQ_1: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes?

RQ_2: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms?

RQ_3: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal?

RQ_4: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external?

RQ_5: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions?

Setting

The setting for this study was a statewide police union in Florida. Study participants were all certified LEOs who volunteered to complete the online survey provided by the police union via email. The police union and study participants were informed in writing of the research purpose, benefits, and potential harms before obtaining consent. Participants were also reminded that the survey was anonymous and

confidential and could discontinue the survey at any time. The time frame for the survey was ten weeks.

Data Collection

Participants

136 LEOs from a statewide police union in Florida responded to the study. Two of those responses did not consent and were removed from the data set prior to analysis. Seven respondents fell outside the age range and were also removed before analysis. Finally, 21 responses were unfinished except for demographic information. As they provided no scale data to analyze, these responses were also removed before analysis. Finally, three multivariate outliers were identified using Mahalanobis distance and were removed before data analysis.

The final sample (n=103) was made up of 80 (77.7%) males, and 23 (22.3%) females. The ethnic demographics of the sample included 2 (1.9%) African-American, 10 (9.7%) Hispanic, 92 (86.4%) Caucasian, and 2 (1.9%) other. The sample was highly representative of active LEOs, with 82 (79.6%) of the respondents versus 21 (20.4%) retired LEO respondents. While 50 (48.5%) were operational staff, 21 (20.4%) were investigative staff, 25 (24.3%) held middle management positions, and 7 (6.8%) held upper management positions (See Table 1).

Table 1

Sample Demographic Characteristics and Years of Service

Demographic	n (%) / M (SD)
Gender	
Male	80 (77.7%)

Female	23 (22.3%)
Generational-cohort	
Baby Boomer (1944-1964)	24 (23.3%)
Generation X (1965-1980)	35 (34%)
Millennials (1981-1996)	44 (42.7%)
Ethnicity	
African-American	2 (1.9%)
Hispanic	10 (9.7%)
Caucasian	92 (86.4%)
Other/Multi-racial	2 (1.9%)
Certification	
Active	82 (79.6%)
Retired	21 (20.4%)
Assignment	
Operational Staff	50 (48.5%)
Investigative Staff	21 (20.4%)
Middle Management	25 (24.3%)
Upper Management	7 (6.8%)
Years of Service	*M* = 17.57 (*SD* = 11.51)
Average Birth Year	*M= 1976 (SD= 13.79)*

**n = 103*

Data Analysis

The study operationalized the TPB-based scenario scale (See Appendix A). The TPB-based scenario scale uses a brief scenario, followed by sixteen Likert-style questions to measure TPB constructs [attitudes, subjective norms, internal and external PBC, and behavioral intentions]. All analysis was conducted using the Qualtrics, Inc. software. However, all visual representations were generated in SPSS v. 27 due to graphic limitations in the Qualtrics, Inc. software. Participants were asked to complete the TPB-based scenario scale, and data was then analyzed using a one-way ANOVA or Kruskal-

Wallis test. Due to the lack of priori data on this study's topic and the cross-sectional design, there was a concern for the inherent effects of APC entanglement on the ANOVA model. Therefore, a linear regression was also operationalized to assist with interpreting the results for all research questions in this study (Bell & Jones, 2014; Mason et al., 1973). Mason et al. (1973) argued that operationalizing two distinct statistical models with two different APC constructs provides reasonable reliability for empirical evaluation of data for generational research when they are compared. The linear regression model operationalized birth year as the independent variable and the TPB constructs [attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions] as dependent variables.

Results

Assumption Testing

Through the research design, the independent variable [Generations] includes three nominal categories [Baby Boomer generation, Generation X, and the Millennial generation]. The dependent variables [attitudes, subjective norms, internal and external perceived behavioral control, and behavioral intentions] are interval-level data gathered from the TPB-based scenario scale. Before analysis, data cleaning and screening showed no missing values (See Table 2) and no extreme outliers (See Figure 1 through Figure 5).

Table 2

Descriptive Statistics

	Att Scale	SN Scale	PBC Int. Scale	PBC Ext. Scale	BI Scale
Valid	103	103	103	103	103

Missing	0	0	0	0	0
Mean	4.40	5.55	5.22	5.07	5.06
Std. Deviation	1.05	1.06	1.04	1.08	1.36
Skewness	.17	-1.26	-.61	-.13	-.89
Std. Error of Skewness	.23	.23	.23	.23	.23
Kurtosis	-.40	1.68	-.01	-.80	.19
Std. Error of Kurtosis	.47	.47	.47	.47	.47

**n = 103*

Figure 1

Boxplot for Attitude Scale

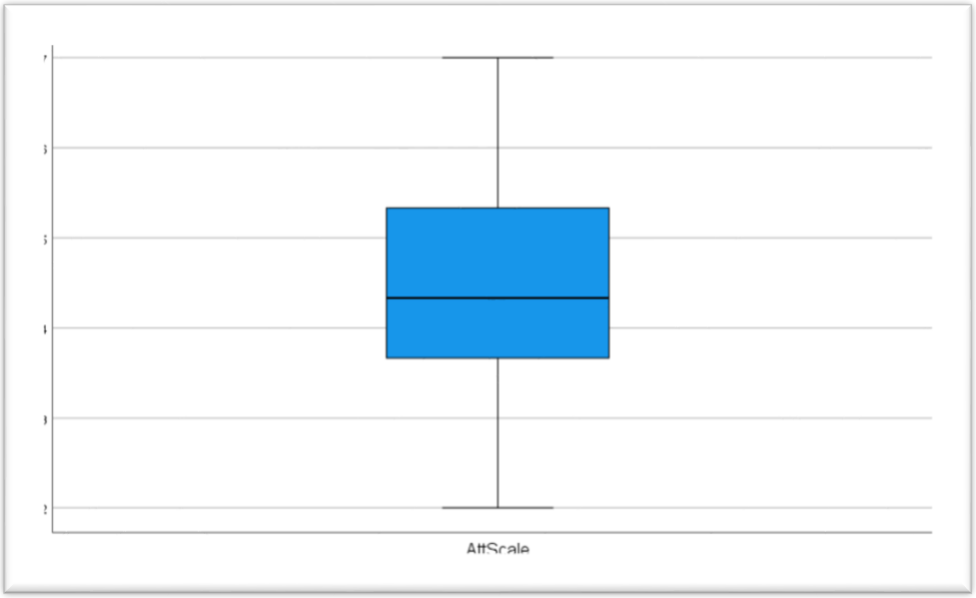


Figure 2

Boxplot for Subjective Norms Scale

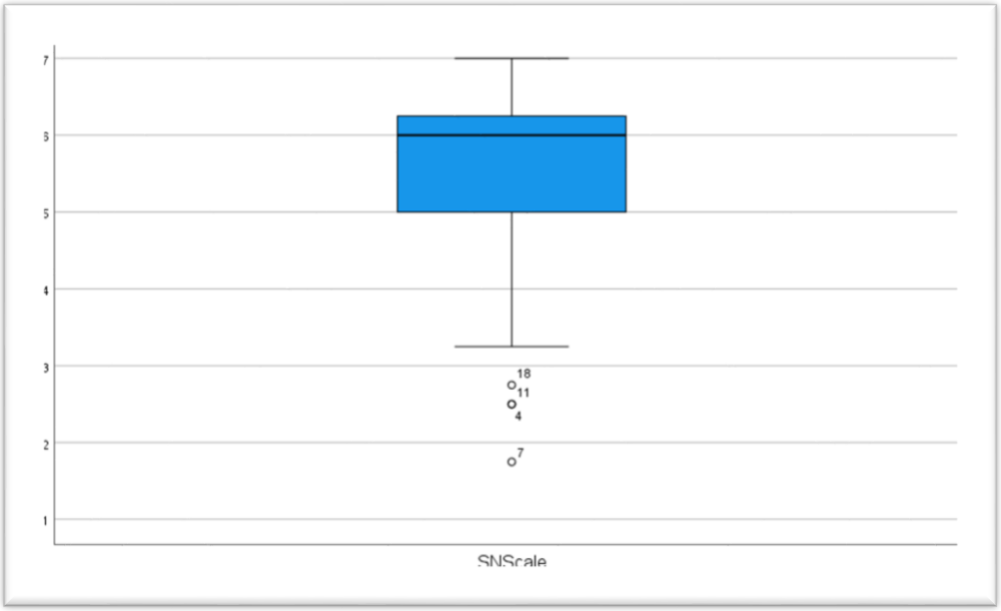


Figure 3

Boxplot for PBC Internal Scale

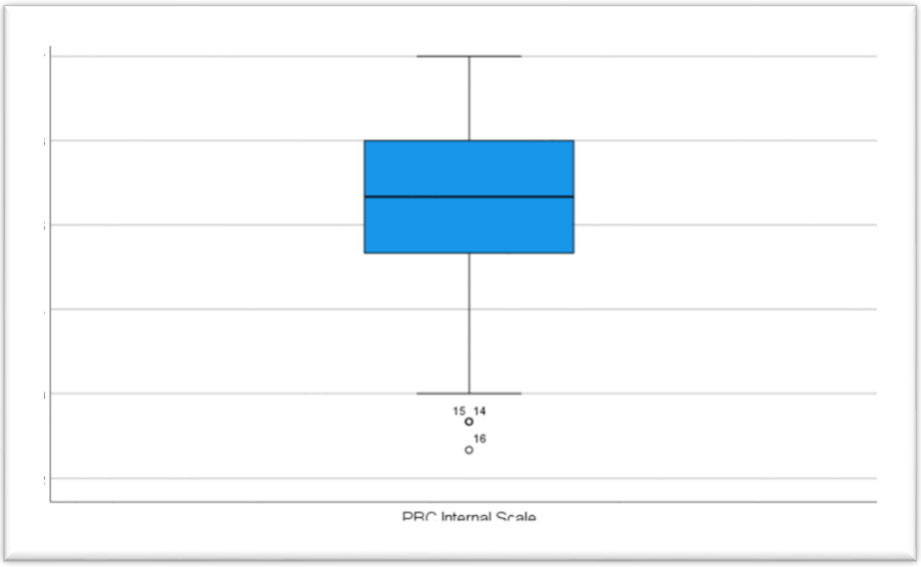


Figure 4

Boxplot for PBC External Scale

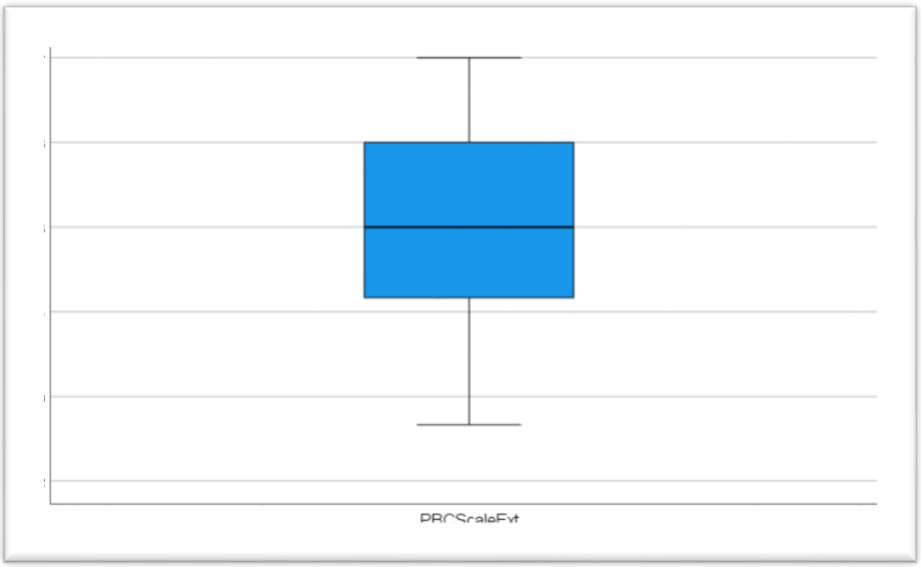
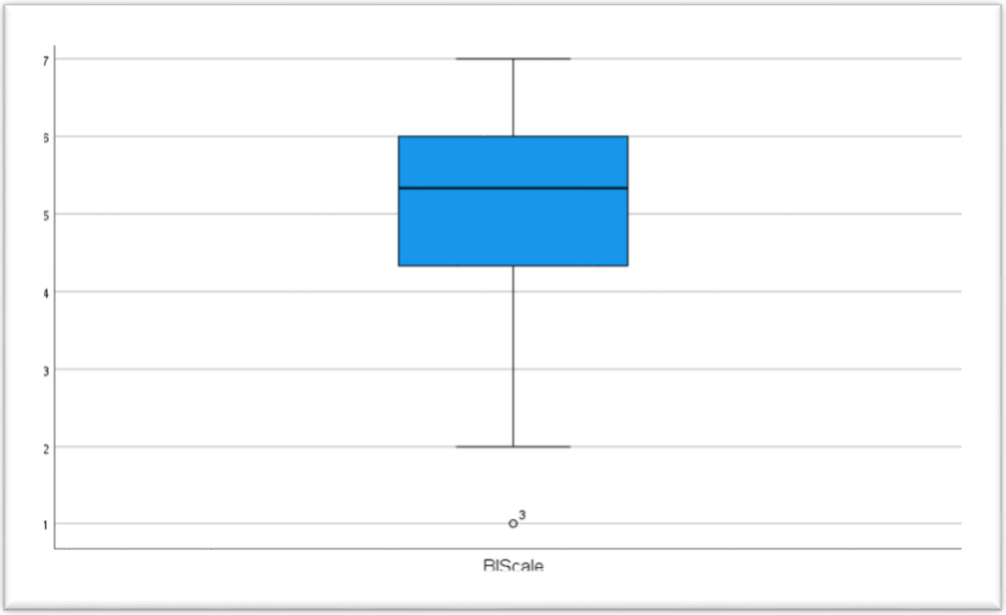


Figure 5

Boxplot for Behavioral Intentions Scale



Independence

Independence of variance was assessed using intraclass correlation (ICC) analysis with a cutoff value of .8 and a statistically significant result which indicated independence of variance (See Table 3).

Table 3

Intraclass Correlation Coefficient

	Single Measures	Average Measures
ICC	.44	.80
95% CI Lower Bound	.32	.71
95% CI Upper Bound	.55	.86
Sig.	.00*	.00*

**P<.01*

Homogeneity of variances

Homogeneity of variance assumption was tested through the Levene test. The Levene test was not statistically significant for all variables, and this assumption was met.

Normal distribution

Normality was tested through the Shapiro-Wilk normality test, and only the attitudes scale met this assumption (See Table 4). However, a review of the normality plots (See Figure 26 through Figure 10) and descriptive statistics show that only the subjective norms scale had a considerable departure from normality in the form of negative skew (See Table 2). Therefore, this assumption was met for all scales, except the subjective norms scale. Due to the lack of normal distribution in the subjective norms scale a non-parametric test was used for analysis.

Table 4

Shapiro-Wilk's Normality Test

Scale Name	Statistic	df	Sig.
Attitude Scale	.97	103	.08
Subjective Norms Scale	.89	103	.00*
PBC Internal Scale	.95	103	.00*
PBC External scale	.96	103	.01*
Behavioral Intentions Scale	.91	103	.00*

*$p<.05$

Figure 6

Normal Q-Q Plot of Attitude Scale

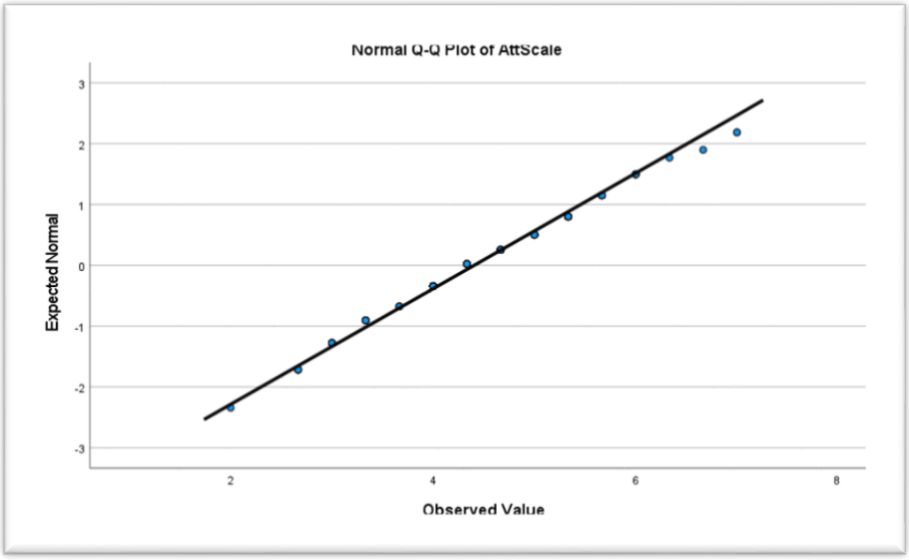


Figure 7

Normal Q-Q Plot of Subjective Norm Scale

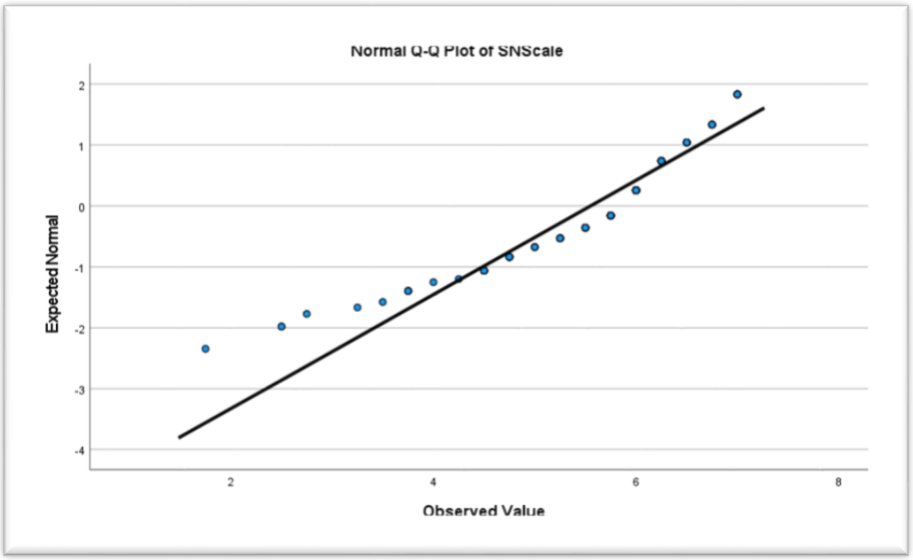


Figure 8

Normal Q-Q Plot of PBC Internal Scale

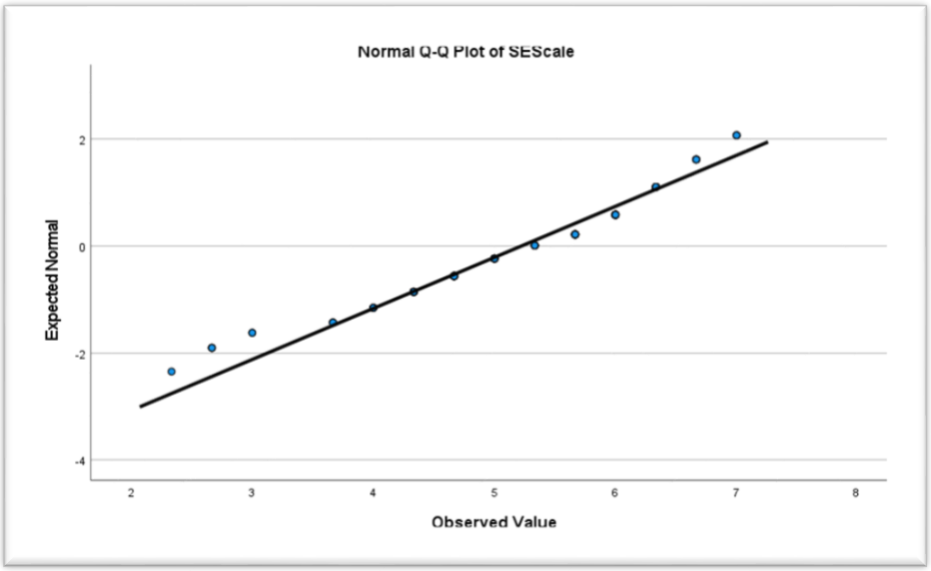


Figure 9

Normal Q-Q Plot of PBC External Scale

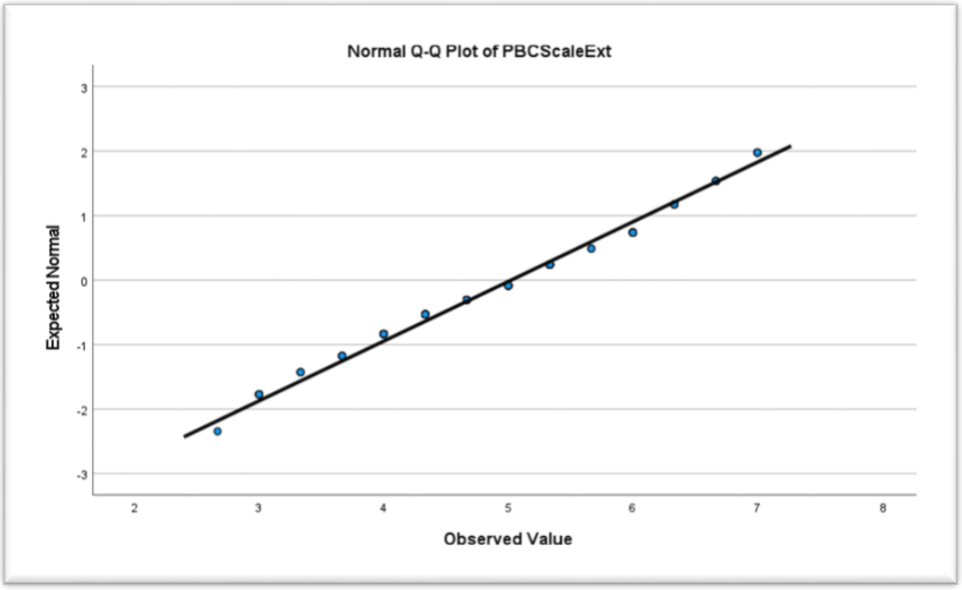
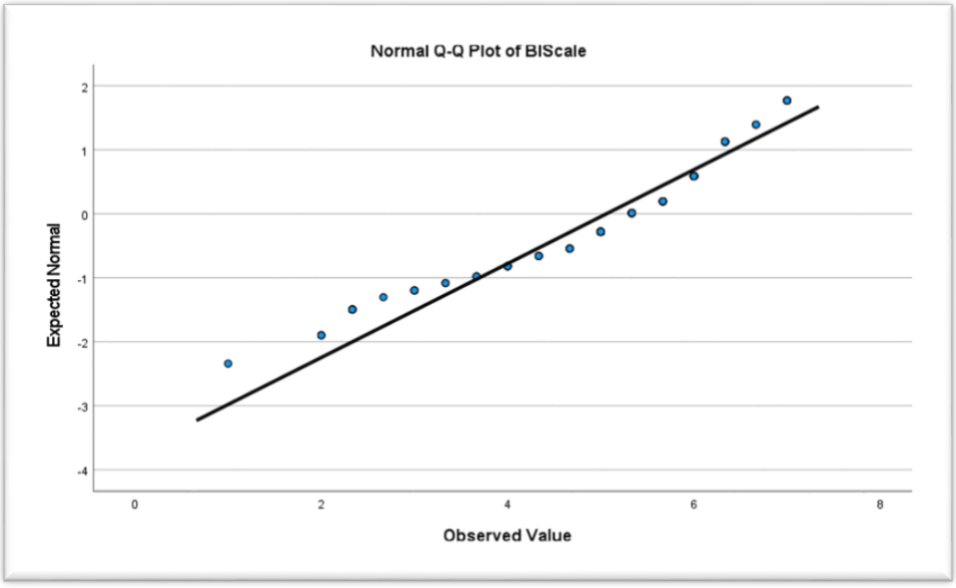


Figure 10

Normal Q-Q Plot of Behavioral Intentions Scale



Analysis methods for RQ1

RQ_1: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes?

H_{01}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes.

H_1: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their help-seeking attitudes.

The data in the help-seeking attitudes scale met all assumptions for ANOVA analysis. No univariate outliers were noted. There were no missing values for this variable.

I ran a one-way ANOVA to determine if police officers' generational-cohort had an effect on their help-seeking attitudes. The ANOVA results revealed that generational-cohort did not have a statistically significant effect on police officers' help-seeking attitudes, $F(2,100) = 1.64$, $p = .19$, $\eta^2 = .03$, $\beta = .34$. There were no differences between the groups based on these results, and the null hypothesis was accepted.

Analysis methods for RQ2

RQ_2: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms?

H_{02}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms.

H_2: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their subjective norms.

The data in the subjective norms scale met all assumptions for ANOVA analysis, except normal distribution. The data had negative skew (SK = -1.26), so the Kruskal-Wallis test was used for omnibus testing instead of ANOVA. Four univariate outliers were noted. However, none of them were extreme outliers, and after individual review of the data points, they all appeared to be valid. There were no missing values for this variable.

I ran an independent-samples Kruskal-Wallis test to determine if police officers' generational-cohort had an effect on their subjective norms scale scores. The Kruskal-Wallis results revealed that generational-cohort did not have a statistically significant effect on police officers' subjective norms scale scores, $H(2) = .52$, $p = .77$. There were no differences between the groups based on these results, and the null hypothesis was accepted.

However, nonparametric tests are more likely to generate a type II error (Gao, 2010), so a post hoc power analysis was conducted using G*power software, $d = .25$, $\alpha = .05$, $n = 103$ (Faul et al., 2007). The post hoc power analysis indicates that probability of making a type II error within this scale is .60. Therefore, there may actually be statistically significant differences between the generations, however the sample size in this study is not large enough to detect them with a nonparametric test.

Analysis methods for RQ3

RQ_3: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal?

H_{03}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal.

H_3: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (self-efficacy) internal.

The data in the PBC internal (self-efficacy) scale scores met all assumptions for ANOVA analysis. Three univariate outliers were noted. However, none of them were extreme outliers, and after individual review of the data points, they all appeared to be valid. There were no missing values for this variable.

I ran a one-way ANOVA to determine if police officers' generational-cohort had an effect on their perceived behavioral control internal scale scores. The ANOVA results revealed that generational-cohort did not have a statistically significant effect on police officers' PBC internal (self-efficacy) scale scores, $F(2,100) = 2.00$, $p = .14$, $\eta^2 = .04$, $\beta = .41$. There were no differences between the groups based on these results, and the null hypothesis was accepted.

Analysis methods for RQ4

RQ_4: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external?

H_{04}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external.

H_4: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their perceived behavioral control (barriers) external.

The data in the PBC external (barriers) scale scores met all assumptions for ANOVA analysis. No univariate outliers were noted. There were no missing values for this variable.

I ran a one-way ANOVA to determine if police officers' generational-cohort had an effect on their PBC external (barriers) scale scores. The ANOVA results revealed that generational-cohort did have a statistically significant effect on police officers' PBC external (barriers) scale scores, $F(2,100) = 2.92$, $p = .05$, $\eta^2 = .06$, $\beta = .56$. Based on these results, there were differences between the groups, and the null hypothesis was rejected. See Table 5 for ANOVA results.

Table 5

ANOVA Results

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.601	2.00	3.30	2.92	.05*
Within Groups	112.79	100.00	1.12		
Total	119.39	102.00			

*$p<.05$

Post-hoc testing showed that between groups there was a statistically significant difference between the mean value of the Baby Boomer generation and Generation X, $M = -.66$, $p = .05$, $\eta^2 = .05$ (See Table 6). There were no statistically significant differences

between the other generational-cohorts. The post hoc results illustrate that participants from the Baby Boomer generation felt significantly less external perceived behavioral control and experienced significantly more barriers to mental health help-seeking than their Generation X counterparts. Barriers to mental health help-seeking behavioral intentions refer to a reduced perception of available resources, or opportunities to seek mental health services.

Table 6

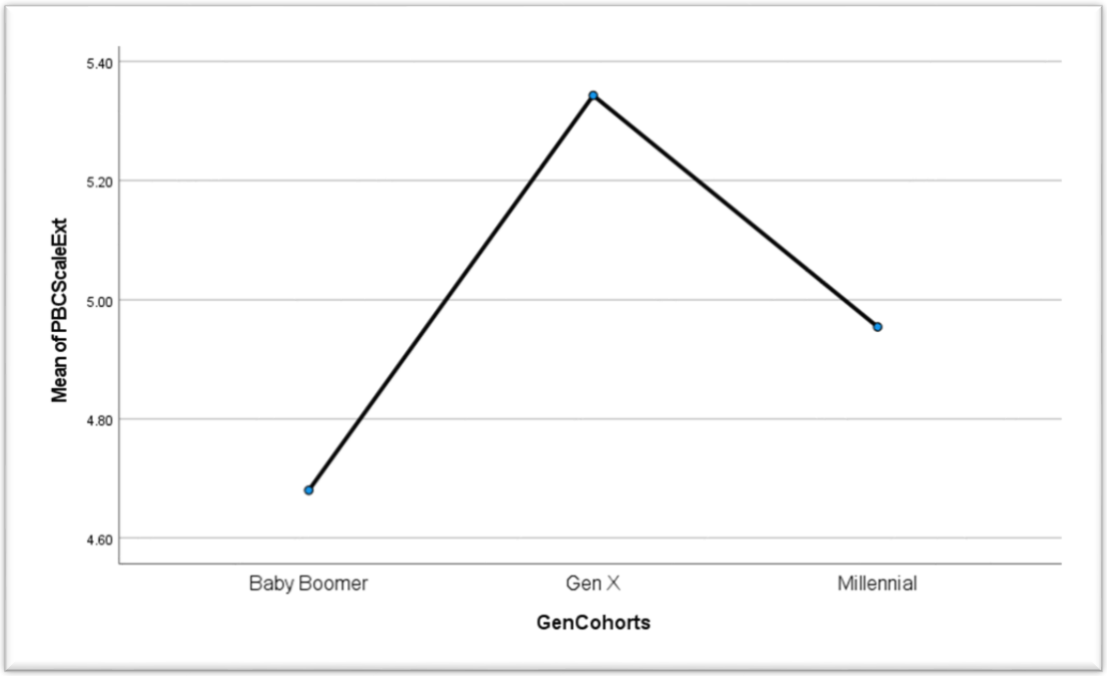
Post Hoc Testing Results

Generation (I)	Generation (II)	Mean Diff	Std. Error	Sig	CI Lower	CI Upper	Partial Eta Sq.
Baby Boomer	Generation X	-.66	.28	.05*	-1.34	.01	.05
	Millennial	-.27	.26	.66	-.92	.37	

*$p<.05$

Figure 11

Means plot for PBC external (barriers) scale



Analysis methods for RQ5

RQ_5: What is the effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions?

H_{05}: There is no effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions.

H_5: There is an effect of police officers' generational differences [Baby Boomer, Generation X, and Millennials] on their behavioral intentions.

The data in the behavioral intentions scale met all assumptions for ANOVA analysis. One univariate outlier was noted. However, it was not an extreme outlier, and

after an individual review of the data point, it appeared to be valid. There were no missing values for this variable.

I ran a one-way ANOVA to determine if police officers' generational-cohort had an effect on their perceived behavioral intentions scores. The ANOVA results revealed that generational-cohort did not have a statistically significant effect on police officers' behavioral intentions scores, $F(2,100) = .13$, $p = .87$, $\eta^2 = .01$, $\beta = .07$. There were no differences between the groups based on these results, and the null hypothesis was accepted.

Linear Regression

Mason et al. (1973) argued that operationalizing two distinct statistical models with two different age, time-period, or cohort (APC) constructs can provide reasonable reliability for empirical evaluations of data within generational research when no priori data exists. The distinct analyses provide guidance for interpreting generational effects against age or time-period effects but cannot establish causal relationships. Due to the cross-sectional design of this study and a lack of priori data, there was an inherent and confounding relationship between APC constructs within the data. Therefore, multiple regression was also completed to support the analysis of the ANOVA findings.

Year of birth was operationalized as the dependent variable, and the scale data for the TPB constructs were operationalized as the independent variables. The data met all assumptions before the ANOVA analyses. The data was also tested for the additional assumptions of linear regression (linearity and homoscedasticity). Linearity was confirmed using a scatterplot, and homoscedasticity was confirmed by plotting the

residuals (Wagner, 2017). There was a concern for multicollinearity due to the small sample size. However, the Variance Inflation Factor (VIF) values for all regressions were under 10, meeting the assumption (Salmeron et al., 2016). The findings indicated there were no statistically significant results for the overall model fit, $R^2 = .01$, $F(5, 97) = .31$, $p = .90$.

Summary

Chapter 4 described the setting, demographics, data collection, and analysis methods for this research study. The data collected was primary data from a statewide police union in Florida. The composite scores from the TPB-based scenario scale offered insight into LEO mental health help-seeking attitudes across three generational-cohorts. Theory of Planned Behavior (TPB) suggests that an individuals' attitudes, subjective norms, internal PBC, and external PBC combine to generate their behavioral intentions, which can be used to understand and predict actual behavior (Ajzen, 1991; Long & Maynard, 2014). The results indicated statistically significant differences between the generational-cohorts in the PBC external (barrier) scales. There were no differences between generational-cohorts in the attitudes scale, subjective norms scale, PBC internal (self-efficacy) scale or behavioral intentions scale. The multiple linear regression indicated no predictive relationship between year of birth and TPB constructs within this sample. In Chapter 5 of this study, the findings are summarized, conclusions are drawn, and recommendations are made. Additionally, Chapter 5 will provide an interpretation of the findings and the limitations and implications of the study.

Chapter 5: Discussion

Introduction

This chapter discusses the findings and recommendations of the study, along with the limitations and implications of the study. Recent research has highlighted findings of improved mental health help-seeking attitudes among LEOs. However, they have not identified the etiology of these trends (Burns & Buchanan, 2020; Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochov, 2013; Meyer, 2000; Soomro & Yanos, 2020). One hypothesis for these changes is generational turnover (Campeau, 2019; Cockcroft, 2019; Duxbury et al., 2018; Farkas et al., 2020; Hu, 2010; Ingram et al., 2018). Generational turnover refers to the phenomenon of changing population demographics over time due to older individuals phasing out and newer individuals establishing themselves in an organization (Campeau, 2019; Edwards, 2007; Duxbury et al., 2018).

The purpose of this quantitative study was to explore differences in mental health help-seeking behavioral intentions across three different generations of U.S. LEOs [Baby Boomer generation, Generation X, and the Millennial generation] within the theoretical framework of TPB. The data analysis showed statistically significant differences between generational-cohorts in the PBC external (barriers) scale. There were no statistically significant differences between generational-cohorts in the attitudes, subjective norms, PBC internal (self-efficacy), and behavioral intentions scales. Additionally, the multiple linear regression analysis indicated no predictive relationship between the dependent variables and participant year of birth.

Interpretation of Findings

As previous research has shown positive shifts in LEO mental health help-seeking attitudes and behaviors, there has been an emerging question about why these shifts were occurring (Burns & Buchanan, 2020; Jetelina et al., 2020; Karaffa & Tochov, 2013; Heffren & Hausdorf, 2016; Meyer, 2000; Soomro & Yanos, 2018). One hypothesis in the research for these trends was generational turnover (Campeau, 2019; Cockcroft, 2019; Duxbury et al., 2018; Farkas et al., 2020; Hu, 2010; Ingram et al., 2018). However, no studies were found that empirically addressed this hypothesis. The purpose of this research was to empirically address this gap in the research by exploring the effects of generational-cohorts on mental health help-seeking in LEOs. The key findings of this study are explored below.

Perceived behavioral control scales

In this study, only the PBC external (barriers) scale statistically affected participants' mental health help-seeking behavioral intention across generational-cohorts. This scale measured the participants' perceptions of available resources and opportunities in their external environments that impact their ability to seek out mental health treatment if it is needed (Hyland et al., 2012). The statistically significant results indicated that study participants were more concerned about the pragmatic aspects of seeking mental health treatment. Post hoc testing for the PBC external (barriers) scale found statistically significant mean differences between the Baby Boomer generation and Generation X.

Statistically significant findings within the PBC (barriers) external scale are not surprising, considering the consistent theme of structural barriers and stigma within the

literature for the LEO population (Bullock & Garland, 2018). Haugen et al. (2017) also found that one in eleven first responders will experience barriers to obtaining mental health care. Karaffa and Tochkov (2013) reported that LEOs in their sample were also more concerned about pragmatic issues in mental health help-seeking, such as financial costs, more convenient office hours, and greater accessibility to mental health professionals with cultural competency in LEO culture. Haugen et al. (2017) found that scheduling concerns and not knowing where to get help are the most frequently endorsed barriers by LEOs.

The Baby Boomer generation reported the lowest scores within this scale, indicating they experience the highest number of barriers to mental health help-seeking behavioral intentions. However, since the majority of the participants in the Baby Boomer generation were retired, their barriers may be less career-focused (i.e., confidentiality concerns, fear of negative career impacts). They may experience a greater lack of access to and knowledge of mental health service availability. It may also mean that they believe the mental health professionals available to them do not possess the specialized skills or knowledge of police culture to assist them accurately. Additionally, under the generational turnover hypothesis, steady increases in scores were expected from the oldest generation [Baby boomer] to the youngest generation [Millennial]. However, the PBC external (barriers) scale scores peaked within Generation X, followed by the Millennial generation and the Baby boomer generation, respectively. This unexpected trend was found across all the TPB scales, except in the subjective norms scale. These results indicate that both generational-cohorts and the socialization process

into police culture play a role in this sample's mental health help-seeking behavioral intentions.

The interplay of generational norms and socialization was identified and defined as cultural inertia by Campeau (2019). Cultural inertia refers to the push-pull relationship between established old-school ideas found in traditional police cultural research and the introduction of new ideas stemming from changing environmental, demographic, and social factors. These competing forces create a delicate social balance that generates small but notable changes to police culture (Campeau, 2019). The high scores within Generation X may be explained by the nature of their generation and its distinct norms. In research, Generation X has been defined as independent, self-reliant, and skeptical with an eagerness to learn (Edge, 2014; Taylor & Gao, 2014). Therefore, they may be less susceptible to police cultural norms and the socialization processes and more likely to challenge established old-school ideas while introducing new ideas, generating cultural inertia.

An alternative explanation of this trend could be that LEOs in Generation X are reflecting across their career experiences and noting the benefits of mental health help-seeking. Though years of service alone have not shown to be a predictor of mental health help-seeking in LEOs, experience across those years may be. Lane et al. (2021) reported that experienced LEOs were more open to help-seeking than those with less experience. Similarly, Vermette et al. (2005) found that more experienced officers placed a higher value on mental health training than their younger counterparts. Furthermore, Daniel and Treece (2021) noted that secondary trauma positively predicted mental health help-

seeking in LEOs. It may be that the increased experience and exposure to potentially traumatic events, secondary stress, and mental health training throughout their careers have led Generation X LEOs to place greater value on mental health services.

Conversely, based on Hyland et al. (2012), one factor that was expected to influence LEO mental health help-seeking behavioral intentions was PBC internal (self-efficacy). Hyland et al. (2012) found a strong positive influence of self-efficacy on Irish LEO mental health help-seeking behavioral intentions. Therefore the lack of statistical significance within the PBC internal (self-efficacy) scale within this sample was surprising. However, this could be explained by cultural differences between the American LEOs in this sample and the Irish LEOs used in Hyland et al. (2012). Current research has found that police culture is not monolithic and is distinct across various agencies, units, and even individual LEOs (Cordner, 2017; Crank, 2014; Gutschmidt & Vera, 2020; Ingram et al., 2016; Pauline & Gau, 2018). Ajzen (1991) also noted that the weight or value of each TPB construct varies across populations, so the lack of statistically significant findings in the PBC internal (self-efficacy) scale further supports the idea of cultural, but not generational distinctions between LEOs.

Attitudes

The attitudes scale in this study was not statistically significant, which supports the findings of Karaffa and Tochkov (2013). Their study found that officers' attitudes towards mental health help-seeking were neutral, not positive or negative. Within the Theory of Planned Behavior (TPB) neutral, or ambivalent attitudes stem from the presence of coexisting or even conflicting positive and negative reactions or beliefs about

a specific behavior (Fishbein & Ajzen, 2010). The lack of statistically significant findings in the attitudes scale across LEO generations indicates attitudinal ambivalence within this sample. Strongly held attitudes are a stronger predictor of behavior than weakly held attitudes. In contrast, ambivalent attitudes are more likely to change in response to time, persuasion, or education and are less likely to influence actual behavior (Armitage & Conner, 2001; Fishbein & Ajzen, 2010). Therefore, while strong positive attitude scores are obviously desirable, the presence of attitudinal ambivalence instead of statistically significant negative findings in the attitudes scale indicates that psychoeducational programs have the potential to positively impact LEO help-seeking attitudes across all generations. Future research should focus on the impacts of persuasion and education on LEO attitudes towards mental health help-seeking to better understand if or how they could be leveraged to encourage further positive shifts in help-seeking attitudes in the population.

Subjective norms

The subjective norms scale measured the participants' beliefs about important persons or groups within their social circle, approving or disapproving of their behavioral intentions to seeking mental health treatment when needed (Ajzen & Fishbein, 2005). The subjective norms scale was not statistically significant in this study, indicating that other factors outside of generational-cohort impact the subjective norms scores in this sample. Furthermore, the non-statistical significance in the subjective norms scale, coupled with the distinctively low scores across all the generational-cohorts in this scale, indicate that LEOs across generations experience significant pressure from subjective

norms. Any future interventions and programs aimed at increasing mental health help-seeking in the LEO population should address this concern regardless of generational membership.

Addressing subjective norms effectively within this population will require additional research. Established research has found that stigma negatively impacts mental health help-seeking attitudes and behavior in LEOs (Bullock & Garland, 2018; Burns & Buchanan, 2020; Haugen et al., 2017. Currently, researchers are testing interventions within the LEO population to determine the most effective methods for reducing stigma against mental health help-seeking in LEOs (Hansson & Markstrom, 2014; Watson & Andrews, 2017). Despite the established research noting the negative impacts of stigma on mental health help-seeking, Jetelina et al. (2020) and Karaffa and Koch (2016) found that over half the LEOs in their samples reported that they have used mental health services. The concept of pluralistic ignorance, which has received less focus in academic research, may fill this research gap between stigma and actual service utilization and needs to be further explored. Pluralistic ignorance is the difference between a participants' ratings of their own attitudes, behaviors, or opinions and their reported perceptions of others' attitudes, behaviors, and opinions on the same topic (Karaffa & Koch, 2016). The non-significance and markedly negative scores on the subjective norms scale in this study across all generational-cohorts supports the need for future research on this topic to understand the relationship between stigma, pluralistic ignorance, subjective norms, and mental health help-seeking attitudes and behaviors.

Behavioral Intentions

The behavioral intentions scale measured the participants' self-reported intentions to seek mental health assistance within the next week based on the scenario in the scale. The behavioral intentions scale was not statistically significant, indicating that generational-cohorts did not impact this samples' self-reported behavioral intentions. Alternatively, the lack of statistical significance may have resulted from the vignette used in this study. Research using vignettes may fail to show variation or results if the participants did not identify with the context of the vignette or if it did not accurately simulate real-world scenarios (Evans et al., 2015). However, as the vignette used in this study was also used successfully in Hyland et al. (2012) with Irish LEOs, this is unlikely. Similar to the PBC internal (self-efficacy) scale, it is possible that there are significant cultural differences between Irish and American LEOs that resulted in non-statistically significant findings from the use of this vignette. However, the PBC external (barriers) scale did show statistical significance with this vignette. It is more likely that some other factor besides generational-cohort influences self-reported behavioral intentions for LEOs in this sample.

Age, period, cohort entanglement

Due to the inherent age, period, and cohort entanglement present in cross-sectional generational research, a linear regression was also completed to support the interpretation of the ANOVA results in this study. The linear regression results were not statistically significant. The lack of any statistically significant predictive relationships between participant birth year and the TPB construct scales could indicate that age does

not contribute to the relationship between generational-cohorts and PBC construct scales in the ANOVA analysis. While a causal relationship cannot be inferred from this data, it supports generational-cohorts as a legitimate construct in psychological research, with groups having distinct traits separate from an individual's age. However, since a causal relationship cannot be inferred from the data in this study, there may also be other impacting factors like cultural inertia, the socialization process, or other unknown variables.

Limitations of the Study

There were several limitations in this study that could not be controlled for based on the design and nature of this study. One limitation of this study was the sample demographics. The sample population was similar to the target population in several ways. However, it did have two substantial deviations from the target population. The study sample did have significantly more female participants (21.7%) than the target population (11.8%) (Federal Bureau of Investigation, 2011), which may have resulted in higher, more positive scores across the TPB scales. Existing research on mental health help-seeking in the general population has found that females are less resistant to mental health help-seeking, with higher service utilization rates (Milner et al., 2020). However, Karaffa and Tochkov (2013) found no difference between genders in a U.S. LEO-specific study, indicating that older age and self-identification with police culture had a stronger relationship than gender with mental health help-seeking in LEOs. Therefore, the overrepresentation of female participants may or may not have impacted the results of this study.

Additionally, the African-American and other ethnicities were underrepresented in the sample (1.9%) compared to the target population, at 12% African-American and 4% other (Morin et al., 2017). Specifically, the findings in this study may present higher, more positive scores across the TPB scales than would be reported with a more balanced sample. Ethnic minorities in the general population are less likely to seek mental health services, have less favorable help-seeking attitudes, and perceive more stigma surrounding mental health treatment than Caucasian samples (Cheng et al., 2018; Taylor & Kuo, 2018). There is a paucity of research on the relationship between ethnicity and mental health within the LEO population. Still, one recent study on U.S. LEOs and mental health stigma found that non-white LEOs had more positive attitudes about seeking mental health services and reported less self-stigma towards mental health help-seeking (Soomro & Yanos, 2018). Therefore the limited diversity in the sample may or may not have impacted the results of this study. However, since this study was completed anonymously and voluntarily, I could not control for this study limitation.

A second limitation for this study focuses on the vignette used. This study explored the behavioral intentions of participants to seek mental health services and not the actual behavior of seeking mental health services. This is an important distinction given that vignettes can be considered projective, relieving pressure from participants to respond within the guidelines of social desirability or political correctness (Steiner et al., 2016). Additionally, hypothetical behavior may not translate to actual behavior in the real world (Evans et al., 2015). Moreover, participants in vignette-based research may not identify with the context of a vignette, and therefore data may not show variation and

lead to a failed study (Evans et al., 2015). While a well-written vignette can simulate real-world scenarios for the target population (Evans et al., 2015)., the participants were anonymous, so I could not confirm the efficacy of the vignette directly

A final limitation to this study included the cross-sectional design of this study. Generational-cohort research inherently includes the confounding constructs of age, time-period, and cohort (APC) effects (Bell & Jones, 2014; Rudolph et al., 2017). The APC constructs are linearly related, making it impossible to empirically identify a causal relationship in a cross-sectional design (Campbell et al., 2015; Mason et al., 1973; Parry & Urwin, 2017). No amount of mathematical manipulation can solve these confounding variables (Bell & Jones, 2014; Rudolph et al., 2017). It was not possible to separate the effects of APC in the study. Additionally, no priori data existed on this topic to use for cross-temporal analysis. Therefore, this study functioned on the assumption that empirical evaluation is possible with reasonable reliability when two distinct models of APC constructs are compared to provide guidance on interpreting generational-cohort effects. Due to this assumption, no causal relationships could be established from the data in this study (Campbell et al., 2015; Mason et al., 1973). However, time and financial restraints made such an approach to this topic impossible for this study.

Implications and Recommendations

The results of this study illustrate an overall positive shift in mental health help-seeking behavioral intentions of Florida LEOs across generations, which is similar to positive shifts noted in other studies in this population (Burns & Buchanan, 2020; Heffren & Hausdorf, 2016; Jetelina et al., 2020; Karaffa & Tochov, 2013; Meyer, 2000;

Soomro & Yanos, 2018). We must continue to support these positive changes to increase the mental well-being of LEOs. Chronic stress and decreased mental health in LEOs pose a risk to themselves, their families, and the public they serve (Gutshall et al., 2017; Hofer & Savell, 2021; Taylor, 2021; Violanti et al., 2017).

Overall, the generational trends across the TPB domains lend support to hypotheses from existing research on generational turnover and cultural inertia as key factors of these positive shifts. However, the cross-sectional design of this study does not allow for a causal relationship to be established, and longitudinal research on this topic is needed. Future studies should examine generational differences in LEOs with a larger and more diverse sample population, along with cross-temporal, or longitudinal research designs. Additional future research directions in this population that were brought to light by the results of this study also include pluralistic ignorance, cultural inertia, and the potential impacts of persuasion and education on LEO attitudes towards mental health help-seeking.

This study found that barriers (PBC external scale) held statistically significant differences across generations and were the most pressing concern for mental health help-seeking behavioral intentions in this sample of U.S. LEOs. This does not mean that the remaining TPB constructs are not concerns that need to be addressed when generating psychoeducation and intervention programs for this population. Instead, it means that when creating and implementing these programs, special attention should be given to different barriers impacting the Baby boomer generation versus Generation X and the Millennial generation.

The statistically significant finding within the PBC external (barriers) scale was not surprising given the large amount of research establishing the prevalence of barriers for mental health help-seeking in LEOs (Bullock & Garland, 2018; Haugen et al., 2017; Karaffa & Tochkov, 2013). Common barriers cited in the literature for LEOs include confidentiality concerns, fear of negative career impacts, lack of culturally competent professionals, minimal mental health knowledge, lack of knowledge of service availability, and unsupportive supervision (Bullock & Garland, 2018; Haugen et al., 2017; Richards et al., 2021). Scheduling concerns and not knowing where to get help are the most frequently endorsed barriers (Haugen et al., 2017; Hofer & Savell, 2021). A multi-pronged approach is recommended to address the wide range of barriers cited by LEOs.

Law enforcement

Increasing psychoeducation programs at law enforcement agencies (LEAs) would be a pertinent place to begin addressing this concern. Psychoeducation programs are a low-cost approach to increasing mental health knowledge and knowledge about service availability. Many LEOs are not familiar with the effects of chronic stress on their mental and physical functioning or how chronic stress can impact their work and their families (Drew & Martin, 2021). Psychoeducation would provide an opportunity to explain and normalize these symptoms while also offering resources and coping skills for officers. Psychoeducation programs can also provide information on legal conditions and limitations of confidentiality with a licensed mental health professional (Drew & Martin, 2021; Richards et al., 2021). Hofer and Savell (2021) reported that psychoeducation

programs and training might also encourage open discussions on mental health and wellness amongst officers while proactively illustrating a LEAs commitment to the mental health of their officers.

Moreover, Florida LEAs must coordinate and generate training for their LEOs. The Florida Department of Law Enforcement (FDLE) requires all sworn LEOs to complete a minimum of 40 hours of new training every four years and firearms training biannually to keep their certified status (Florida Department of Law Enforcement, 2021). As a result, LEAs already have established practices for instituting training. The already established structure for training would allow for more straightforward implementation of psychoeducation programs as a part of annual LEO training.

Another step LEAs can take to reduce barriers and show supervisory support of mental wellbeing is implementing prevention incentives (Hofer & Savell, 2021). Many agencies offer monetary or leave incentives for LEOs who attend regular physical checkups, maintain healthy eating and exercise habits, and generally work towards physical wellbeing. Major cities such as Los Angeles, Dallas, Las Vegas, and San Diego have health and wellness programs to encourage wellbeing in their LEOs (Copple et al., 2019). Alternatively, LEAs may also allow LEOs to attend physical checkups during work hours or even partner with insurance companies to provide clinics with extended hours (Hofer & Savell, 2021; Ramchand et al., 2019). LEAs should consider implementing similar programs for attending mental health training or therapy sessions. Prevention programs would encourage service utilization and help build rapport between officers and selected service providers who are culturally competent. They may also

increase LEOs knowledge of the mental health resources available to them and provide them with skills to increase resiliency and cope with stress (Hofer & Savell, 2021).

In this study, the majority of the Generation X and Millennial cohort participants were still actively employed at a LEA. In contrast, the participants from the Baby boomer generation were all retired. Therefore, negative career impacts are likely a more pressing concern for participants in Generation X and the Millennial generation. Negative career impacts are a key barrier to mental health help-seeking cited in research (Bullock & Garland, 2018; Haugen et al., 2017; Richards et al., 2021). To address this barrier for Generation X and Millennial cohort members, LEAs should have clearly written formal policies on mental health to reduce confusion and generate an inclusive and supportive environment for mental health throughout the agency (Richards et al., 2021; Taylor, 2021). Agency mental health policies should detail their responses to critical incidents or other emotional events that LEOs are likely to experience during their careers. The policies should also explain potential career implications, including circumstances for modified duty, how long modified duty may last, and the process for LEOs to be reinstated.

Additionally, situations for mandatory counseling should be explained, and the steps LEAs are taking to ensure confidentiality should be addressed. Finally, written policies should detail confidentiality rules for insurance and providers if officers choose to access care outside of agency resources; a list of both internal and external mental health resources should also be provided for LEOs in the policy (Hofer & Savell, 2021; Daniel & Treece, 2021). Leaders within a department should also attend training and

counseling sessions to educate themselves and speak openly about the importance of mental health in LEOs to promote mental health help-seeking in their agencies (Craddock & Telesco, 2021; Taylor, 2021).

Finally, some agencies utilize employee assistance programs (EAPs) and mandatory counseling sessions to decrease barriers to mental health help-seeking in officers (Daniel & Treece, 2021; Hofer & Savell, 2021; International Association of Chiefs of Police, 2016). EAPs act as an independent point of contact for employees to obtain referrals to services that can help employees with a wide variety of concerns, not just mental health services. However, there is a paucity of research in these domains within the LEO population. Little is known about EAP usage in LEOs or their efficacy within the population (Donnelly et al., 2015). Therefore, it is unknown if EAPs are suitable for the LEO population, and future research should investigate EAPs within this population (Daniel & Treece, 2021). Similarly, there is limited research in the domain of compulsory therapy in LEOs. Several studies reported LEO acceptance of mandatory therapy as a way to bypass cultural barriers to seeking mental health treatment (Hodges, 2019; Hofer & Savell, 2021; Schering, 2020; Taylor, 2021). However, more research on mandatory therapy for LEOs is needed to understand its impact on mental health help-seeking.

Conversely, as the Baby boomer cohort members in this study were retired, they may lack access to some of the LEA resources discussed above and be less concerned with career-focused barriers, but more focused on financial and knowledge barriers. In this case, police unions could be potential resource centers for retired members, providing

similar, but tailored resources for their retired members. Police unions should be encouraged to offer psychoeducation programs for retired members on the nature, purpose, and benefits of mental health services. They could also provide referrals for culturally competence therapists in their areas. Additionally, they could explore partnerships with insurance agencies and local therapists to provide free or reduced-cost mental health services for their retired members.

Currently, there are two main police unions in Florida, the Fraternal Order of Police (FOP) and the Police Benevolence Association (PBA). The FOP currently offers training courses on officer wellness in Florida via their network of local union chapters, along with access to LEO-specific crisis hotlines on their statewide website. Their statewide website also promotes an annual wellness summit, as well as the results of a nationwide wellness survey of LEOs, and a standardized guide for selecting wellness providers. Finally, they also have a national wellness committee of active and retired LEOs with a background in mental health or crisis intervention that focuses on research, legislative and policy development, and training. The members work with clinical police psychologists to further mental wellness in all LEOs (Fraternal Order of Police, 2022). The FOP appears to lack standardized psychoeducation programs tailored explicitly to retired members. Additionally, their statewide website does not provide any additional information on specific wellness initiatives the committee is supporting or reviewing, and it does not provide referrals for culturally competent providers. However, they offer points of contact for members to obtain additional information, which could include some of these recommended resources. Their website notes the development of a peer support

training program and a forum for wellness professionals outside of their wellness summit. The PBA provides no statewide mental health resources, referrals, training, peer support, or crisis hotline access. However, several local chapter websites did note free or low-cost mental health counseling services (Florida Police Benevolence Association, 2018).

A final resource that could help all generational cohorts overcome a wide variety of barriers includes peer support programs (PSP). Peer support programs use specifically trained colleagues to provide support to fellow LEOs. They are also trained to recognize and refer individuals to advanced mental health assistance when needed (International Association of Chiefs of Police, 2016). Police unions and LEAs could partner to implement and manage PSPs, reducing the cost and administrative burdens to LEAs and unions associated with the startup, training, and ongoing maintenance of PSPs. Daniel and Treece (2021) reported social engagement as a critical factor in influencing mental health help-seeking behaviors in LEOs, further supporting the idea of PSPs as an effective way to increase service utilization and knowledge for all LEO generational-cohorts. Currently, there is little research establishing the efficacy of peer support programs. However, recent studies have noted their success in reducing stigma and barriers in LEOs (Drew & Martin, 2021; Lucia & Holloran, 2020). Future research on PSPs is needed to understand their efficacy in reducing stigma and barriers or their role in increasing mental health service utilization in LEOs.

Mental health professionals

Within the mental health domain, professionals should be encouraged to seek out training and experience with this unique population to establish rapport with LEOs.

Established research has reported LEOs' concern for lack of professionals with the appropriate knowledge and specialization for treating them. This barrier is powerful given police cultural norms and the limited research on appropriate interventions and treatments (Christopher et al., 2018; Richards et al., 2021; Steinkopf et al., 2015). Kirschman et al. (2014) cited three key characteristics therapists will need to work successfully with LEOs due to their unique culture. These characteristics include transparency, cultural competency, and collaboration. She argues that mental health professionals must be open and honest with their LEO clients to establish rapport. Professionals should also take the time to clearly explain the limits of confidentiality to LEO clients since confidentiality concerns are a key barrier to help-seeking in the population (Bullock & Garland, 2018; Haugen et al., 2017; Kirschman et al., 2014; Richards et al., 2021). Cultural competency is essential in establishing rapport and treating LEOs due to the unique ways in which police culture influences LEOs.

Similarly, collaboration is also an important trait as LEOs need to feel ownership and control in their therapeutic plans for successful treatment to occur (Kirschman et al., 2014). Richards et al. (2021) supported this assessment and argued that mental health professionals should personalize interventions to LEO preferences and ensure LEOs play an active role in their treatment planning. In addition to these traits, Lucia and Holloran (2020) found that LEOs also sought professionals with specialized credentials, such as board certification in police psychology or trauma. To address these concerns mental health professionals should be encouraged to integrate with police culture through ride-a-longs and attending patrol briefs or roll calls (Ramchand et al., 2019). Mental health

professionals who desire to begin treating this specialized population should first begin by increasing their contact with the culture to create trust and familiarity between themselves and local LEOs. This can be achieved by participating in community policing activities, volunteering their time and services to department programs such as crisis intervention teams, attending a citizen's police academy, or even applying to become a reserve [part-time] LEO (Kirschman et al., 2014). Unfortunately, most of these recommendations stem from anecdotal evidence, personal experience in editorial works by licensed therapists in the field, and research studies focusing on identifying stigmas and barriers instead of studies focusing specifically on the preferred traits and characteristics of a therapist by LEOs. While there is some research on this topic directly, most of the research is from the 1980s and is sorely outdated. Future research on the specific traits and characteristics that LEOs prefer in therapists should be addressed.

Social Change

The findings in this study indicate overall improved mental health help-seeking behavioral intentions in LEOs. However, there are still barriers to overcome. The chronic stress and trauma that LEOs are exposed to over their careers lead to increased risk for physiological and psychological issues. Physiological risks include increased risk for heart disease, diabetes, sleep disorders, metabolic disorders, and suicide. Psychological risks include increased risk for PTSD, anxiety, depression, and substance use (Jetelina et al., 2020; Lane et al., 2021; Velazquez & Hernandez, 2019; Violanti et al., 2017). It may also lead to decreased cognitive abilities, judgment, and decision-making, impacting how LEOs interact with the public they serve (Conn, 2016; Hofer & Savell, 2021; Lucas et al.,

2012). High chronic stress and trauma exposure may also lead to increased errors and use of force by LEOs (Baker et al., 2020; Gutshall et al., 2017). Finally, chronic high stress and trauma can lead to higher rates of burnout, lower job satisfaction, and lost productivity in LEOs, costing taxpayers at least $4489 per officer annually (Fox et al., 2012; Hofer & Savell, 2021). Therefore, we must continue to support and encourage mental health help-seeking in LEOs to benefit themselves, their families, and public welfare.

Specifically, further research on the impact and design of psychoeducation programs, EAPs, and PSPs for LEOs is necessary. While more research into constructs related to mental health help-seeking in LEOs is also needed in areas such as stigma interventions, pluralistic ignorance, and cultural inertia. Additionally, LEAs should begin increasing access to mental health resources to combat perceived barriers to mental health help-seeking, such as locating quality providers specializing in treating LEOs. They should also increase the availability and visibility of peer support networks, referral services, and 24-hour crisis lines. LEAs can also improve awareness of employee assistance programs and union-based programs that offer free or low-cost services to LEOs. They should also consider creating incentive programs to encourage mental health service utilization to reduce barriers to help-seeking. Agencies may also introduce mental health training for their LEOs to generate familiarity with the help-seeking process and introduce LEOs to mental health professionals who are proficient in treating them.

Finally, mental health professionals who wish to work with this population may consider gaining additional experience or exposure within the culture (i.e., ride-a-longs,

attending daily briefings, assisting in mental health training programs). This approach exposes the professional to the police culture and allows the LEOs to generate firsthand experiences with the therapist that may reduce their perception of barriers (Kirschman et al., 2014). Specifically, the barrier noted by Richards et al. (2021) found that LEOs felt there were not enough mental health professionals with cultural competency to treat them effectively. Professionals who wish to work with this population may consider more flexible office hours. Due to shift work, many LEOs cannot attend counseling during traditional office hours, making the need for weekend or later business hours a necessity for specializing in this population (Hofer & Savell, 2021; Karaffa & Tochkov, 2013; Kirschman et al., 2014; Lucia & Holloway, 2019). Finally, quantitative and qualitative research on the traits and characteristics that LEOs desire in therapists is also needed to continue improving mental health help-seeking attitudes and behavioral intentions of LEOs. Improving mental health help-seeking and service utilization in this population is key to reducing the psychological risks that harm LEOs, their families, and the public.

Conclusions

Chapter 5 provided a detailed discussion of the study findings and the implications of those findings, along with the study's limitations. It also discussed recommendations for future research and recommendations for LEAs, police unions, and mental health professionals to address the key concern for the participants in this study. I expected a consistent and positive increase in mental health help-seeking scores regarding the generational turnover hypothesis, from the oldest generation [Baby boomer] to the youngest generation [Millennial]. Instead, the scores consistently peaked

in Generation X. Overall, this study did find a positive trend in mental health help-seeking behavioral intentions across generational-cohorts, though only the PBC external (barriers) scale was statistically significant. This study also highlighted the lack of a statistically significant predictive relationship between participant age and the TPB scales, indicating that generational-cohorts may play a role as a change agent within this sample. As this study was cross-sectional, additional longitudinal or cross-temporal research is needed within this population to make conclusions on a causal relationship between generational-cohorts and mental health help-seeking in LEOs.

However, there is also evidence to support further investigation into cultural inertia and the police socialization processes as moderators of change in police culture to understand their influence on LEO mental health help-seeking (Campeau, 2019; Cockcroft, 2019; Duxbury et al., 2018; Farkas et al., 2020; Hu, 2010; Ingram et al., 2018). Similarly, the influence of persuasion, education, and pluralistic ignorance also warrant further investigation in the LEO population regarding their impacts on mental health help-seeking (Armitage & Conner, 2001; Fishbein & Ajzen, 2010; Karaffa & Koch, 2016). Furthermore, a better understanding of LEO mental health help-seeking is needed within the populations' minorities since existing research uses ethnicity as an independent or control variable rather than using a phenomenological approach (Padilla, 2021). Finally, future studies should explore the efficacy of psychoeducation programs, peer support programs, employee assistance programs, and actual mental health help-seeking behaviors versus behavioral intentions within this population.

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Appendix A: TPB-based scenario scale

Please read the following scenario and answer the questions, which are based on the scenario:

Six weeks ago, while working a road patrol shift Terry responded to a call for service involving accusations of severe child abuse in his assigned area. Terry, having basic first aid training, attempted to aid the victim prior to the child being transported to a local hospital. In the six weeks since responding to this call, Terry has shown noticeable behavioral and personality changes. Terry has reported feeling no energy and extremely sad for most of each day. Terry has also been plagued by disturbing thoughts since witnessing the victim's injuries. Due to these disturbing thoughts Terry's sleep patterns have become erratic. Terry has become socially withdrawn, refusing to go out with friends and has lost interest in activities that were once a source of enjoyment. Two weeks ago, Terry suddenly began to feel extremely anxious when patrolling in his assigned area near this call for service and in the last week Terry has refused to leave the house at all, even in sick for work.

Terry's best friend, Chris, worried about the noticeable changes in Terry's behavior, sought the advice of a local medical doctor. The medical doctor advised Chris that Terry should go along to see a professional psychologist to receive counseling for these problems as soon as possible. Chris made an appointment with a professional psychologist on Terry's behalf for next week and has urged Terry to keep the appointment and go along to see the professional psychologist

Now please answer the following questions putting yourself in the position of Terry, so that to the best of your ability, you are answering these questions as if you were in Terry's situation:

1. How likely is it that you would intend to go along to see a professional psychologist for counseling within the next weeks if you were in Terry's position?

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

I**f you were in Terry's position, for you to go along to see a professional psychologist within the next week would make you feel**

2. **Good** extremely quite slightly neither slightly quite extremely **Bad**

3. **Valuable** extremely quite slightly neither slightly quite extremely **Worthless**

4. **Proud** extremely quite slightly neither slightly quite extremely **Ashamed**

5. Do you think you would have the ability to participate in counseling with a professional psychologist within the next week?

Definitely Do Have The Ability 1 2 3 4 5 6 7 **Definitely Do Not Have The Ability**

6. Do you feel that whether or not you participate in counseling with a professional psychologist within the next week is entirely up to you?

Agree extremely quite slightly neither slightly quite extremely **Disagree**

I would like to know how you think other people might expect you to act, if you were in Terry's position, with regard to participating in counseling with a professional psychologist within the next week. For example, would you say that?

7. It is likely that. Your closest friends think that you should participate in counseling with a professional psychologist within the next week

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

8. It is likely that your closest family members think that you should participate in counseling with a professional psychologist within the next week

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

9. It is likely that your partner (wife/husband, boyfriend/girlfriend) thinks you should participate in counseling with a professional psychologist within the next week

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

10. It is likely that most people you know would think that you should participate in counseling with a professional psychologist within the next week

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

And how likely is it that you would agree that if you were in Terry's position,

11. You will try to participate in counseling with a professional psychologist within the next week

Likely extremely quite slightly neither slightly quite extremely **Unlikely**

12. To what extent do you see yourself capable of participating in counseling with a professional psychologist within the next week

Capable extremely quite slightly neither slightly quite extremely **Incapable**

13. How much personal control do you feel you have to participate in counseling with a professional psychologist within the next week

Complete Control 1 2 3 4 5 6 7 **No Control**

14. Do you feel confident that you would be able to participate in counseling with a professional psychologist within the next week?

Agree extremely quite slightly neither slightly quite extremely **Disagree**

15. Do you feel that participating in counseling with a professional psychologist within the next week is beyond your control?

Not At All 1 2 3 4 5 6 7 **Very Much So**

16. You have decided to participate in counseling with a professional psychologist within the next week

Agree extremely quite slightly neither slightly quite extremely **Disagree**

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