## The Pursuit



"You are to appoint judges and officers for all your gates [in the cities] your G-d is giving you, tribe by tribe; and they are to judge the people with righteous judgment. You are not to distort justice or show favoritism, and you are not to accept a bribe, for a gift blinds the eyes of the wise and twists the words of even the upright. Justice, only justice, you must pursue; so that you will live and inherit the land your G-d is giving you."

**Deuteronomy 16:18 – 16:20** 



## About The Pursuit Journal

*The Pursuit*, a publication of the Criminal Justice Association of Georgia (CJAG) is a peer-reviewed journal that focuses on the broad field criminal justice. *The Pursuit* publishes scholarly articles relevant to crime, law enforcement, law, corrections, juvenile justice, comparative criminal justice systems and cross-cultural research. Articles in *The Pursuit* include theoretical and empirically-based analyses of practice and policy, utilizing a broad range of methodologies. Topics cross the spectrum of policing, criminal law and procedure, sentencing and corrections, ethics, juvenile justice and more, both in the United States and abroad.

Authors interested in submitting manuscripts for consideration should use the link on the CJAG website (http://cjag.us) or email the Editor of *The Pursuit* at cjagjournal@gmail.com

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### **About the Criminal Justice Association of Georgia**

The Criminal Justice Association of Georgia is a not-for-profit organization of criminal justice faculty, students and professionals. It exists to promote professionalism and academic advancement in all areas of inquiry related to the Criminal Justice field.

The Association holds its annual meeting in October. Those interested in presenting at the conference should contact Professor Lorna Alvarez-Rivera (llalvarezrivera@valdosta.edu).

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# Service-Learning Pedagogy as an Effective and Efficient Approach to 21<sup>st</sup>-Century Police Professional Development

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#### **Abstract**

Police officers are trained to de-escalate volatile situations, yet some officers still rely on use-offorce (UOF). Without enhanced techniques and additional tools for successfully navigating volatile
situations, officers often default to the extensive UOF training when called to respond to a crisis.

Service-learning pedagogy could be used in police orientation and professional development to
empower officers and increase positive engagement among police within communities. In this
study, exposure to service-learning pedagogy was shown to increase engagement among the police
officers interviewed. Kolb's experiential learning theory (ELT) served as the conceptual framework
for the study. A generic qualitative design was used to capture the insights of 8 purposefully
selected new officers who had participated in service-learning. Emergent thematic analysis revealed
new officers with prior service-learning experiences continued to engage in their community after
training. Recommendations for the implementation of a service-learning training curriculum to
provide more new officers the foundational skills for enriched community relationships.

#### Introduction

Despite major issues with use-of-force by police, the service-learning curriculum has not been incorporated into police officer professional development or police academy orientation programs. This study was conducted in a Southeastern local setting with the Metropolitan Police Department (SMPD, a pseudonym). The problem that I explored was the documented increase in the number of police-involved use-of-force (UOF) complaints filed against newly trained law enforcement officers over 3 years between 2015 and 2017. In 2015, the SMPD Office of Professional Standards Department's administrator reported 37 UOF complaints filed. In 2016, there were 40 complaints filed, and in 2017 there were 42 complaints filed, a 14% increase between 2015 and 2017, which averages to a 6.75% increase each year. At the local level, SMPD's problem was greater than the national controversial phenomenon over police UOF incidents. Between 2002 and 2011, UOF complaints increased to 4% or 4.8% a year on average on a national level (Hylan et al., 2015). In 2017, UOF has ranked the top critical issue in policing (U.S. Department of Justice, Community Relations Services, 2017).

When police officers are positively engaged with the community and situations they encounter, members of the community increase trust in the police. Public perception of police brutality has led to a national discussion regarding "defunding" the police due to a lack of trust around the use of force techniques. Goldsmith (2010) indicated police trustworthiness in a community, is supported through the reflective process. When new officers learn de-escalation techniques while in police academy training, service-learning could increase opportunities to increase their intercultural communication skills. Reasons to trust in fairness when interacting with the police evolve as prior issues are recognized, relationships are rebuilt, and confidence between police-citizen contact is improved (Goldsmith, 2010). Based on the results of this study, a potential

avenue for officers to learn about how to de-escalate situations is through service-learning could be considered.

#### Rationale

Service-learning has the potential to foster positive engagement skills and dispositions that may be useful as officers encounter people in crisis and respond to problem situations. Service-learning "is an educational approach that combines learning objectives with community service to provide a pragmatic, progressive learning experience while meeting societal needs" (Knapp & Fisher, 2010, p. 209). Service-learning has been recognized as having a positive impact on learners' approach to diversity (Keen & Hall, 2008). Empathy is important in its inhibitive function concerning aggression, which is a key factor in de-escalating situations (Carreras et al., 2014).

Because abilities such as critical thinking, problem-solving, and empathy may be learned through service-learning experiences (Freeman & Kobia, 2016; Wilson, 2011), police officers may develop more positive attributes through service-learning. Positive attributes of police officers include communication skills to build trust, empathy, compassion, and problem-solving (Roufa, 2018). Learning these positive attributes in police training might help officers de-escalate situations by engaging positively with people and situations they encounter.

Despite the potential of service-learning to develop positive engagement skills and dispositions (Freeman & Kobia, 2016; Hall & Keen, 2018; Wilson, 2011), according to the collegiate university board (2017), service-learning has not been adopted as a widespread teaching practice in criminal justice in the Southeastern local setting. Research has shown that only some officers have had access to training about de-escalating problem situations (Weaver, et al., 2013).

Officers without training may not be prepared to relate to people they encounter as they engage with communities in their practice (Schatmeier, 2013).

A lack of de-escalation training may contribute to an increase in UOF by new officers and subsequent filing of UOF complaints against newly trained police officers. The study was conducted to explore the connections between police officers' service-learning experiences and preparedness to de-escalate volatile situations. Community Oriented Policing Services (COPS Office, 2015) is a section within the federal Department of Justice (DOJ) that has recommended that law enforcement agencies implement training and education that includes community engagement. Community engagement is the heart of service-learning, which involves engaging in activities that help the community or human needs (Jacoby, 2014).

#### **Significance**

Service-learning and its potential impact on police officer training is underexplored. Police academy instructors and curriculum developers, communities, police departments, and the field of research in police training can all benefit as police training is reformed. Police academy instructors might be able to strengthen policing curriculum, student engagement, and assessment of learning skills for effectual policing and positive engagement in the community. Changes in policing curriculum can affect future officers' learning about positive engagement, perhaps better enabling new police officers to positively engage within their practice. Communities may then benefit from officers who are trained to positively engage with their communities as they protect them.

The assessment of service-learning is also important in the local setting because, in 2015, the SMPD mirrored the national setting to "adopt a guardian-like mindset to build trust through community policing programs" (COPS Office, p. 13). Applying service-learning could increase

police officer skills and help officers develop dispositions to respond positively to decrease UOF. The UOF has been identified as the top critical policing issue in the nation (COPS Office, 2015).

#### **Theoretical Framework**

Experiential learning theory was the conceptual framework that guided this study, and it outlines four stages through which learners are influenced by life experiences that translate into learning, which refers to a process where knowledge is created from experience (Kolb, 1984). The four stages flow from concrete experience (CE) to reflective observation (RO), then to abstract conceptualizing (AC), and end with active experimentation (AE; Kolb, 1984). These four stages comprise the experiential learning cycle (ELT), which Kolb and Kolb (1999) explained as the process by which information is gained by centering on experiences a person has in life.

Information from these experiences is then transformed based on the learners' interpretation of them and is acted upon. Learning occurs through the learning process of experiencing (CE), reflecting (RO), thinking (AC), and acting (AE). Figure 1 illustrates Kolb's experiential learning cycle. Each of Kolb's four stages of experiential learning is discussed in detail in the following sections.

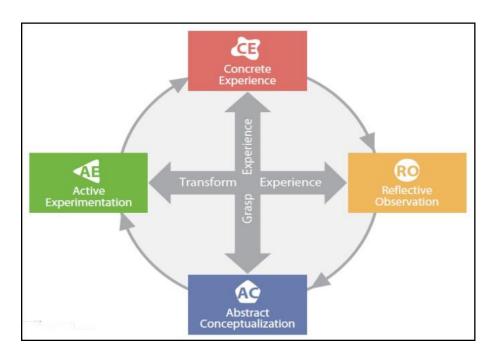


Figure 1. Kolb's experiential learning cycle.

#### **Concrete Experience (CE)**

CE is an activity or series of events in which an individual actively engages that makes up the experience (Kolb, 1984). Kolb's CE stage was applied to the present study by asking new police officers if they had a service-learning experience within a criminal justice college-level course. If they had an experience, they were asked to describe it. Adding additional closed-ended survey questions allowed an easier and quicker understanding so respondents to answer with no ambiguity, which makes responses easily documented (Mason, 2010).

#### **Reflective Observation (RO)**

With RO individuals learn through thought and contemplation of their experiences.

Reflection is an ongoing process that occurs throughout the experience and beyond (Kolb, 1984).

The RO stage was applied in this study by allowing the participants to explore what they may remember about any service-learning activities they may have experienced. While reflecting, the

new officer considered and gave thought to any successes or failures within the service-learning activity. Some individuals may be able to remember events quicker than others, but the process of remembering the experience and moving forward toward the next phase is what is most important.

#### **Abstract Conceptualization (AC)**

The ability of learners to create a concept that integrates their observation of the experience into a logical model is AC (Kolb, 1984). The AC stage is when learners make sense of the experience, comparing what they did to what they already know (Kolb, et al., 2014). Learners make sense of the experience by drawing from previous experiences, speaking to others in the learning space, and researching and exploring the topic further. AC is the stage in which learners own their knowledge. With AC, the new police officer would review the current experience and compare it to some form of past feeling or behavior. The officer would tend to rely primarily on the feelings instead of a systematic approach to the problems which they encounter and consider an open-minded approach to resolving any issues that may derive from their knowledge.

#### **Active Experimentation (AE)**

The last phase described by Kolb is AE, which is the ability of the learner to utilize their new knowledge to make decisions and solve problems in future situations (Kolb et al., 2014). The AE stage happens when the learners decide in what situation or context their new learning (knowledge or skill) can be applied. Kolb explained that during the AE stage learners take their new knowledge and translate it into what actions need to be taken or what revisions need to be made. In AE, the new officer would recognize the feelings considered and formulate a practical approach to resolving the issue. The formulation of practical approaches involves an objective view that is profitable for the officer and the public's safety and best practices.

#### **Literature Review**

Articles from the past 10 years (2011 – 2021) are included in this literature review. The researchers sought to include an examination of police recruitment and police officer preparedness as this study tends to seek to understand and utilize service-learning techniques in the police training curriculum. The literature review contains a primarily qualitative analysis with a brief quantitative meta-analysis on service-learning as a success in educational settings. While the literature search was organic, it resulted in the primary focus of student outcomes and service-learning benefits.

#### **Effective Policing Requires New Skill Development**

In 2015 President Obama's Task Force on 21<sup>st</sup> Century Policing recommended best practices for effective policing. Taskforce recommendations included police officers improve their trust-building skills and become fairer and more impartial in their policing (COPS Office, 2015). Education and training were recommended to improve the skills and dispositions of police officers. Current recruitment efforts target police officer recruits who would be adept at effective policing—persons who have the intellect, discernment, maturity, previous work experience, and who are physically and psychologically fit (Inankul, 2016). However, stringent recruitment efforts may have made it difficult to recruit police officers to fill growing and unmet needs in the policing profession (Peak & Sousa, 2018).

In response to vacancies and President Obama's Task Force recommendations, agencies started recruiting persons who reflected the cultures and attitudes of the communities that the recruits would serve as officers. Departments included more recruiting in local community organizations such as churches and service organizations, places where persons who reflected

community cultures could be found (Schlosser et al., 2015). Thus, the philosophy of police departments could change to improve community trust, reduce bias and racism in policing (Schlosser et al., 2015).

#### **Police Preparedness and Practice**

Candidates have and are still entering from various paths in life into the policing profession. Candidates may come with additional experiences and that may become vital to the learning process within the police academy training. According to the Bureau of Justice Statistics (Hyland et al., 2018), the basic training model of an entry-level academy training program was primarily stress-based training. Stress-based training programs are designed to train on a continuum with primarily physical and psychological demands. Academy training consisted of mock scenario training for recruits to sharpen critical thinking skills.

Hostility toward police officers was an issue when the police profession was standardized and remains an issue as UOF and profiling as top problems facing policing. Police academies have responded moving from the traditional para-military training to a more collegiate, guardian-like, problem- and community-based training, a foundation for the addition of service-learning experiences being studied in police preparedness. Because of the guardian-like and more collegiate pedagogy forward-thinking in the policing profession; the following section presents a critical review of the positive impact of service-learning.

#### Service-Learning in College Coursework

Service-learning in college courses has the potential to motivate students consistently (Straus & Eckenrode, 2014). Several current authors have explored service-learning and its positive impacts in college courses, including one meta-analysis. Sedden and Clark (2016) conducted a

meta-analysis of the literature to examine students' motivation in the classroom concerning teaching strategies implemented. The authors found that students' classroom engagement—connection, interaction, guiding, and reminding—impact students' motivation to learn. Service-learning experiences contain all of these elements. Sedden and Clark (2016) recommended educators be conscious of how instructional design affects students in the classroom and beyond.

Everhart (2016) initiated a teaching tool that involved self-assessment and reflective writing with 12 undergraduate students who participated in service-learning during an undergraduate college course. Everhart reported that self-assessment and reflective writing in response to students' service-learning experiences both challenged and enhanced empathy development and created an emotional experience for students (Everhart, 2016). Findings from Everhart's research suggested that individual service experiences impacted "cognitive development, personal growth, and civic engagement" (pg. 129). From another academic perspective on service-learning, author Jamplis (2015) conducted qualitative research that identified service-learning processes as transformative in terms of leadership traits, qualities, and competencies; skills that would assist students during their careers and in future social settings. Improving learning, empathy, and leadership are attributes that are valued beyond the college experience. The literature on the impact of service-learning post-college is limited, but current literature is presented next.

#### **Impact of Service-Learning Post-College**

Kessinger (2015) traced how any form of service-learning promotes citizenship among participants and benefits society. Kessinger starts with John Dewey's philosophy of service-learning and traces how service-learning has been implemented not only in educational institutions but also in other settings over the past 25 years. Hall and Keen (2018) studied post-college outcomes of persons who participated in service-learning. Program participants (n = 689) entered

their service-learning experiences with a focus on selfish, individual motivations; and ended their service-learning experience with a focus on social justice advocacy. The yearlong post-college service-learning experience studied by Hall and Keen transformed participants from being focused on self to be focused on serving others. Serving others is at the heart of police practice. With police academies in the midst of adapting police training from being paramilitary to more guardian-like, the time is ripe to understand if service-learning experiences impact policing practice.

#### Service-learning and Adult or Professional Education

Literature about the impact of service-learning and adult or professional education is scant. Experiential learning is the term used synonymously with service-learning in adult education forums. Past and shared experiences are critical and valuable to life experiences most generally (Kuk & Holst, 2018). Yet, research about the impact of experiential learning post- college among adults and their careers is lacking (Dhital et al., 2015). Molly et al. (2015) proposed four reasons to implement service-learning: (a) to link academic learning outcomes to meaning through service; (b) to enhance student engagement through experiential education; (c) to improve social and personal development; and (d) to strengthen communities. Strengthening and serving communities is one facet of policing. Police preparation might benefit from incorporating service-learning into college or academy training. This study was to examine if and how service experiences in college impact new police as adult practitioners.

Professionals interviewed 3-16 years after college reported positive outcomes, attitudes, experiences, and behaviors from their reflections about their service-learning experiences in college (Fullerton et al., 2015). Fullerton et al.'s (2015) findings are consistent with Gredley's (2015) opinion, that service-learning in higher education offers an opportunity for students to examine empathy, power, knowledge, and skills. Gredley (2015) reported good outcomes of his teaching by

framing student reflections about their service-learning within theories postulated by Dewey (1938), Freire (1965), and Mezirow (1997). The potential for service-learning in and post-college is established. The impact of service-learning in college among new police officers has not yet been established and is the topic of this study.

#### **Research Design and Approach**

A qualitative basic design using interviews was used in this study to explore the experiences, applications, and reflections of service-learning in college among new police officers. Basic qualitative designs employing open-ended interviews help gather data that does not constrain participants' conversations about their experiences (Merriam & Tisdell, 2016). The researcher was able to explore participants' depth of experiences, how experiences are applied, and their reflective learning. A basic qualitative interview design yielded insight into service-learning post-college to stakeholders, provided a foundation for future studies, and offered insight into the way police officers are prepared in training academies. Among stakeholders is the SMPD, the setting of this study.

#### **Population and Sample**

The population for this study included all new police officers in a metropolitan police department in the southeastern United States. To represent other police departments, all new police in the SMPD were selected because SMPD's UOF complaint problem over the last 3 years is greater than the national average over the 11 years ending in 2011. Interviews with new officers who joined the SMPD within the years of 2013–2017 were requested for their insight about new officers' perceptions of service-learning in college courses. A comprehensive sample of a total of 359 new police who joined the SMPD between 2015 and 2017 comprised the sampling frame.

#### **Data Collection**

Data collected focused on the overarching research question by identifying new police officers who have had a college-level service-learning experience. Interviews were the main source of data collection to examine the participants' opinions, beliefs, and viewpoints about their service-learning experiences while in college. The purpose of the data analysis was to thoroughly explore eight participant responses to each of four interview questions and discern how responses inform the one overarching research question of the study. Data were transcribed from the audio recordings. Transcripts were read multiple times and manually coded for categories. Categories were combined as patterns emerged. Tables were created to present findings. Four tables corresponding to interview questions and Kolb's experiential model. Any themes which emerged were also presented.

#### **Participants**

Eight new police officers were interviewed. As Table 2 illustrates, participant demographics interviewed consisted of six males and two females: four Black, one Hispanic and, one White male; and one Black and one Hispanic female. No White females were interviewed. To note the demographics have underrepresented males, Caucasians, and Asians, compared to the population of SMPD officers based on public records not cited to maintain the anonymity of the department.

Table 1

Demographics of Participants Compared to Population

			Difference between population SMPD
Attribute	SMPD (%)	Sample (%)	and sample (%)
Male	82	75	- 7
Female	18	25	+ 7
African	58	63	+ 5
American/Black			
European	13	37	- 24
American/White			
Hispanic/Latina	25 +	21	+4
Asian	0	1	-1

*Note*. SMPD = Southeast Metropolitan Police Department

#### **Findings**

This section provided evidence of how service-learning might enhance new police officer training and practice. It confirmed the researcher's experiences with service-learning and examines the teaching-learning process involved in critical reflection. New police who had service-learning revealed responsiveness, empathy, and compassion. Police officers valued all the tools gained in the police training academy as a means to connect with the community in an essence of global citizenship.

#### **Interview Question 1: Concrete Experiences**

The first interview question asked participants to identify their service-learning experience, the CE of Kolb's learning cycle. Most participants identified several service-learning experiences for this question. To delimit the conversation, participants were asked to focus on the one service-learning experience which was most meaningful during their college experiences. Each participant articulated their experience vividly and with rich descriptions. Categories that emerged about new police service-learning experiences are listed below in Table 3. Categories included who benefitted from the service, the volunteer service role of the new officers, and the organization served.

As can be noted in Table 3, five of eight (62.5%) of new police interviewed served at-risk youth or young adults, two of eight (25%) served in impoverished countries, one of eight (12.5%) served families in need.

 Table 2

 Interview Question 1: What was Your Service-Learning Experience

Participant	Beneficiary	Volunteer role	Local organization
1	Impoverished country	General	National Habitat for Humanity
2	Young adult male sports team	Managing	College basketball team
3	At-risk youth	Mentoring	National Fraternal Neighborhood Boys and Girls Club
4	Co-ed youth basketball team	Coaching	Church
5	Impoverished country	Tutoring	Regional academy college
6	Families in need	General	Churches
7	At-risk youth school	Tutoring	Law office
8	Elementary students	General	Elementary school

The new police service time as a volunteer included general volunteering (n = 3 or 37.5%), mentoring/coaching (n = 2 or 25.0%), being a teacher/trainer (n = 2 or 25.0%) and managing (n = 1 or 12.5%) roles. New police who had a service-learning experience served youth and young adults in five roles: as a coach, manager, mentor, tutor, and general volunteer. All organizations served were local and closely connected with the community (n= 5 or 62.5%); three represented local chapters of the national organization (n = 3 or 37.5%) or regional organization (1 or 12.5%). In summary, the new police primarily serve local youth and community organizations in various service-learning roles in which the beneficiaries were children, young adults, and families in need of a service.

#### **Interview Question 2: Reflective Observations**

Three categories were coded in response to interview question 2, what did that service-learning experience mean to you? The question was asked to get a sense of the learner's reflection on a personal basis which is Kolb's second phase of the ELT. Table 4 below presents categories of responses to interview question two about what the service-learning experience meant to participants. For example, Roger's (an alias) service-learning experience was in an impoverished country, and in reflection he stated, "...I did not know what poverty could look like on a global scale when there is not readily accessible to education, health, or a decent livelihood long term and to see if any solutions might be in sight." Paty (an alias) recalls times working in the community when she saw people who appeared too prideful to ask for a handout. Paty stated, "in any given situation we could all be just a paycheck or a mistake away. Hopefully, you will do the same thing when you see someone else who may be struggling."

Participants' reflections revealed they're making individual personal and professional meaning from their service-learning experiences. As can be noted by patterns of words participants used to express personal meaning-making, words related to wisdom and encouragement emerged. Professionally, participants gained individual meaning in various ways. No patterns emerged from professional meaning-making among new police officers' service-learning reflections.

In summary, all participants reflected on their experiences by becoming more self-aware and identified the actual service experience as meaningful. All participants expressed a rewarding experience and we're grateful to have been afforded the experience. Participants valued the structure and collaboration of the service-learning programs and university—organization partnerships which exposed them to the service-learning opportunity.

Table 3

Interview Question 2: What did that Service-Learning Experience Mean to You?

Participant	Reflection	Personal meaning	Professional meaning
1	Development of community	Exposed to abject poverty	Connected to community
2	Managing people	Learned to team build	Sensitized to workload
3	Giving back	Uplifted manhood & discipline	Developed networking opportunities
4	Managing youth	Realized strengths as a mentor	Support youth
5	Tutor children	Became self-aware	Instilled self-esteem
6	Giving back	A strengthened propensity for charity to help less fortunate	Cultivated diversity
7	Tutor children	Engaged by helping younger people	Socialized students
8	Read to youth	Felt needed	Showed appreciation

#### **Interview Question 3: Abstract Conceptualization**

Participants revealed how they grasped their learning when they explained how they apply their service-learning experiences in response to interview question 3, *how have you applied the service-learning experiences*? Abstract conceptualization is the third part of Kolb's ELT, the "ah-ha" moment of learning and immediate application of that learning: the new knowledge gained and added to the knowledge already known. Table 5 presented the grasping concept voiced by participants and the way they have applied their service-learning experience.

 Table 4

 Interview Question 3: How Have you Applied the Service-Learning Experiences?

Participant	Application of service-learning	Grasping concept
	experience	
1	Is more aware of community needs	Realized positive influence
2	Considers value to time in all actions	Structured management of time
3	Educates young men about staying	Presented give-back programs
	straight	
4	Coaches young men	Counseled and advised others
5	Recognizes cultural diversity on the beat	Connected with youth
6	Develops "confidential sources" (i.e.,	Worked with less fortunate
	street people who help police)	
7	Educates youth on law	Realized the value of law
8	Encourages young people to be positive	Related to others

As can be noted, new police participants grasped various concepts individually; but all applications aligned with the new knowledge they gained from their service-learning experiences. Participants were able to easily identify what they learned and how they applied their learning during interviews. Participants intuitively knew and easily identified the benefits of service-learning. For example, Tim and Sam (aliases) each think about service to others in their work every day. Tim described his work schedule in detail from the time of the calls, getting to the location, and investigating the scene down to the minutes. Tim stated, "...my game plan has to be on point because people have stuff to do and places to go. They cannot be waiting on me." Sam felt the need to help at-risk youth in the neighborhood because a police officer helped him. Sam stated, "...with all this negativity out here. You got to be the difference-maker at some point. Why not make it early? I found my 'why' and that is why I'm here'".

#### **Interview Question 4: Active Experimentation**

Based on Kolb's cycle, active experimentation deals with how new knowledge is applied and tested to make decisions and solve problems: the transformation from one way of thinking and being to another. New officers were asked, *how have you made sense of the service-learning experience*? While closely akin to AC, AE is the transformation that has taken place as a result of an experience. In this case, a service-learning experience.

Three categories emerged from responses to this question: the mode of experimentation with their new knowledge, the related purpose of their experimentation, and the transformation participants voiced. Table 6 presents these categories and individual responses.

Table 5

Interview Question 4: How Have you Made Sense of the Service-Learning Experience?

Participant	Mode of experimenting with service-learning	Related purpose	AE transformation
1	Community policing	Helping people	Joined PD to help others through community
2	Awareness of persons waiting	Prioritizing	Conscious of time in response to policing action
3	Provision of guidance	Learning	Continuously seeks ways to guide at-risk youth
4	In-the-moment mentoring	Inspiring	Motivates at-risk youth
5	Self-confidence building through teaching	Stimulating	Models confidence in youth language acquisition
6	Serving others	Gift-giving	Pay it forward in every circumstance
7	Self-recognition of valuable knowledge	Training	Teach others about self- regulation concerning law
8	Encouraging others	Motivating	Inspiring others

*Note.* AE = Active Experimentation (Kolb's Experiential Learning Cycle)

To illustrate, Carl (an alias) experimented with in-the-moment mentoring on the beat. Carl recalls educating youth by saying to them: "the main goal was how not to behave on the court but

off the court in high-intensity environments, so you don't get into trouble." Inspired by the way he felt and the responses he witnessed; he continues to motivate at-risk youth by mentoring at-risk youth at the moment whenever he has a chance. In sum, new police officers interviewed were transformed by their service-learning experiences. A common theme among transformation from the new officer service-learning focuses on others. All of them continue to serve in roles to voluntarily serve to impact both the present and the future of individuals and communities.

#### **Summary of Findings**

New police officers readily reflected on their service-learning experiences and identified influences that were all positive. The five themes derived from analyses were (a) new police officers focus on volunteering for youth and community organizations; (b) altruism and enjoyment results from their experiences; (c) new police officers connect with and grasp the ideals of service; (c) new police officers are grateful for their transformative experiences and (e) new police officers continue to serve in capacities to which they were introduced during their college-based service-learning experiences.

#### **Implications of Findings**

Findings have revealed if and how the new police officers have applied their knowledge of service-learning immediately upon graduation of police officer training and within the field.

Findings may encourage instructors and subject-matter experts with additional opportunities for teaching. The implication in this study suggested may provide policing agencies, academy instructors, and new officers' concepts to explore possibilities of college criminal justice courses of service-learning experiences, reflections, and applications in a setting where comprehensive learning and long-term retention of the subject matter may be further infused into the learning.

#### **Application of Findings**

Service-learning activities are opportunities that create avenues for promoting social change (Kahne & Westheimer, 2004; Lewis, 2011; Marullo & Edwards, 2000; Mitchell, 2007). Embedding service-learning into field training of new officers could have several implications for social change for police reform advocates, current police officers, police academy instructors, communities, the police profession, and professional training communities in and out of the academy. Efforts to reform police training may benefit from understanding how service-learning may positively influence UOF in policing. Advocates of police reform could use the project as a model for enhancing intercultural communication skills for new officers. Embedded service-learning in field training has the potential to transform police training from being focused on defense-type tactics to being focused on community, the emphasis in the 21st century policing.

Police officers might benefit from transformational learning which service-learning experiences yield. Transformational learning is a "theory of adult learning in which the process of changing perspectives can be understood, experiential education's focus on challenge and experiences, followed by a reflection that is leading to learning and growth" (Association for Experiential Education, n.d. p. 156). Police academy instructors might be able to complement the existing policing curriculum, enhance police academy student engagement, and develop an assessment of intercultural communication skills for more effective policing. Adding service-learning in policing curriculum would affect future officers' learning about positive engagement, perhaps better enabling all police to positively engage within their practice communities.

Communities may benefit from having more intercultural communication skilled officers that are trained to respond positively and engaged within their communities. The interaction

between police and the community profoundly influences the public's perception of the police (Nagin & Telep, 2017).

Improving policing practices are critically important to promoting trust and should be the central priority of any policing agency (COPS Office, 2015; Friedman, 2017; Trinkner & Tyler, 2016). If so, communities may benefit from officers who are trained to positively engage as they work with communities to ensure safety.

As a result, the police profession may be influenced by a change in reputation from one which uses too much force to one reputed and publicized for its compassion, empathy, and positive response to volatile situations. With service-learning as a valued component within police training, other professions may adopt service experiences. Professional training which occurs both in and out of academia may benefit from exposing learners to service-learning.

Service-learning practices are present in the academy but have not been widely implemented post-college in professional practice training. Additionally, no research has linked service-learning with police officer training or practices. This project may contribute to practice and build positive social change by adding a curriculum plan that could be easily implemented and expose new police officers to service-learning practices. Service-learning holds promise for reforming community policing to meet 21<sup>st</sup> century expectations.

Policing has always been a reactive position so, naturally, the impact may serve as a proactive skill for police to de-escalate situations. Nationally, embedding service-learning programs could influence police executives, policymakers, and education administrators to provide more funding and resources to service-learning within police training to enhance interprofessional communication skills. Service-learning has proven to be a benefit to education and through

demonstration of the proposed curriculum plan within SMPD, service-learning may serve the greater good by promotion within policing.

This study demonstrated how service-learning impacted UOF in new police officer work within an urban police department. The study is not generalizable beyond the training program I explored. The service-learning applications might be useful in other police departments. All participants stated they benefitted from their service-learning experiences and continue to use methodologies from their experiences. If service-learning has increased the skills of the few participants featured in this study, then the use of service-learning applications embedded throughout the police department could socially enhance community engagement. Having service-learning as a sustainable training program among new police may decrease UOF incidents, bring police-citizen contacts to a more positive connection within the community.

#### **Limitations and Conclusions**

Police officers work directly with people in crisis, and each officer should feel empowered and equipped with as many tools as possible when interacting with a diverse population of citizens. Three directions for future research recommendations include implementation in a smaller police department (a) conducting a police department climate survey, (b) implementing service-learning curriculum in the academy and as professional development of current officers; and (c) conduct a post-intervention survey six months after the intervention to evaluate the results. Expanding service-learning in academy police training and expanding to other types of communities, say rural and suburban to see if the effect is evident outside of an urban setting. Second, service-learning has been shown to work effectively in education and nursing professional training.

However, an evaluation of service-learning in other public service entities such as among first-responder personnel sciences may provide empirical data to determine links between service-learning and emergency personnel. Last, cast the study from a quantitative perspective by comparing and contrast those who know about service-learning benefits and barriers.

Service-learning opportunities for all current police officers could enhance intercultural communication skills to positively managing volatile situations within their professional community. The recommendation for service-learning practices to become procedurally a part of field training and also be a professional development option. Future studies of how service-learning affects positive policing could then be conducted to enhance educational opportunities for officers. This study revealed that service-learning practices are a viable addition to any field training curriculum, and service-learning can be informative and rewarding within a police department. Continued research to investigate service-learning, its impact in other jurisdictions, and among other first-responder personnel is a wide-open field. The hope is the implications of this research and applications of the curriculum plan provide a more strategic tool that will produce meaningful and enriching engagement between police and communities.

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# **Student Perceptions of Guns on Campus**

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# **Abstract**

The legal presence of guns on college campuses, made possible by various campus conceal and carry laws throughout the nation, continues to be a hotly contested issue. The current study advances the knowledge of student perceptions of concealed carry on campus by examining support for concealed carry by academic major, specifically, comparing criminal justice and non-criminal justice majors. While respondents (surveyed from two major universities, one in South Carolina and one in Texas) indicated some support for faculty and staff carrying guns, findings reveal that support for guns on campus overall is weak at best. Importantly, most respondents favored some level of specialized required training if campus carry laws are to remain in place.

#### Introduction

It is generally understood that college campuses are safe environments, with rates of violent crime being much lower than in the general public (Birnbaum, 2013; Patten, et al., 2013a). Since the 2007 shooting at Virginia Tech, however, the issue of allowing concealed handguns on college campus has been increasingly disputed. Some states have considered and passed legislation allowing students, faculty, and staff to carry concealed handguns on campus with the proper permit (Bennett, Kraft, and Grubb, 2012), the most recent being HB 280 a bill passed on July 1, 2017 by the Georgia legislature. The American Association of State Colleges and Universities (AASCU) identifies concealed carry as one of the top 10 policy issues (AASCU, 2015). AASCU opposes state legislation to prevent colleges from regulating concealed weapons on campus:

AASCU remains disappointed over continued attempts by state lawmakers to strip college presidents and public university governing boards of their authority to regulate concealed weapons on campus. Nearly every higher education and law enforcement stakeholder group has steadfastly opposed legislation that allows individuals to carry concealed weapons on campus (AASCU, 2014).

While all states allow carrying of concealed weapons under certain conditions, 16 states prohibit concealed carry on college campuses (including South Carolina), 23 states leave the decision to ban or allow concealed carry to the college or university, and 10 states allow concealed carry on campus (www.ncls.org). These states are Arkansas, Colorado, Georgia, Idaho, Kansas, Mississippi, Oregon, Texas, Utah, and Wisconsin. Utah prohibits colleges and universities from banning concealed weapons on campus. According to the National Conference of State Legislatures, bills were introduced in at least 19 states in 2013 to allow concealed carry on college campuses. Of these, two passed, in Kansas (allows general concealed carry) and

Arkansas (limited to faculty). While concealed carry is allowed in some states, approximately 97% of campuses in the U.S. restrict firearm possession on campus (Cramer, 2014).

Cramer (2014) notes that campus restrictions on concealed carry fall into two categories: prohibition of weapons in campus and university-owned housing and prohibition of carrying guns on campus. It appears that many of the current restrictions regarding guns on campus can be traced back to the turbulence and protests on college campuses in the 1960s (Cramer, 2014).

The debate over concealed carry on campus did not start with the Virginia Tech shooting, but that event was a watershed moment in this debate. Immediately after the shooting at Virginia Tech, a student at The University of North Texas started Students for Concealed Carry (SCC) which has grown into a national organization of over 43,000 members (www.concealedcampus.org). SCC advocates for concealed carry on college campuses as a means of self-defense, which is a right enjoyed in other public venues. Also founded in 2008 was the Campaign to Keep Guns Off Campus (CKGOC) (Wood, 2014). CKGOC maintains that campuses are safer without guns. Another group against concealed carry, Students for Gun Free Schools, provides five arguments against concealed campus carry:

- 1. Concealed handguns would detract from a healthy learning environment.
- 2. More guns on campus would create additional risk for students.
- 3. Shooters will not be deterred by concealed carry permit holders.
- 4. Concealed carry permit holds are not always "law-abiding" citizens.
- 5. Concealed carry permit holders are not required to have any law enforcement training (Wood, 2014, p. 428).

Essentially those on the anti-concealed carry side of the debate contend campuses are different from the larger society and that allowing concealed carry threatens academic freedom and academic autonomy (Birnbaum, 2013). In regards to academic freedom, the concern is that members of the campus community may feel less safe in expressing ideas openly, especially those that may lead to disagreement. The issue of academic autonomy is concerned with colleges

and universities maintaining the ability to decide what is correct for their campuses. Lastly, opponents of concealed carry on campus raise concerns that violence on campus will increase as the presence of guns increases (Birnbaum, 2013).

### **Literature Review**

Using a national sample, Hemenway, Azrael, and Miller (2001) found that 94% of respondents did not believe regular citizens should be allowed to bring guns onto college campuses, with women and non-gun owners indicating the strongest opposition. This study, however, does not offer information regarding perceptions of concealed campus carry by members of the campus community. It has been argued that what is missing in the debate about concealed carry is perceptions of campus populations (Cavanaugh, Bouffard, Wells, and Nobles, 2012). There is a growing body of research examining perceptions of students, faculty, and staff regarding the issue of concealed carry, yet there are still questions left to answer. Studies in this area indicate that the majority of college students, faculty, and staff do not support allowing concealed handguns on campus (e.g. Bennett, et al., 2012; Cavanaugh, et al., 2012; Patten, et al., 2013a; Patten, et al., 2013b). Further, a survey of campus police chiefs indicates that the vast majority of those surveyed do not believe allowing concealed carry would prevent campus killings (Thompson, et al., 2009).

In a survey of faculty and administrators at one university in Georgia, Bennett, Kraft, and Grubb (2012) found the majority opposed HB 89 which expanded concealed carry to restaurants and state parks. An even larger majority of the sample expressed opposition to expanding concealed carry to college campuses and places of worship, measures which had been proposed in Georgia (Bennett, et al., 2012). While no difference in opinion was found by sex, race/ethnicity, or age, there were differences in this sample by gun ownership, with gun owners

less opposed to HB 89 as well as expansion to concealed carry on campus and religious buildings. Further, faculty in the College of Liberal Arts showed more opposition to HB 89 and allowing guns in religious buildings than those in the College of Education and College of Science and Technology. No differences were indicated by college for support/opposition to concealed carry on campus. Those faculty identifying as Democrats expressed stronger opposition in expansion of concealed carry in all three areas examined than were Republicans or Independents (Bennett, et al., 2012). In multivariate analysis, only gun ownership and being Republican were significant predictors of support for concealed carry, with political affiliation being the strongest predictor of support for concealed carry on campus as well as support for HB 89. Gun ownership was the strongest predictor of support for concealed carry in religious buildings (Bennett, et al., 2012). The authors note these findings are similar to studies of the general population, with gun owners and political conservatives being most opposed to gun control.

The International Association of Campus Law Enforcement Administrators, Inc.

(IACLEA) issued a white paper in 2008 arguing that concealed carry does not lead to safer campuses, noting that: use of guns for self-defense is rare; there is no evidence that concealed carry reduces crime; and that only a small percentage of students would be of the age to obtain a concealed handgun license and carry a gun. Rather, IACLEA contends that allowing concealed carry on campus may lead to an increase in violence on campus, noting: the potential for accidental discharge; potentially dangerous mixtures of alcohol consumption and gun availability; and confusion for law enforcement officers in addressing active shooter incidences. The white paper cites studies indicating the majority of students who are self-reported gun owners engage in binge drinking and other reckless behaviors. Despite the occurrence of high

profile shootings such as Virginia Tech and Umpqua Community College, evidence typically suggests that campuses are relatively safe settings for students. In conclusion, IACLEA contends that allowing concealed carry on campus will potentially lead to more firearm injuries and deaths on campus, more suicides, and increased injury to campus law enforcement officers (Sprague, 2008).

Using the IACLEA directory, Thompson, et al. (2009) surveyed campus police chiefs regarding firearm-related violence on campus. The majority of police chiefs in this sample believed that allowing students to carry concealed handguns on campus would not prevent campus killings. While 97% of the police chiefs reported their campus has a policy in place to prohibit firearms, the majority report their campus lacks policies or training for how to deal with firearms on campus or troubled students (Thompson, et al., 2009).

Bouffard, Nobles, and Wells (2012) examined the desire to carry a concealed handgun on campus between criminal justice and other majors. Using a sample of students from Texas and Washington state, the authors found a 37% chance that students would obtain a Concealed Handgun License (CHL) and carry a gun on campus if allowed, with the students in Texas indicating a higher likelihood of doing so. Further, Criminal Justice (CJ) majors did report a higher likelihood of obtaining a CHL and carrying on campus if allowed by law, in both bivariate and multivariate analyses. Other factors influencing the self-reported likelihood of obtaining a CHL and carrying on campus were being a current CHL holder, prior law enforcement experience, and political conservativism (Bouffard, et al., 2012).

Using survey data from students in Texas and Washington state, Cavanaugh, Bouffard, Wells, and Nobles (2012) found students on both campuses were more likely to report that they were not at all comfortable with guns on campus as opposed to reporting that they were very

comfortable. Students did not express the same pattern of opposition for guns in the community, which the authors attribute to students viewing "the campus as a unique environment in terms of concealed handgun carrying" (Cavanaugh et al., 2012, p. 2246). The authors note that such student concerns have not been sufficiently considered in discussions to expand concealed carry to campus communities.

Patten, Thomas, and Viotti (2013a) examined support for concealed carry on campus among female students at one university in California. The majority of students in their sample did not support concealed carry on campus and did not think concealed carry would lead to either a safer campus or more feelings of safety. It should be noted that two violent incidents occurred in the midst of data collection, the first involved the kidnapping at gun point and sexual assault of a university student, and the other a "riot" that occurred as police attempted to break up a campus party. Both before and after these violent incidents, the majority of female students studied indicated overwhelming opposition to concealed carry on campus. In other words, two incidents involving violence and university students did not lead to higher support for concealed carry as some might predict. In fact, the level of opposition was greater after the violent incidents occurred (Patten et al, 2013a). When disaggregating the sample, however, the level of opposition for gun owners was lower after the violent incidents than before, although a majority still opposed concealed carry on campus. There were no before-after differences for non-gun owners. In multivariate analyses, political conservatives were more supportive of concealed carry as were firearm owners (Patten et al., 2013a).

Examining data collected from faculty, staff and students about their level of support for concealed carry on campus at one university in California and one in Nebraska, Patten, Thomas, and Wada (2013b) found the majority of those surveyed did not support it, would not feel safer

on campus if it were legal, and did not believe that it would promote a sense of campus safety. Conservatives were more likely to support concealed carry. The majority of gun owners were opposed to concealed carry. The multivariate analyses indicated women were less supportive of concealed carry, conservatives were more supportive, and those not owning firearms were less supportive (Patten, et al., 2013b).

Thompson, et al. (2013) surveyed undergraduate students at 15 universities in Midwestern states, where the majority of students (79%) in the sample were not supportive of concealed carry on campus. Likewise, the majority reported students would not feel safer if concealed carry were allowed on campus. A similar proportion (78%) reported they would not obtain a CHL if concealed carry were allowed on campus. Among those who said they would obtain a CHL if campus carry were allowed, 28% reported they would not carry on campus. Factors related to increased support for concealed carry were owning two or more firearms, being male, growing up in a home with firearms present, and Republican political affiliation. Extrapolating self-report likelihood of obtaining a CHL and carrying a concealed weapon on campus, the authors estimate a 1,500% increase in the number of handguns on campus with approval of concealed carry, or 1,500 out of 10,000 students carrying a concealed firearm on campus. The authors also note that the characteristics of those who are most supportive of campus concealed carry in this sample (male, Republican, gun owners) mirror the characteristics of legislators that tend to introduce bills in support of campus carry (Thompson, et al., 2013).

While research studies do indicate little support for concealed carry, it should also be noted that several factors appear to impact the likelihood of support. Those identifying as Republican or conservative express higher levels of support than Democrats or liberals (Bennett, et al., 2012; Patten, et al., 2013b). Those owning a gun are also more supportive of concealed

carry than those who do not own a gun (Bennett, et al., 2012; Patten, et al., 2013a; Shepperd, Pogge, Losee, Lipsey, and Redford, 2018). Men and women feel differently towards gun ownership, with women much more likely to support school teachers being armed (Lewis, Locurto, Brown, Stowell, Maryman, Dean, McNair, Ojeda and Siwierka, 2015). Criminal justice majors are more likely to report that they would obtain a concealed handgun license and carry on campus if legal when compared to other majors (Bouffard, et al., 2012). The purpose of the present study is to further knowledge of student perceptions of concealed carry on campus by examining support for concealed carry by academic major, specifically, comparing criminal justice and non-criminal justice majors.

## Methodology

The present study seeks to expand the body of knowledge regarding student perceptions of allowing concealed carry on campus. Undergraduate students at a public university in South Carolina and a public university in Texas were surveyed in person prior to the COVID-19 pandemic. Surveys were self-administered in a purposive sample of classes, with overrepresentation of criminal justice classes, to allow for a comparison of CJ and non-CJ majors. The students represent a convenience sample of students who were present the day of survey administration and willing to participate. For this reason, there are questions of generalizability to a general campus population that rise from this study. Characteristics of the sample are displayed in Table 1. In total, 210 students from criminal justice classes and non-criminal justice courses participated in the study and, as shown in Table One, the majority of the respondents for both campuses were female.

**Table 1. Sample Characteristics by State** 

N= 210		TX	SC	Total
Sex	Male	39.3%	43.0%	41.1%
	Female	60.7%	57.0%	58.9%
Race/Ethnic				
ity	White	65.4%	48.0%	57.0%
	Black	11.2%	40.0%	25.1%
	Hispanic	15.9%	2.0%	9.2%
	Other	7.5%	10.0%	8.7%
Classificatio	Freshma	2.70/	0.00/	<b>5</b> 00/
n	n	3.7%	8.0%	5.8%
	Sophomo	10 10/	11.00/	11 60/
	re	12.1%	11.0%	11.6%
	Junior	43.0%	37.0%	40.1%
	Senior	41.1%	44.0%	42.5%
Major	CJ	59.8%	54.0%	57.0%
	non-CJ	40.2%	46.0%	43.0%
	mean age	22.94	21.85	22.41

The majority of the sample (57%) were white, but there were some differences in the racial/ethnic make-up of the sample by the campus. The South Carolina sample was more racially/ethnically diverse than was the Texas sample, with 48% of respondents being white, 40% identifying as black, 2% Hispanic, and 10% other. The majority of the Texas sample (65.4%) were white. There were more Hispanic respondents in this sample at 15.9%. The majority of the students in the sample are juniors and seniors. Consistent with this, the average age of the respondents is 22.41 (22.94 in Texas and 21.85 in South Carolina). In order to compare criminal justice majors with other majors, criminal justice classes were purposely oversampled. As a result, the majority of the sample (57%) identified as criminal justice majors.

At the time of data collection, neither state allowed concealed carry on campus.

However, there was active legislation moving through the state legislature regarding concealed

carry on campus during the time of data collection in Texas. It is possible, then, that students on this campus might have been more cognizant of this issue than the students on the other campus, through media attention to the legislation as well as discussions during classes and on campus that may have taken place as a response to the legislation.

In terms of concealed carry, both Texas and South Carolina are "shall issue" states, meaning a license is issued to any applicant who meets the criteria as set out by the state (Hemenway, Azrael, and Miller, 2001). Both Texas and South Carolina have a reputation for being pro-gun, with gun ownership increasing steadily in both states. However, each state has different criteria to be able to carry concealed. In South Carolina, you must be a resident of the state, have 20/40 vision, and not be prohibited from possessing a firearm. Furthermore, one must complete the concealed handgun training approved by the state (www.sled.sc.gov/SCStateGunLaws/.aspx). Texas requires the applicant to be a legal resident of the state for a minimum of 6 months, have no record of a felony conviction or charged with a Class A or B misdemeanor, or be a fugitive from justice. In addition, you cannot be delinquent on child support payments, be chemically dependent, and you must be of sound mind (www.txdps.state.tx.us/rsd/chl/legal/newlegislation.htm). Both states require the applicant to be a minimum of 21 years of age.

## **Dependent Variable**

Support for concealed campus carry was measured through a series of questions using a 0-10 scale where 0 represents completely disagree and 10 represents completely agree. Three questions concerned the allowance of concealed handguns on campus:

- Students should be allowed to carry concealed handguns on campus.
- Faculty should be allowed to carry concealed handguns on campus.
- Staff should be allowed to carry concealed handguns on campus.

Secondly, there were three questions concerning feelings of safety, measured on the same 0-10 scale:

- If students were allowed to carry concealed handguns on campus with the proper license, it would make me feel safer.
- If faculty were allowed to carry concealed handguns on campus with the proper license, it would make me feel safer.
- If staff were allowed to carry concealed handguns on campus with the proper license, it would make me feel safer.

Lastly, respondents were asked about their own preference for carrying a concealed handgun on campus:

• If allowed, I would carry a concealed handgun on campus.

Means and standard deviations for each of these items is presented in Table 2.

**Table 2. Dependent Variables** 

		St.
N= 210	Mean	Dev.
Students should be allowed to carry concealed		
handguns on campus	3.90	3.74
Faculty should be allowed to carry concealed		
handguns on campus	5.43	3.72
Staff should be allowed to carry concealed		
handguns on campus	4.93	3.72
If students were allowed to carry concealed		
handguns on campus, I would feel safer	4.17	3.84
If faculty were allowed to carry concealed		
handguns on campus, I would feel safer	5.40	3.89
If staff were allowed to carry concealed		
handguns on campus, I would feel safer	5.00	3.85
I would carry a concealed handgun on campus		
if allowed	4.88	4.17

Respondents indicated the most support for allowing faculty to carry concealed handguns on campus vs. students or staff, with a mean of 5.43. Although this was the highest level of support, it is barely past the mid-point of the 0-10 scale, so it is not an indication of resounding

support for concealed carry. The lowest level of support was for allowing students to carry concealed handguns on campus (mean = 3.90). Similarly, in terms of concealed carry leading to feelings of safety on campus, respondents indicated the highest level of support for faculty (mean = 5.40) and the lowest level of support for the statement regarding students (mean = 4.17). Again, even the mean of 5.40 for the item concerning faculty does not indicate a high level of agreement with the item. The mean score for students reporting they would carry a concealed handgun on campus if allowed was 4.88 which approaches the mid-point of the 0-10 scale. Overall, it doesn't not appear that there is strong support among this sample for allowing concealed carry of handguns on campus, with the lowest levels of support (or the most disagreement) concerning allowing students to carry on campus.

# **Independent and Control Variables**

The primary independent variable examined in the present study is CJ major (CJ). Respondents were asked an open-ended question about their major and those indicating a criminal justice major were coded as 1. Additionally, and consistent with prior research, respondent sex (FEMALE=1), race/ethnicity, political ideology (POLITICAL), and gun ownership (GUNOWN) are examined. Rather than using political party affiliation, political ideology was measured by having respondents rank their political beliefs on a scale of 1 to 7, with 1 being very conservative and 7 being very liberal. Frequencies for each of these items are presented in Table 3.

A series of crime salience items are also included as control variables. These include concern about crime on campus (CONCERN), measured on a scale of 0-10, with 0 being not at all concerned and 10 being very concerned, perceived safety on campus (SAFETY), measured on a 0-10 scale, with 0 being completely safe and 10 being completely unsafe. Fear of crime on

campus (FEAR) was measured through 8 items combined into an additive scale with an alpha of .931. Respondents ranked their level of fear on a scale of 0-10, with 0 being not at all fearful and 10 being very fearful, for the following 8 items occurring on campus:

- Being murdered
- Being raped/sexually assaulted
- Being attacked by someone with a weapon
- Having someone break into your car
- Having your car stolen
- Being robbed or mugged
- Having your personal property stolen
- Being beaten up or assaulted by strangers

A fourth crime salience measure was perceived likelihood of victimization on campus, measured on a scale of 0-10, with 0 being not at all likely and 10 being very likely, respondents were asked how likely they would experience violent crime (VIOLLIKE) or property crime (PROPLIKE) on campus in the next year. Lastly, respondents were asked about the likelihood of a school shooting on their campus:

• On a scale of 0 to 10, with 0 being not at all likely and 10 being very likely, compared to other campuses in the United States, how likely do you think it is for there to be a school shooting on your campus?

Descriptive statistics for each of these crime salience measures is presented in Table 3.

**Table 3. Independent variables** 

						St.
N = 210	Attribute	f			Mean	Dev.
Political			Crime			
Ideology	1-2	18.8%	Salience	Concern	5.15	2.86
				Campus		
	3-5	65.0%		Safety	4.06	3.04
	6-7	16.2%		Fear of crime	26.22	19.32
				Likelihood		
				violent victim	1.84	1.91
				Likelihood		
				property		
Gun Ownership	No	63.3%		victim	3.30	2.72
•				Likelihood		
				school		
	Yes	36.7%		shooting	3.35	2.23

As indicated in the table, most of the respondents indicated a political ideology in the middle of the 1-7 scale, with 65% indicating 3, 4, or 5. A similar proportion were on the ends of the scale, with 18.8% indicating 1 or 2 (conservative) and 16.2% indicated 6 or 7 (liberal). Over one-third of the sample (36.7%) were gun owners. Examining the mean scores for the crime salience variables, this sample does not appear to be overly apprehensive about crime on campus. The highest mean was for the more global measure of concern about crime on campus at 5.15. Students in the sample seem to feel safe on campus, have low fear of crime on campus, perceive a low likelihood of being the victim of crime on campus, and do not seem to view the school shooting as being likely on their campus. This is consistent with research indicating that campuses are, in fact, relatively safe places in terms of crime.

The following hypotheses are tested in this study.

- 1. Criminal Justice majors will be more supportive of concealed campus carry than non-CJ majors.
- 2. Respondents with higher crime salience will be more supportive of concealed campus carry than those with lower crime salience scores.

- 3. Respondents in Texas will be more supportive of concealed campus carry than those in South Carolina.
- 4. Consistent with prior research, in multivariate analysis, males, gun owners, and conservatives will be more supportive of concealed campus carry.

# **Findings**

Independent samples t-tests were used to examine the first hypothesis that criminal justice majors would be more supportive of concealed carry than non-criminal justice majors. As indicated in Table 4, this hypothesis is supported in this bivariate analysis. For all 7 items, criminal justice majors do have significantly higher means than non-criminal justice majors, indicating that they do have a greater level of support or agreement with concealed carry on campus. Consistent with the univariate data, the highest mean scores for both CJ and non-CJ majors are for those items concerning concealed carry by faculty and the lowest mean scores for those items concern concealed carry by students. The only mean score for the criminal justice majors that is below the mid-point of the scale is for students being allowed to carry concealed handguns on campus. All other CJ mean scores are above the mid-point whereas none of the mean scores for the non-CJ majors are at or above the scale mid-point. Criminal justice majors in this sample are also more likely to indicate that they would personally carry a concealed handgun on campus if allowed to do so.

Table 4. Independent Samples t-tests by Major

N= 210	non-CJ	CJ
Students should be allowed to carry	3.01	4.66**
concealed handguns on campus	(3.37)	(3.86)
		6.25**
Faculty should be allowed to carry	4.45	*
concealed handguns on campus	(3.70)	(3.52)
Staff should be allowed to carry	4.03	5.68**
concealed handguns on campus	(3.50)	(3.71)
If students were allowed to carry		5.17**
concealed handguns on campus, I would	2.92	*
feel safer	(3.51)	(3.82)
If faculty were allowed to carry		6.35**
concealed handguns on campus, I would	4.26	*
feel safer	(3.81)	(3.71)
		5.89**
If staff were allowed to carry concealed	3.89	*
handguns on campus, I would feel safer	(3.61)	(3.79)
		5.94**
I would carry a concealed handgun on	3.48	*
campus if allowed	(3.98)	(4.02)
** p<.01; *** p<.001		

To assess the second hypothesis concerning crime salience and support for concealed carry, bivariate correlations were used. The results are displayed in Table. 5. As indicated in the table only one of the crime salience variables was significantly correlated with any of the support for concealed carry measures, and this was at the .05 level of significance and in the opposite direction than predicted. The -0.150 correlation, while statistically significant, is a fairly weak correlation. None of the other crime salience variables were significantly correlated with any of the concealed carry measures. The second hypothesis, at least in the bivariate analysis, is not supported.

Table 5. Bivariate Correlations for Crime Salience Variables and Support for Concealed Campus Carry

			Likeliho	Likeliho	Likeliho	Боот
	Concer	School	od violent	od property	od school	Fear of
N= 210	n	Safety	victim	victim	shooting	crime
Students should be allowed to carry concealed handguns on campus	-0.129	-0.024	-0.009	0.019	-0.032	-0.031
Faculty should be allowed to carry concealed handguns on campus	-0.125	-0.071	-0.043	0.059	-0.030	-0.056
Staff should be allowed to carry concealed handguns on campus	0.150*	-0.055	-0.028	0.025	-0.061	-0.058
If students were allowed to carry concealed handguns on campus, I would feel safer	-0.018	0.022	0.030	0.055	-0.021	0.005
If faculty were allowed to carry concealed handguns on campus, I would feel safer If staff were allowed to carry	-0.050	-0.065	-0.016	0.072	-0.046	-0.026
concealed handguns on campus, I would feel safer	-0.052	0.016	-0.003	0.094	-0.014	-0.008
I would carry a concealed handgun on campus if allowed * p<.05; ** p<.01; *** p<.001	-0.091	-0.073	0.029	0.050	-0.024	-0.046

The third hypothesis, that there would be higher levels of support in Texas than in South Carolina is also not supported. As shown in Table 6, only one question yielded statistically significant differences between the two samples. In this instance, students in Texas did indicate a significantly higher mean support for faculty being allowed to carry concealed handguns on campus than did those students in South Carolina. The mean scores for the other six items were higher in the Texas sample, but these differences did not approach statistical significance.

Consistent with other analysis previously presented, respondents in both states indicated higher mean scores for the items concerning faculty and the lowest for the items concerning students.

Table 6. Independent Samples t-tests by School/State

N= 210	SC	TX
Students should be allowed to carry	3.66	4.13
concealed handguns on campus	(3.80)	(3.67)
Faculty should be allowed to carry	4.87	5.96*
concealed handguns on campus	(3.85)	(3.52)
Staff should be allowed to carry concealed	4.78	5.07
handguns on campus	(3.89)	(3.56)
If students were allowed to carry		
concealed handguns on campus, I would	3.90	4.42
feel safer	(3.73)	(3.94)
If faculty were allowed to carry concealed	5.10	5.69
handguns on campus, I would feel safer	(3.88)	(3.90)
If staff were allowed to carry concealed	4.90	5.08
handguns on campus, I would feel safer	(3.89)	(3.82)
I would carry a concealed handgun on	4.67	5.07
campus if allowed	(4.34)	(4.01)
* p<.05; ** p<.01; *** p<.001		

The last hypothesis, that males, gun owners and political conservatives will be more supportive than others in multivariate analysis, was examined through various OLS regression models. The results are presented in Table 7. Each model contains the same variables and the Beta coefficients are reported to allow for comparison across the models. Only variables that were significant in at least one of the models were included here. As none of the crime salience variables were significant predictors, they are not included in the models presented here. Gun ownership is a significant predictor for each concealed carry measure except for feeling safer if faculty are allowed to carry concealed handguns on campus. Political ideology is statistically significant in 4 of the 7 models and in the predicted direction, with conservatives showing higher levels of support for staff being allowed to carry, feeling safer on campus if students carry, feeling safer on campus if faculty carry, and feeling safer on campus if staff carry. For most of the measures of support for concealed carry, then, the fourth hypothesis is supported, but even

among gun owners and political conservatives, there is apparently not uniform support/agreement for these measures. Additionally, male respondents were significantly more supportive of students, faculty, and staff being allowed to carry, feeling safer on campus if students carry, and agreeing that they would carry a concealed handgun on campus if allowed.

Table 7. OLS Regression Models for Support for Concealed Campus Carry

N= 210	Student s carry	Faculty carry	Staff carry	Students safer	Faculty safer	Staff safer	I would carry
Gun	0.265**	carry	carry	Saici	Saici	Saici	0.368**
ownership	*	0.167*	0.256**	0.156*	0.119	0.181*	*
Political	-0.095	-0.101	-0.164*	-0.193**	-0.140*	-0.147*	-0.067
	-						-
Female	0.219**	-0.157*	-0.188**	-0.149*	-0.064	-0.127	0.179**
CJ Major	0.030	0.091	0.026	0.134	0.146*	0.111	0.103
		0.252**					
White	0.117	*	0.155*	0.100	0.274***	0.173*	0.057
Constant	4.434	5.257	5.854	5.263	4.934	5.284	4.590
Adj. R <sup>2</sup>	0.228	0.227	0.257	0.196	0.212	0.200	0.288
* p<.05; ** p	o<.01; *** p	0<.001					

Respondents were also asked what training should be required if campus concealed carry were allowed. They could choose between 4 options: no training, standard concealed handgun training, standard concealed handgun training plus training specifically for college campuses, and other (with a space to specify). Results for this item are displayed in Table 8. As shown, an overwhelming majority (86.7%) indicated that additional training specific to college campuses should be required on top of the standard concealed handgun training. Of those choosing other, most of them specified that even more training on top of this, including training on when to shoot, crisis training, regular or annual training, and a more thorough background check.

Table 8. If concealed carry is allowed, what training should be required?

No training	1.0%
Standard concealed handgun training	7.6%
Standard concealed training plus training	
specifically for college campuses	86.7%
Other	4.8%

Others:

6 - c plus more better background

when to shoot psych eval x 2 crisis training

regular training to stay up to

date

standard with annual training standard with more thorough background check very in-depth training test right now is too easy

## Discussion

Generally, students in the sample did not seem overly supportive of concealed carry on campus. Consistent with previous research, criminal justice majors did express significantly higher levels of support than non-criminal justice majors. They were also significantly more likely to report that they would carry a concealed handgun on campus if allowed to do so. This has potential implications for faculty teaching criminal justice courses as they may be more likely to encounter students in their classes who are carrying concealed weapons than faculty in some other majors. However, CJ major was generally not significant in the multivariate models, so the impact of major does not appear to hold when other variables are considered. It is possible that CJ major is indicative of some of the other characteristics, such as political conservativism, that are related to support for concealed campus carry.

Whereas students in Texas did show stronger levels of support for concealed campus carry than students in Washington in previous research, students in Texas did not differ significantly from those in South Carolina in this sample. This is perhaps not surprising, given that both states are gun-friendly states. It is possible that the coverage of the legislation as well as discussions on campus of the pending legislation could have impacted the views of students in Texas, but it is not clear whether this was the case.

Consistent with other research, the multivariate analysis indicated that males, gun owners, and political conservatives are generally more supportive of concealed campus carry, although this support was not uniform across all measures of support. None of the crime salience variables considered here was significant in either bivariate or multivariate analyses indicating that concern or fear of crime are not driving factors in levels of concealed campus carry. Instead, it is demographic characteristics that seem to be more influential. These are similar characteristics that explain support for guns more generally, indicating that the campus location may be somewhat irrelevant for those who support concealed campus carry. What is clear, though, is support for concealed campus carry seems to be fairly isolated to a specific segment of a campus population and not widespread among diverse groups.

One of the most noteworthy findings in this study concerns the training students believe should be required if concealed campus carry were allowed. Over 91% of the sample indicated that there should be additional training on top of the standard concealed handgun training. Most respondents (86.7%) chose the standard training plus something specific to college campuses. Of the students who chose "other," the open-ended responses included better background checks, training on when to shoot, psychological evaluation, crisis training, and regular or annual training. Despite the strong level of support for additional training, it should be noted that most

states where campus carry is permitted do not require any campus specific training. The dangers associated with this became apparent in 2019 when a University of Georgia student accidentally shot themselves in the leg because they were improperly handling a handgun (Canas, 2019). While the student in that case was not gravely injured, the potential for self-injury or harm to others certainly exists. Given that university campuses often have day care centers on site, as well as dual enrollment high school students who attend classes, the risk of injuring a child is one that must be considered.

In conclusion, laws that permit students, faculty, and staff to carry concealed handguns on college campuses continue to be controversial and have limited levels of support. Results from this study confirm findings from previous research which show low levels of support for guns on campus among students; however, support among criminal justice majors was somewhat higher, compared to other majors. While the criminal justice majors in this study were more supportive of concealed handguns on campus, their support was by no means overwhelming.

Despite having minimal levels of support from campus communities and increasing the risk of gun violence, campus carry legislation appears to be continuing unabated. Numerous states including Oklahoma, Florida, Michigan, Tennessee, and Kentucky have introduced campus carry laws in 2019 and 2020. Florida's HB 6001 would have removed the provision prohibiting guns on campuses; however, it did not pass the criminal justice subcommittee (Florida Senate, 2020). Tennessee law currently permits full time university employees to carry handguns on campus, but HB 2102 was introduced this year to remove restrictions placed on students (Ebert, 2020). Similar laws have been introduced in previous sessions and all have failed, so its passage is far from certain. The presence of concealed handguns on university campuses is not likely to disappear any time soon. As such, future research should examine the

consequences of having guns on campus, both in terms of the increased risk of violence and the potential negative psychological consequences for students who may be fearful of guns in the classroom.

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# An Examination of the Impact of Individual, Family, and Community Factors on the Perceived Risk of Victimization in Youth

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# **Abstract**

Numerous studies have examined fear of crime. However, few studies have examined the impact of predictive factors at different levels (individual, family/friends, and community) on the perceived risk of future victimization; even fewer have looked at this risk perception in youth samples. Using the National Longitudinal Survey of Youth (1997), the current study examines the direct impact of individual-level, family-level, and community-level factors, as well as interaction effects, on the perceived risk of violent victimization within one year and five years. Findings suggest that individual-level variables are important in the understanding of youths' perceived risk of future victimization. These and other findings related to family/friends and community variables are discussed.

### Introduction

Over the past 50 years, we have seen a shift from a focus on offending to a greater consideration of factors affecting victimization. Traditionally, research on victimization has examined the effects of crime on those who experience it. In recent years, there has been a significant increase in studies related to victimization, many of which have examined fear of crime and the likelihood of victimization (e.g., Chon & Wilson, 2016; Cook & Fox, 2011; Han & Connell, 2021; May et al., 2010; Noble & Jardin, 2020). According to statistics reported by the Federal Bureau of Investigation, as well as a report by the Bureau of Justice Statistics from the National Crime Victimization Survey, the violent crime rate has significantly decreased in the United States over the last two decades, yet many citizens still believe that crime continues to increase (Gramlick, 2018). Prior research has consistently shown that perceptions of crime tend to exceed the actual risk of criminal victimization (Hale, 1996; Wilcox Rountree & Land, 1996; Wyant, 2008). Still, fear of crime and risk of victimization, whether real or perceived, is a significant issue for individuals, the community, and the criminal justice system. As victimology research is still generally new, it is important to examine the effects of fear in, on, and surrounding victimization. Because there is still so much to question, consider, and research as it relates to victims, continuing exploration in this area is imperative.

Historically, studies on fear of crime have focused on individual factors, such as age, gender, and race (Warr, 1984), and neighborhood- and community-level factors, such as disorder and social cohesion (LaGrange et al., 1992; Lane & Fox, 2013; Lane & Meeker, 2010; Markowitz et al., 2001; May et al., 2010). A few studies have more recently considered both individual and neighborhood effects, using aggregate measures and/or multi-level modeling (e.g., Sampson & Raudenbush, 2004; Wyant, 2008). When the relationship between age and

victimization has been studied, findings show that personal victimization peaks in adolescence and early adulthood and then tends to decrease thereafter (Lauritsen, 2003). Although researchers have continued to study the predictors of fear of crime among adults, few have focused these same efforts on fear and perceived risk in children and adolescents (De Groof, 2008). Of the studies that have used younger populations, more attention seems to be placed on college and university students, rather than their younger counterparts (Jacobson et al., 2020).

Victimization of youth, in particular, is important to understand, as violent victimization has been found to increase the risk of anxiety, depression, suicide, poor academic performance, and violent offending (MacMillan & Hagan, 2004; McLaughlin et al., 2009; Hodges & Perry, 1999; Ringwalt et al., 2003). Moreover, students' perceived risk of victimization has been found to have negative effects on educational achievement, including a disruption in classroom concentration (e.g., Boulton et al., 2008). Research into youth fear and perceived risk may also help us better understand how adults experience fear. In short, what remains particularly understudied is how youths in particular are impacted by a variety of factors and how they relate to their perceived risk of violent victimization in both the shorter- and longer-terms. To help fill this void, the current study highlights the importance of studying the impact of factors at multiple levels on perceived risk of violent victimization in youth.

## **Review of Literature**

Fear of Crime vs. Perceived Risk

Fifty years ago, Furstenberg (1971) first distinguished fear of crime from worry about crime. He indicated that one's fear of being victimized is not necessarily commensurate with concern or anxiety regarding crime rates or crime in general. An examination of prior literature

reveals that there are generally two approaches to conceptualizing fear of crime: cognitive and affective (Chon & Wilson, 2016; Ferraro & LaGrange, 1987; Hale, 1996). A cognitive interpretation relates more to the perceived risk of criminal victimization, worry about crime, or one's sense of safety. Affective conceptualizations, on the other hand, focus more on emotional states or responses, such as anxiety (i.e., fear). Early research on fear of crime often failed to distinguish between the emotional response to crime (i.e., fear) and the cognitive appraisal regarding the risk of victimization (i.e., perception; Jennings et al., 2007). Presently, the two can be understood by distinguishing between safety and worry; the cognitive perception of risk differs from the emotional fear of crime. Thus, perceived risk refers to the cognitive estimation regarding an individual's perceived likelihood of victimization—how likely am I to be a victim of crime? (McNeeley & Stutzenberger, 2013). As perceived risk may influence how afraid of crime one might be, fear of crime also affects one's perceived likelihood of victimization (Ferraro & LaGrange, 1987). In fact, perceived risk of victimization has been found to be an important predictor of fear of crime, and mediator between fear of crime and individual or social factors such as gender, victimization experience, and social incivilities (Ferraro, 1995; Ferraro & LaGrange, 1987; Gainey et al., 2011; Rountree & Land, 1996).

Studies show that women tend to worry about crime more frequently than men, which is partially explained by their lesser ability to physically defend themselves and because they feel they would be more negatively impacted by the crime (Jackson, 2009; Warr, 1984). Using this perspective, fear of crime should increase when a crime is particularly egregious, when an individual believes he/she has little control over being victimized, and/or when an individual believes the consequences of a victimization would be extreme if the victimization were to occur (Killias, 1990). Although research has demonstrated that perceived risk is linked to fear, changes

in perception of risk have been found to affect fear differently, depending on the type of crime (Ferraro, 1995; Jackson, 2009; Warr, 1987). For example, a minor increase in risk perception for a violent crime might equate to a significant increase in levels of fear, while a relatively large increase in risk perception might be needed to generate a similar escalation in fear for a more innocuous offense.

# Correlates of Risk and Fear

Scholars have also looked at the relationship between certain variables and either fear of crime or risk perception (e.g., Cho & Wooldredge, 2018; Jacobson et al., 2020; Madriz, 1996). Some have suggested that individuals who have been directly victimized are more likely to have greater perceptions of victimization risk (Chadee et al., 2020; Lee et al., 2020; Mesche, 2000). Fear of crime is often considered a rational reaction to crime and victimization. Therefore, it is understood that people who have been victimized will express more fear. Moreover, those who know someone who has been a victim (i.e., vicarious victimization) are also likely to be more fearful of victimization than someone who does not know someone who has been victimized. Research assessing the relationship between vicarious and direct victimization and perceived risk or fear of crime among the general population, however, has been mixed (Box et al., 1988; Liska et al., 1988; McNeeley & Stutzenberger, 2013; Oh & Kim, 2009; Skogan & Maxfield, 1981).

In a study examining contextual predictors of fear, LaGrange et al. (1992) found that neighborhood incivilities, which are commonly found predictors of fear, were more strongly related to perceived risk than actual fear. Other contextual factors examined in prior research related to perceived risk include location, potential hiding places for offenders, and lighting. Research has suggested that fear of crime varies based on the location of the individual and the

characteristics of the surrounding environment (e.g., an unsafe or disorderly neighborhood) (Day, 1994). In other words, people assess the amount of risk posed by their immediate surroundings, and those who perceive low levels of risk have proportionately lower levels of fear (Ferraro, 1995; Melde, 2009; Melde & Esbensen, 2009). As such, physical and social incivilities tend to increase perceptions of risk because people associate adverse neighborhood conditions with criminal activity (Mesche, 2000). These assessments, however, can be altered by the commonality of crime and victimization. Therefore, those who live in high-crime areas (or associate with individuals involved in criminal behavior), may see crime as more of an everyday event, which may reduce their perceptions of risk for victimization and, thus, fear (Melde & Esbensen, 2009). If the commonality of crime affects the level of fear and perceived risk, then we might also expect these to be lower among individuals involved in a delinquent lifestyle (Lane, 2006; Melde, 2009; Melde & Esbensen, 2009) or who associate with delinquent peers.

Researchers have consistently found a significant correlation between an individual's participation in crime and his/her level of victimization (Chen, 2009; Lauritsen et al., 1992; Mustaine & Tewksbury, 1998). More specifically, prior research has shown that as adolescents become more involved in delinquent behavior, there is a substantial increase in their risk of victimization. Importantly, research has found that there is a difference between individuals' perceived risk of victimization and their actual risk of being victimized (Hughes et al., 2003), often referred to as the fear-crime paradox. Few studies, however, have looked at how delinquent behavior affects perceived risk of victimization. More research, then, needs to be done to determine the relationship between victimization and perceived risk of future victimization. Moreover, even though increased involvement in delinquent behavior is typically associated with an increase in direct victimization, Melde (2009) found that no such association exists with the

perceived risk of future victimization. Instead, only an indirect (through personal victimization) relationship existed between a change in delinquent behavior and perceived risk of victimization. Millstein and Halpern-Felsher (2001) made the conclusion that research on risk perception and those who engage in risky behaviors suggests that individuals involved in risky behaviors recognize the risk, but view the risks as less significant than individuals who do not engage in similar risky behaviors. On one hand, offenders may be more afraid or feel more at risk because they see the crime and consequences firsthand. On the other hand, they may instead be less afraid or feel less at risk because they feel bolstered by their street experience or personal connections (Lane, 2006; Miller, 2001).

Delinquent peer associations and committing delinquent acts tend to both be positively associated with student victimization (Schreck et al., 2003; Wilcox et al., 2009). Prior research has consistently found that individuals with delinquent friends are more vulnerable to victimization. This may be because juvenile delinquency tends to occur as a group activity. It is also a possibility that victimization of juveniles is a byproduct of retaliation of other groups for the peer group's own delinquent activities (Taylor, 2008). Additionally, association with delinquent peers provides direct exposure to would-be offenders (Mustaine & Tewksbury, 1998). Similarly, research suggests that gangs and gang members contribute to experiences with direct or indirect victimization and perceived incivilities of other students while at school (Bouchard et al., 2012; Kupchik & Farina, 2016; Wynne & Joo, 2010).

Lane and Fox (2012) found that current and former gang members felt more at risk of victimization, but were less afraid than non-gang members. Similarly, others have found that gang members report lower levels of fear than their nongang member counterparts (Lane & Fox, 2012; Melde et al., 2009). Additionally, women in gangs seem to have lower perceived risk,

which could potentially be explained by the feeling of protection from their gang. According to Melde (2009), youth who are involved in delinquent behavior recognize their increased risk of victimization, but view the risks as being less salient. Melde (2009) suggested that some of the reasons for this may be due to juvenile delinquents being less forward-thinking related to lower levels of self-control (Gottfredson & Hirschi, 1990) or that criminally involved youth, especially those involved in gangs, may be more "street smart" and have less fear or feel that their increased status and gang attachments will provide them with a certain level of protection. Similarly, individuals living delinquent lifestyles may have a greater understanding that crime and disorder are associated with certain times, areas, and people. This knowledge may reduce the random nature of criminal events, thereby also reducing perceived risk. More research is needed to better understand the relationships between delinquent behaviors, victimization risk, association with delinquent peers, and more specifically gang involvement, and perceived risk of victimization in order to help better predict future violent victimization.

The abundance of prior research on both perceived risk and fear of crime has demonstrated that a number of correlates are associated with these constructs, especially demographic characteristics, such as age, gender, income, education level, living situation, and city size. Many studies have revealed that older people tend to have greater levels of fear of crime and perceived risk (Chon & Wilson, 2016; Ferraro & LaGrange, 1992; Hummelsheim et al., 2011; McGrath & Chananie-Hill, 2011; Oh & Kim, 2009; Sampson & Raudenbush, 2004). These studies have also indicated that females consistently have higher levels of perceived risk and fear than males (Badiora et al., 2014; Chon & Wilson, 2016; Fetchenhauer & Buunk, 2005; Hummelsheim et al., 2011; Keane, 1992; McGrath & Chananie-Hill, 2011; Mesch, 2000; Reid & Konrad, 2004; Tseloni & Zarafonitou, 2008), even though this is in opposition to the level of

actual risk for most crimes. In addition, income, education level, and city size have been found to be significant predictors of perceived risk. While individuals with lower incomes typically show higher levels of fear and perceived risk, those with higher incomes show lower levels (Sampson & Raudenbush, 2004). Researchers have also found that those with less education tend to have higher levels of perceived risk than those with more education (Hummelsheim et al., 2011; Mesch, 2000; Roccato et al., 2011). Braungart et al. (1980) found that those who live alone and those who are unmarried have greater perceived risk, although these relationships are dependent on both age and gender of the individual. Fewer studies have explored these correlates of perceived risk in younger samples. More research is needed to expand our understanding of how these factors impact the risk perception of our youth.

As noted by Taylor (2002), most fear of crime research has used samples from large, well-developed cities. These samples tend to provide ample diversity in terms of individual demographics and neighborhood context, and enhance generalizability. Smaller samples of rural and suburban neighborhoods, however, make up a large proportion of where the U.S. population lives. Still, research comparing how fear of crime and perceived risk predictors may differ between small cities and larger urban areas has been largely overlooked in the literature.

Although less research has been done using smaller cities and rural settings, prior research has indicated that those who live in urban areas (e.g., larger city size) have higher levels of perceived risk of victimization than those who live in rural (e.g., smaller) areas (Hummelsheim et al., 2011; MacMillan et al., 2000; Markowitz et al., 2001).

In short, research to date has demonstrated that several demographic variables are predictive of perceived risk of victimization. Although some variables tend to be stronger and more consistent indicators than others, age, gender, income, education, living situation, marital

status, and city size all affect perceived risk. In particular, older people, females, less wealthy people, the less educated, those who live alone, those who are unmarried, and those who live in urban areas tend to have higher levels of perceived risk of victimization. Fewer studies have looked at multiple factors at different levels, as well as interaction effects, and their impact on perceived risk and predictability of violent victimization within the youth population. As stated by De Groof (2008, p. 267), "Many studies have been conducted to examine the predictors of fear of crime among adults, but feelings of insecurity among children and adolescents have been practically ignored." The current state of research, then, would benefit from a better understanding of how some of these factors impact younger generations and their perceived risk of victimization.

## **Theoretical Basis**

A strong association has been found between certain risk/opportunity factors and victimization. According to the routine activities and lifestyle approach, an individual's daily activities indirectly affect his/her risk of victimization based on how these activities increase or decrease exposure to situations conducive to victimization (Cohen & Felson, 1979; Hindelang et al., 1978). Cohen and Felson (1979) argued in their routine activities theory that when motivated offenders come together with suitable targets and an absence of capable guardians in the same space and time, crime—and therefore victimization—is likely to occur. While the presence of motivated offenders is assumed to be fairly constant, vulnerability to victimization is primarily influenced by individuals' activities and the associated levels of guardianship. Ultimately, victimization may be explained by activities that place potential targets in situations that increase their vulnerability and allow offenders to be successful in their pursuits. This risk/opportunity model of criminal victimization can be applied to youth, considering the variation in daily

activities both at and outside of school. As these activities vary in both level of supervision and structure, the risk of being a victim of a violent crime is likely influenced.

Risk and opportunity factors that have been associated with victimization and are particularly important in understanding the perception of risk include exposure to risk, proximity to potential offenders, and target attractiveness and suitability. Exposure, or physical visibility and accessibility of potential victims to potential offenders, indicates that the more visible or accessible someone is, the greater their possibility of victimization (Cohen & Cantor, 1981). Proximity is the physical distance between possible targets and potential offenders, with shorter proximity leading to greater opportunities for victimization (Cohen & Felson, 1979). Target suitability and attractiveness denotes the desirability of a person or object to potential offenders; the greater the desirability, the greater the risk for victimization.

Multiple researchers have emphasized the significance of individual-level proxies of exposure, target suitability, and guardianship with regards to school-based victimization. Studies have shown that involvement in criminal behavior significantly increases risk of victimization at school (Burrow & Apel, 2008; Wilcox et al., 2009). Additionally, delinquent behavior and delinquent peer associations have been positively associated with student victimization (Schreck et al., 2003; Wilcox et al., 2009).

Individual or lifestyle characteristics that have been found to influence fear of crime and perceived risk of victimization include consumption of alcohol or using illegal drugs, partying or engaging in leisure activities outside the home on a frequent basis, engaging in criminal activities, and employment (Fisher et al., 1998; Lasley, 1989; Mustaine, 1997). Lee and Hilinski-Rosick (2012) tested some of these lifestyle activities and personal characteristics among a

sample of college and university students to see if their relationship with fear of crime varied by time of day. The authors concluded that fear of crime varies by crime type, and gender, perceived risk, and avoidance behaviors have varying relationships with fear of violent crimes when taking time of day into consideration. Lifestyle variations are likely related to differential exposure to dangerous situations and places where there is an increased risk of victimization (Mesche, 2000). This relates back to the importance of better understanding the factors that affect perceived risk of victimization and the ability to predict violent victimization, especially in school-age adolescents.

# **Current Study**

What remains particularly understudied is the impact of the interactions of predictive factors at different levels on the perceived risk of future victimization for youth, specifically distinguishing this concept from fear of crime. Focusing on a youth sample allows for the exploration of the relationships between individual-, family/friends-, and community-level variables on the perceived risk of violent victimization for youth, which may differ from young adult (e.g., college aged) or adult samples. The present study also distinguishes between perceived risk and the general "fear of crime" questions that are typically asked in surveys (Wilcox Rountree & Land, 1996). We do so by using a measure that asks respondents to assess their likelihood/risk of future victimization by providing a percentage, and by examining the interactions of various predictive factors from multiple levels.

Specifically, the present study examines the respondents' perceived risk of violent victimization based on individual factors (prior victimization, risk behaviors, predicted risk/protective behaviors), family/friends factors (family/friend risk behaviors), and community

factors (urban, poorly kept). Integrating individual, family/friends, and community variables provides a more complete understanding of the development of an individual's perceived risk of violent victimization by examining if family/friends and communities condition the relationships between individual characteristics and perceived risk of violent victimization. It should be noted that while we include interaction effects, limitations of the secondary data only allowed for the examination of the interaction between individual characteristics with family/friends gang membership at the family/friends level and residing in an urban area at the community level.

#### Methods

The current study analyzes data from the Bureau of Labor Statistics' National Longitudinal Survey of Youth (1997) waves one through four (1997-2000). The NLSY97 is a nationally representative panel study of youth born between 1980 and 1984, with the goal of examining the transition from childhood to adulthood, specifically the transition from school to work. In addition to data on education and employment, the NLSY97 also collects extensive data on a variety of topics, including topics related to individual behaviors and expectations for the future. The original NLSY97 sample of 8,984 consists of a national representative sample of 6,748 subjects with an additional oversampling of 2,236 Black/Non-Hispanic and Hispanic subjects. As of the fourth wave of the NLSY97 (2000), 8,080 subjects remained in the sample, representing an attrition rate of 10%. The analyses in this study are based on the respondents who provided an assessment of their perceived risk of future victimization, which is the dependent variable. Of the respondents for wave four (2000), 7,956 responded to the question assessing risk of victimization within one year (98% of respondents).

# Dependent Variables

This study examines two dependent variables focusing on perceived risk of violent victimization (Table 1). In wave four (2000) of the NSLY97, all respondents were asked to assess their perceived risk of victimization within one year and five years: "What is the percent chance that you will be the victim of a violent crime at least once in the next year?" and "What is the percent chance that you will be the victim of a violent crime at least once in the next five years?" Perceived risk of violent victimization within one year and five years are both examined because perceived risk may vary based on the views of the youth sample regarding their future life circumstances. Youth experience many life changes as they transition from being teenagers to young adults. Major life changes that youth may be taking into account when assessing their perceived risk of violent victimization in five years is that they may expect to have graduated from high school, gone to college, be working full-time, and living on their own, separate from parents or guardians.

## Demographic Variables

Measures of demographic characteristics are included in the study: age, sex, race/ethnicity, and religion (Table 1). The Age variable is based on the respondent's age on December 31<sup>st</sup> of the year prior to the wave's data collection period. Sex is operationalized as the variable Male (0=Female, 1=Male). A series of dichotomized variables were created using race and ethnicity variables from the NLSY97: Black, Hispanic, White (Non-Black/Non-Hispanic), and Other. White (Non-Black/Non-Hispanic) was excluded as the comparison category within the analyses. The Religious variable is based on respondents indicating their preferred religious classification (0=Religious, 1=Non-Religious).

**Table 1 - Descriptive Statistics** 

·	<u>N</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	Standard <u>Deviation</u>
Dependent Variables					
Predicted Likelihood of Violent Victimization within 1 Year (2000)	7,956	0	100	13.12	19.91
Predicted Likelihood of Violent Victimization within 5 Years (2000)	7,949	0	100	16.89	22.03
Individual Variables					
Age (2000)	8,080	15	21	17.98	1.44
Male	8,080	0	1	51%	
White (Non-Black/Non-Hispanic)	8,080	0	1	49%	
Black	8,080	0	1	26%	
Hispanic	8,080	0	1	21%	
Other	8,080	0	1	4%	
Religious (1997)	7,967	0	1	88%	
Home was Broken Into (<19 years) (2000)	8,023	0	1	18%	
Victim of Bullying (<19 years old) or Threats at School (2000)	8,076	0	1	33%	
Saw Someone Shot with a Gun (<19 years old) (2000)	7,988	0	1	13%	
Victim of a Shooting (12 - 18 years old) (2000)	7,988	0	1	0%	
History of Running Away from Home (2000)	8,075	0	1	10%	
Gang Member (2000)	8,080	0	1	11%	
Arrest (2000)	8,080	0	1	19%	
Prior Incarceration (2000)	8,080	0	1	2%	
Drank Alcohol (2000)	8,080	0	1	43%	
Used Marijuana (2000)	8,080	0	1	20%	
Used Non-Marijuana Drug (2000)	8,075	0	1	14%	
Predicted Likelihood within 1 Year - Arrested (2000)	8,012	0	100	9.79	18.26
Predicted Likelihood within 1 Year - Drunk (2000)	8,034	0	100	25.96	36.32
Predicted Likelihood - School in 1 Year (2000)	8,050	0	100	75.32	36.61
Predicted Likelihood - School & Working 20+ Hours in 1 Year (2000)	8,028	0	100	64.86	34.55
Predicted Likelihood - Work 20+ Hours in 1 Year (2000)	8,021	0	100	88.63	23.70
Family & Friends Variables					
Siblings or Friends in a Gang (2000)	8,080	0	1	30%	
Community Variables					
Urban Residence (2000)	8,075	0	1	73%	
INTVW - Poorly Kept Buildings on Street (2000)	8,045	0	1	8%	

# Individual Variables

Three groupings of individual-level variables were included in the analyses: (1) prior victimization or witnessed victimization, (2) prior risk/delinquency behaviors and criminal justice interactions, and (3) predicted future risk and protective factor variables (Table 1). Prior victimization or witnessed victimization incidents include: being the victim of a home break in, being the victim of bullying or threats at school, seeing someone shot or shot at with a gun, and

having been shot with a gun. These experiences are expected to increase respondents' assessment of their likelihood of future victimization. Individuals who experienced direct or vicarious victimization may feel more vulnerable to future violent victimization due to previously being unable to protect themselves or others.

The variables indicating the respondent was the victim of a home break in, the victim of bullying and/or threats at school, saw someone shot or shot at with a gun, and having been shot are age specific, including prior to the age of 12 years old and between the ages of 12 and 18 years old. The being the victim of a home break in variable indicates that the respondent was a victim prior to the age of 19 years old, and the variable was created by combining the question "did you ever have your house or apartment broken into?" from wave one (1997), three (1999), and wave four (2000)(0=No, 1=Yes). The being the victim of repeated bullying or being threatened at school variable indicates that the respondent was a victim prior to the age of 19 years old, and the variable was created by combining the question "were you ever the victim of repeated bullying?" from wave 1 (1997) and wave 4 (2000) with the question that asked if during the Fall term of the current school year, someone had threatened the respondent, from wave 1 (1997) (0=No, 1=Yes).

The saw someone shot or shot at with a gun variable indicates that the respondent observed an incident prior to the age of 19 years old, and the variable was created by combining the "Before you turned age 12, did you ever see someone get shot or shot at with a gun?" question from wave 1 (1997) and "Between the ages of 12 and 18, have you ever been shot at, or seen someone get shot or shot at with a gun?" from wave four (2000) (0=No, 1=Yes). If a respondent indicated that they saw someone get shot or was shot with a gun between the ages of

12 and 18, then the respondent is asked their relation to the victim. The victim of a shooting variable indicates that the respondent was the victim of the observed shooting (0=No, 1=Yes).

The second grouping of individual variables are related to prior risk/delinquency behavior and criminal justice interactions, including having a history of running away from home, being a gang member, having been arrested, having been incarcerated, drinking alcohol, and using drugs (marijuana and non-marijuana drugs). These variables measuring prior risk behaviors are expected to increase respondents' assessment of their perceived risk of future victimization. Since individuals who participate in delinquent activities are at a higher risk of victimization, they may have witnessed the increased victimization of other youth who participated in delinquent activities, which in turn may increase their own perceived risk of victimization.

The history of running away variable is based on the "Have you ever run away from home?" question from wave one (1997) through wave four (2000) (0=No, 1=Yes). The gang member variable is based on the "Have you ever belonged to a gang?" question from wave one (1997) through wave four (2000) as well as asking about the respondent's gang member status since the date of the last interview (0=No, 1=Yes). The arrest variable is based on the "Have you ever been arrested by the police or taken into custody for an illegal or delinquent offense (do not include arrests for minor traffic violations)?" question from wave one (1997) through wave four (2000) (0=No, 1=Yes). The prior incarceration variable is based on the respondent indicating that he or she had been incarcerated for the first time at an age less than their age on December 31st of the year prior to the interview (0=No, 1=Yes). The variable indicating that the respondent has had at least one alcohol drink is based on the question "Have you ever had a drink of an alcoholic beverage?" from wave one (1997) through wave four (2000) (0=No, 1=Yes).

The marijuana variable is based on the initial question of "Have you ever used marijuana, for example: grass or pot, in your lifetime?" from wave one (1997) through wave four (2000) (0=No, 1=Yes). The variable indicating that the respondent has used non-marijuana drugs is based on combining the "Have you ever used any drugs like cocaine or crack or heroin, or any other substance not prescribed by a doctor, in order to get high or to achieve an altered state?" question from wave two (1998) through wave four (2000).

The third grouping of individual variables are related to the respondent's perceived future risk and protective factors. Respondents were asked to assess the likelihood of specific risk and protective factors using a variation of the same question "What is the percent chance that you will (specified factor), at least once in the next year?" with results ranging from 0% to 100%. Individuals who predict a higher level of risk behaviors, such as illegal activities that could lead to an arrest, may also expect to have a higher risk of victimization due to the participation in these activities. Predicted future risk behaviors include: being arrested (whether rightly or wrongly) and drinking enough to get drunk.

Predicted future protective behaviors include assessments of the likelihood of being in school, working, or a combination of being in school and working. Reported increase in expected future protective behaviors are expected to decrease respondents' assessment of their likelihood of future victimization. In comparison to individuals who predict a higher level of risk behaviors, individuals who predict a higher level of protective behaviors may assume that these behaviors will insulate them from victimization. Protective factor questions include, "What is the percent chance that you will be a student in a regular school one year from now?", "If you are in school a year from now, what is the percent chance that you will also be working for pay more than 20

hours per week?", and "If you are not in school a year from now, what is the percent chance that you will be working for pay more than 20 hours per week?"

# Family & Friends Variables

Individuals' perceived risk of victimization may be impacted by the people closest to them, such as family and friends. Having family and friends participating in activities related to gang involvement, such as violent victimizations, may increase their vicarious exposure to victimization and thus increase their own perceived risk of violent victimization. This exposure may also condition the relationship between individual-level characteristics and perceived risk of violent victimization. The perceived risk of victimization for individuals who have experienced prior victimization or have participated in delinquent activities may be further increased if they also have family or friends in a gang. The friends or family in a gang variable is based on the "Do any of your brothers, sisters, cousins or friends belong to a gang?" question from wave one (1997) through wave four (2000) (0=No, 1=Yes).

# Community Variables

Individuals' perceived risk of victimization may be impacted by the characteristics of their community. Living in an urban area and living in a neighborhood that appears poorly kept are factors that are may increase the perceived risk of future victimization. Individuals living in an urban area may have an increased perceived risk of violent victimization because of the increased proximity to other individuals, including motivated offenders, found in areas with higher population concentration levels. This increased proximity to others in urban areas may also condition the relationship between individual-level characteristics and perceived risk of violent victimization. The perceived risk of victimization for individuals who experienced prior

victimization or have participated in delinquent activities may be further increased if they live in areas with a higher population concentration. This increased proximity to others found in urban areas may particularly interact with prior victimization due to increased interaction with others whom the individual may view as possible motivated offenders. The urban variable is based on the identification of the respondent's residence as 'Urban' or 'Rural' (0=Urban, 1=Not Urban). If the area was identified as 'Unknown', then the interviewer's assessment of the residence as 'Urban' or not located in an urban area was used as a replacement. The variable indicating that the area the respondent lives in is poorly kept is based on the question "How well kept are most of the buildings on the street where the youth resident lives?" (0=Not Poorly Kept, 1=Poorly Kept), which is asked of the interviewer. In the cases where the interviewer did not provide an assessment of the buildings on the street, then the assessment of the exterior of the respondent's housing unit is used as a replacement.

# **Analytic Strategy**

The analytic strategy includes two sets of OLS regression models: (1) wave four (2000) models using a dependent variable of perceived risk of violent victimization within one year and (2) wave four (2000) models using a dependent variable of perceived risk of violent victimization within five years. For the two sets of models, there are two OLS regressions: (1) base model and (2) base model with interaction terms involving individual-level characteristics and family/friends gang membership at the family/friends level as well as individual-level characteristics and residing in an urban area at the community level.

# **Descriptive Statistics**

On average, respondents assessed their likelihood of violent victimization within one year at 13% and within five years at 17%. Estimates of perceived risk of violent victimization within one year and five years were highly correlated (r=.79). Due to the high level of skew in the estimates of perceived risk of violent victimization within one year (value of 1.656) and within five years (value of 1.331), the values for each dependent variable were transformed using a square root transformation.

The average age of the respondents was 17.98, 51% of the respondents were male, 49% of the respondents identified as White (Non-Black/Non-Hispanic), and 88% of the respondents indicated that they are religious. Overall, 18% of the respondents were victims of a home break in, 33% were victims of bullying or threats at school, 13% saw someone shot or shot at with a gun, and 0.45% had been shot with a gun. Ten percent of the respondents had run away from home, 11% had been in a gang, 19% had been arrested, 2% had been incarcerated. In regards to alcohol and drug use, 43% of the respondents had drank alcohol, 20% had used marijuana, and 14% had used non-marijuana drugs.

On average, respondents predicted that there was a 10% likelihood that they would be arrested in the next year and a 26% likelihood that they would be drunk. Respondents predicted that there was a 75% likelihood that they would be in school in a year, 65% likelihood that they would be in school and working 20 hours per week, and 89% likelihood that they would be working more than 20 hours per week. Overall, 30% of the respondents indicated that they had siblings or friends in a gang, 73% indicated that they lived in a rural area, and 8% lived on streets that had poorly maintained buildings.

## **OLS Regression Results**

Two sets of OLS regression models were estimated using the dependent variables: (1) perceived risk of victimization within one year and (2) perceived risk of victimization within five years. Each set of OLS regression models included a base model and a base model with the addition of interaction terms based on the interaction of individual-level characteristics and family/friends gang membership at the family/friends level and the interaction of individual-level characteristics and residing in an urban area at the community level. No issues of multicollinearity were found in the models based on an examination of the bivariate correlation coefficients.

# One-Year Models

The first set of models (Table 2) estimated the impact of selected variables on the perceived risk of violent victimization within one year. The one-year base model explained 22% of the variance in the dependent variable. Negative significant findings within the one-year base model included gender, race, and the condition of the residential area (p<.05). Male respondents reported lower perceived risk of victimization than female respondents (p<.05). Additionally, black and Hispanic respondents reported lower perceived risk of victimization than white respondents (p<.05). In comparison, being older, having a home that was broken into, having been bullied and/or threatened at school, having used marijuana, predicting a higher likelihood of arrest within the next year, predicting a higher likelihood of being drunk within a year, and residing in an urban area significantly increased the perceived risk of victimization within one year (p<.05).

Table 2 - Perceived Risk of Victimization (1 Year) 2000 Models

, , , , , , , , , , , , , , , , , , , ,	Base	Interaction
(Constant)	-1.19(0.42)*	-1.25(0.43)*
Individual Variables	1.13(0.42)	1.23(0.43)
Age (2000)	0.13(0.02)*	0.14(0.02)*
Male	-0.32(0.06)*	-0.31(0.06)*
Black	-0.47(0.08)*	-0.48(0.08)*
Hispanic	-0.20(0.08)*	-0.22(0.08)*
Other	-0.37(0.15)*	-0.37(0.15)*
Religious (1997)	-0.07(0.09)	-0.06(0.09)
Home was Broken Into (<19 years) (2000)	0.18(0.07)*	0.32(0.16)*
Victim of Bullying (<19 years old) or Threats at School (2000)	0.25(0.06)*	0.26(0.12)*
Saw Someone Shot with a Gun (<19 years old) (2000)	-0.12(0.09)	-0.25(0.20)
Victim of a Shooting (12 - 18 years old) (2000)	-0.24(0.42)	0.90(0.93)
History of Running Away from Home (2000)	0.10(0.10)	0.18(0.21)
Gang Member (2000)	-0.07(0.10)	0.54(0.24)*
Arrest (2000)	-0.14(0.08)	-0.19(0.17)
Prior Incarceration (2000)	-0.26(0.22)	-0.27(0.22)
Drank Alcohol (2000)	-0.07(0.07)	-0.25(0.13)
Used Marijuana (2000)	0.18(0.09)*	0.53(0.18)*
Used Non-Marijuana Drug (2000)	0.09(0.09)	0.16(0.18)
Predicted Likelihood within 1 Year - Arrested (2000)	0.06(0.00)*	0.06(0.00)*
Predicted Likelihood within 1 Year - Drunk (2000)	0.01(0.00)*	0.01(0.00)*
Predicted Likelihood - School in 1 Year (2000)	0.00(0.00)*	0.00(0.00)*
Predicted Likelihood - School & Working 20+ Hours in 1 Year (2000)	0.00(0.00)	0.00(0.00)*
Predicted Likelihood - Work 20+ Hours in 1 Year (2000)	0.00(0.00)*	0.00(0.00)*
Family & Friends Variables	0.00(0.00)	0.00(0.00)
Siblings or Friends in a Gang (2000)	0.10(0.07)	0.25(0.16)
Community Variables	( /	( /
Urban Residence (2000)	0.23(0.07)*	0.26(0.10)*
INTVW - Poorly Kept Buildings on Street (2000)	-0.28(0.11)*	-0.28(0.11)*
Interaction Terms	, ,	, ,
Gang - Siblings-Friends & Home was Broken Into (<19 years)		-0.04(0.15)
Gang - Siblings-Friends & Victim of Bullying (<19 years old) or Threats at School		-0.11(0.13)
Gang - Siblings-Friends & Saw Someone Shot with a Gun (<19 years old)		-0.02(0.18)
Gang - Siblings-Friends & Victim of a Shooting (12 - 18 years old)		-1.46(1.01)
Gang - Siblings-Friends & History of Running Away from Home		-0.14(0.20)
Gang - Siblings-Friends & Gang Member		-0.65(0.21)*
Gang - Siblings-Friends & Arrest		0.11(0.16)
Gang - Siblings-Friends & Drank Alcohol		0.12(0.14)
Gang - Siblings-Friends & Used Marijuana		-0.04(0.17)
Gang - Siblings-Friends & Used Non-Marijuana Drug		-0.27(0.18)
Urban & Home was Broken Into (<19 years)		-0.16(0.18)
Urban & Victim of Bullying (<19 years old) or Threats at School		0.02(0.14)
Urban & Saw Someone Shot with a Gun (<19 years old)		0.18(0.22)
Urban & Victim of a Shooting (12 - 18 years old)		-0.09(0.96)
Urban & Gang Member		-0.22(0.24)
Urban & Arrest		0.00(0.18)
Urban & Drank Alcohol		0.20(0.14)
Urban & Used Marijuana		-0.46(0.20)*
Urban & Used Non-Marijuana Drug		0.07(0.20)
Urban & History of Running Away from Home		0.00(0.23)
Urban & Siblings or Friends in a Gang		-0.03(0.16)
n	7,636	7,636
$R^2$	0.22	0.22

The

one-year base model with interaction terms explained 22% of the variance in the dependent variable. Of the 10 gang-related interaction terms incorporated into the base model, only one finding was significant. The gang-related interaction term involving the respondent being a member of a gang and the respondent having friends and family in a gang negatively correlated with the perceived risk of violent victimization within one year (p<.05). Only one of the 11 urban-related interaction terms added to the base model was significant. The urban-related interaction term involving the respondent having used marijuana and residing in an urban area negatively correlated with perceived risk of victimization within one year (p<.05).

## Five-Years Models

The second set of models (Table 3) estimated the impact of selected variables on the perceived risk of violent victimization within five years. The five-year base model explained 23% of the variance in the dependent variable. Being male was negatively correlated with the perceived risk of victimization within five years (p<.05). Black and Hispanic respondents reported lower perceived risk of victimization than white respondents (p<.05). In comparison, age, having a home that was broken into, having been bullied and/or threatened at school, having used marijuana, having used non-marijuana drugs, predicting a higher likelihood of arrest within a year, predicting a higher likelihood of being drunk within a year, predicting a higher likelihood of being in school within a year, predicting a higher likelihood of working more than 20 hours a week, and residing in an urban area significantly increased the perceived risk of victimization within five years (p<.05).

Table 3 - Perceived Risk of Victimization (5 Years) 2000 Models

	<u>Base</u>	Interaction	
(Constant)	-0.20(0.44)	-0.26(0.45)	
Individual Variables	(- ,	( /	
Age (2000)	0.09(0.02)*	0.09(0.02)*	
Male	-0.15(0.06)*	-0.15(0.06)*	
Black	-0.67(0.08)*	-0.67(0.08)*	
Hispanic	-0.18(0.08)*	-0.19(0.08)*	
Other	-0.40(0.16)*	-0.40(0.16)*	
Religious (1997)	-0.15(0.09)	-0.14(0.09)	
Home was Broken Into (<19 years) (2000)	0.19(0.08)*	0.24(0.17)	
Victim of Bullying (<19 years old) or Threats at School (2000)	0.30(0.06)*	0.28(0.13)*	
Saw Someone Shot with a Gun (<19 years old) (2000)	0.00(0.10)	-0.14(0.21)	
Victim of a Shooting (12 - 18 years old) (2000)	-0.75(0.44)	0.64(0.98)	
History of Running Away from Home (2000)	0.00(0.11)	0.17(0.22)	
Gang Member (2000)	-0.17(0.10)	0.27(0.25)	
Arrest (2000)	-0.11(0.09)	-0.01(0.18)	
Prior Incarceration (2000)	-0.39(0.23)	-0.41(0.23)	
Drank Alcohol (2000)	0.01(0.07)	-0.11(0.13)	
Used Marijuana (2000)	0.19(0.09)*	0.56(0.18)*	
Used Non-Marijuana Drug (2000)	0.22(0.09)*	0.17(0.19)	
Predicted Likelihood within 1 Year - Arrested (2000)	0.07(0.00)*	0.07(0.00)*	
Predicted Likelihood within 1 Year - Drunk (2000)	0.01(0.00)*	0.01(0.00)*	
Predicted Likelihood - School in 1 Year (2000)	0.00(0.00)*	0.00(0.00)*	
Predicted Likelihood - School & Working 20+ Hours in 1 Year (2000)	0.00(0.00)	0.00(0.00)	
Predicted Likelihood - Work 20+ Hours in 1 Year (2000)	0.01(0.00)*	0.01(0.00)*	
Family & Friends Variables	, ,	` ,	
Siblings or Friends in a Gang (2000)	0.13(0.07)	0.43(0.17)*	
Community Variables	, ,	` ,	
Urban Residence (2000)	0.21(0.07)*	0.24(0.10)*	
INTVW - Poorly Kept Buildings on Street (2000)	-0.06(0.11)	-0.06(0.11)	
Interaction Terms	, ,	. ,	
Gang - Siblings-Friends & Home was Broken Into (<19 years)		0.05(0.16)	
Gang - Siblings-Friends & Victim of Bullying (<19 years old) or Threats at School		-0.15(0.14)	
Gang - Siblings-Friends & Saw Someone Shot with a Gun (<19 years old)		0.11(0.19)	
Gang - Siblings-Friends & Victim of a Shooting (12 - 18 years old)		-1.12(1.05)	
Gang - Siblings-Friends & Gang Member		-0.54(0.22)*	
Gang - Siblings-Friends & Arrest		-0.13(0.17)	
Gang - Siblings-Friends & Drank Alcohol		-0.06(0.15)	
Gang - Siblings-Friends & Used Marijuana		-0.08(0.18)	
Gang - Siblings-Friends & Used Non-Marijuana Drug		-0.16(0.18)	
Gang - Siblings-Friends & History of Running Away from Home		0.06(0.21)	
Urban & Home was Broken Into (<19 years)		-0.08(0.18)	
Urban & Victim of Bullying (<19 years old) or Threats at School		0.08(0.14)	
Urban & Saw Someone Shot with a Gun (<19 years old)		0.12(0.23)	
Urban & Victim of a Shooting (12 - 18 years old)		-0.80(1.01)	
Urban & Gang Member		-0.08(0.25)	
Urban & Arrest		-0.06(0.19)	
Urban & Drank Alcohol		0.20(0.15)	
Urban & Used Marijuana		-0.46(0.20)*	
Urban & Used Non-Marijuana Drug		0.16(0.21)	
Urban & History of Running Away from Home		-0.24(0.25)	
Urban & Siblings or Friends in a Gang		-0.13(0.17)	
n	7,633	7,633	
$R^2$	0.23	0.24	The

five-years base model with interaction terms explained 24% of the variance in the dependent variable. Only one of the 10 gang-related interaction terms added to the base model was significant. The interaction term involving the respondent being a member of a gang and the respondent having friends and family in a gang negatively correlated with the perceived risk of violent victimization within five years (p<.05). Of the 11 urban-related interaction terms incorporated into the base model, only one finding was significant. The urban-related interaction term involving the respondent having used marijuana and residing in an urban area negatively correlated with perceived risk of victimization within five years (p<.05).

## Discussion

Overall, the results of this study are consistent with the previous research, with some exceptions. Individual characteristics were found to be predictive of perceived risk of violent victimization within the one year and five years base models. Age was positively correlated with the perceived risk of victimization, though it has to be noted that in this study, the age range is limited, with respondents being between 15 and 21 in 2000. Also, consistent with prior research, male respondents reported lower perceived risk of victimizations than female respondents, which previous studies have partially explained by males being better able to physically defend themselves. Interestingly, one area where the results differed from some prior studies was related to race. Specifically, black and Hispanic respondents perceived a lower risk of violent victimization.

The results also demonstrate that previous personal victimization impacts the perceived risk of future victimization in the base models as suggested by prior research (Taylor & Hale, 1986). Specifically, prior victimization experiences of having been bullied and/or threatened at

school and having had a home broken into increased the perceived risk of violent victimization within one year and five years. Once an individual is victimized, it is possible that this will create for the victim the impression that they are more vulnerable for future victimization as compared to someone who has not had a personal experience of being victimized. Considering the amount of time that youth spend at home and at school, prior victimizations in these locations may increase the impact on perceived risk of victimization, particularly since home is a place that an individual should feel safe.

Prior research has indicated that lifestyle characteristics, such as consuming alcohol and drugs and committing crimes, influence fear of crime (Fisher et al., 1998; Lasley, 1989; Mustaine, 1997). For the most part, the findings for these factors, including being a gang member, consuming alcohol, prior arrests, and prior incarceration, were not significantly related to the perceived risk of victimization in the base models. However, having used marijuana was found to significantly increase the perceived risk of violent victimization within both one year and five years. Approximately 20% of the sample indicated prior marijuana use. In 2000, marijuana was illegal to buy for personal, non-medical use, thus the experience of procuring marijuana may influence this result. According to routine activities theory, illicit activities, such as buying marijuana illegally, place potential targets in vulnerable situations for victimization and can increase victimization and in turn perceived risk of future victimization. Interestingly, in the years since the collection of these data, several states have legalized the purchase of small amounts of marijuana for personal use, which may impact the influence of having used marijuana on perceived risk of future victimization for young adult and adult populations but less so for youth who are not old enough to buy marijuana legally in these states.

The current study expands on prior research by also examining the impact of predicted risk and protective factors on the perceived risk of violent victimization within one year and five years. Prior research found that alcohol use and criminal activity increased fear of crime. In this study, respondents were asked to assess their perceived risk of using alcohol within a year (26%) and being arrested within a year (10%). Both factors significantly increased the perceived risk of violent victimization within the next year and five years in the base models. Keeping in mind that most of the respondents were not yet able to drink legally, both of these factors indicate an intent to commit illegal actions, which can place the respondents at an increased perceived risk of victimization.

This study further builds on prior research by investigating the interactive impacts of individual behavior and the behavior of family and friends. A series of interaction terms were created involving individual characteristics and the respondent having friends and family in a gang. It is expected that having family and friends in a gang will further increase the perceived risk of victimization for individuals who have experienced prior victimization or have participated in delinquent activities due to the possible increase in exposure to victimization associated with the gang activities of their family and friends. The possible exception to these hypotheses would be the expected interactive impacts of being a gang member and having family and friends in a gang.

In comparison to the other individual-level characteristics, a logical argument could be made to hypothesize both a positive and a negative relationship between gang membership and perceived likelihood of future violent victimization. Due to the exposure to violence that is part of being in a gang, a positive relationship between gang membership and the perceived risk of future violent victimization could be hypothesized. However, if the gang provides a protective

element for the gang member, then being a gang member could be hypothesized to decrease the perceived risk of violent victimization. Having family or friends in the gang is expected to moderate the relationship between being a gang member and perceived likelihood of violent victimization. Specifically, if gang membership provides a protective element, then additional ties to the gang through family and friends is expected to increase this protective element.

Of the 10 gang-related interaction terms, only the interaction term involving being a gang member and having family and friends in a gang was significantly related to the perceived risk of violent victimization within one year and five years (p<05). According to the base model, neither being a gang member nor having family or friends in a gang was significantly correlated with the perceived risk of violent victimization within one year or five years. However, in both cases, the result of the interaction term was negative and significant (p<.05). This result indicated that having family and friends in a gang moderates the relationship between being a gang member and perceived risk of victimization; specifically, it decreased predictions of future violent victimization for gang members who also have friends and family in a gang.

In addition to examining the interactive impacts of individual behavior and the behavior of family and friends, this study also incorporates a series of interaction terms that were created involving individual characteristics and residing in an urban area. It is expected that residing in an urban area will further increase the perceived risk of victimization for individuals who have experienced prior victimization or have participated in delinquent activities due to increased proximity with others, but more specifically with the increased proximity to those who may be viewed as possible motivated offenders. Of the 11 urban-related interaction terms, only the interaction involving the respondent having used marijuana and residing in an urban area was

significantly related to the perceived risk of violent victimization within one year and five years (p<.05).

According to the base model, both having used marijuana and residing in an urban area significantly increase the perceived likelihood of violent victimization within both one year and five years (p<.05). Interestingly, in both the one year and five years models, the result of the interaction term was negative and significant (p<.05). This result indicated that residing in an urban area moderates the relationship between having used marijuana and the perceived risk of violent victimization. Specifically, it decreased the perceived risk of violent victimization for individuals who have used marijuana and reside in an urban area. One possible explanation is that marijuana use may be more accepted in urban areas, thus the impact of having used marijuana on the perceived risk of violent victimization may be decreased based on location, specifically between urban and non-urban areas.

The results of this study may be useful for policymakers who want to reduce individual perceived risk of victimization. Of particular interest to policymakers may be the finding that having been bullied or threatened at school increased the perceived likelihood of victimization. Programming and interventions that address the root causes of bullying within schools as well as school policies that effectively address the handling of bullying or victimization may reduce the bullying and victimization that occur on school campuses. In turn, the decrease in experienced or witnessed bullying or victimization on campus may reduce the perceived risk of future violent victimization. Along the same lines, it may also be useful information to policymakers that increased perceived likelihood of alcohol use and being arrested in the next year was associated with an increase in the perceived likelihood of violent victimization. Programming and interventions that are targeted at reducing individual participation in underage drinking or

delinquent or criminal behavior may in turn reduce the perceived risk of victimization for participants.

## Conclusion

The purpose of this study was to examine the impact of individual-level, family/friends-level, and community-level factors on the perceived likelihood of violent victimization in youth. Findings suggest that individual-level variables are important in the understanding of perceived future victimization, but that further study is needed to determine the impact of contextual factors, specifically family and friends as well as community.

This study contains several limitations. First, the data are from between 1997 and 2000 and therefore it is possible that other factors would have an impact in current society. However, this limitation must be weighed against the value of the information related to the perceived risk of victimization for youth as much of the victimization research has focused on young adults and adults. Second, the variables indicating past alcohol and drug use, past criminal behavior, and past criminal justice system and juvenile justice system involvement are based on simple dichotomous yes/no measures and do not take into account the extent of involvement. Finally, the variable regarding the condition of the surrounding area, specifically if it was well-kept, is based on the interviewer's perspective and not the perspective of the respondent. Despite these limitations, this study contributes to the existing literature of perceived risk of victimization.

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### **A Commentary**

## To Tell the Truth: What Are the Real Numbers Related to COVID-19 Deaths?

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#### **Over-reported or Under-reported Results?**

In 2020, the local weather, national disasters, and even the winner of the World Series took the backseat to the coronavirus pandemic. Nearly every news channel on the television had a ticker highlighting the number of COVID-19 cases, hospitalizations, and deaths. The COVID-19 statistics appeared to create gloom and doom. The statistics for the number of COVID-19 deaths made it look like people were dropping dead as if the apocalypse had arrived. Since the information was being reported by the local and state governments and passed onto the Centers for Disease Control and Prevention (CDC) to report, must the statistics be accurate? There are many variables that influence the reliability of the number of COVID-19-related cases, hospitalizations, and deaths. The number of deaths could be more or less than what is being reported. The purpose of this commentary is to explore various reasons why the number of deaths reported to the public may not be as accurate as perceived.

Pathologists in a coroner- or a medical examiner-system may take different avenues when determining the cause of death of a deceased person. The pathologist may perform a full autopsy, a limited autopsy, an external examination, or a "sign out." A full autopsy includes an examination of the head, chest, and abdomen, a review of toxicology, and histology or microscopic examination of the structure of tissues (some autopsies may include more). A

limited autopsy focuses only on a specific area of the body. An external examination involves the pathologist only viewing the outside of the body and possibly drawing fluids for toxicology. A "sign out" involves simply reviewing case information and then deciding the cause of death without seeing the body. It is at the sole discretion of the pathologist to determine the extent of the postmortem examination. With most apparent natural deaths, medical records are reviewed, and information is obtained from the family. If the deceased had no medical history, then the pathologist must rely only on interviews from family. Since the pathologist will then be deciding on the cause of death based on limited information, the death could be categorized as being COVID-19-related when in actuality it could be related to some other underlying natural disease process.

An open records request was sent to the Fulton County Medical Examiner's Office (FCMEO) in Atlanta, Georgia to obtain data related to the number of COVID-19 deaths and the extent of related autopsies for the time period of March 1, 2020 to December 31, 2020. FCMEO certified a total of 29 COVID-19-related deaths during the requested time period. Of the 29 deaths, 27 deaths had "complications of the COVID-19 infection" listed as the primary cause of death. Full autopsies were performed on 2 of 29 (6.8%), while 1 of 29 (3.4%) had a limited autopsy. "Sign outs" and external examinations accounted for 26 of 29 (89.6%) of the cases certified by the forensic pathologist. No information was available to determine whether the cases that were "sign outs" or external examinations had specimens submitted for COVID-19 testing or whether the decedent had a recent positive COVID-19 test preceding death.

Are the number of COVID-19-related deaths being padded by hospitals due to subsidization by the federal government? Many articles exist agreeing and disagreeing with this notion. An interview by Laura Ingraham of Dr. Scott Jensen, a family physician in Minnesota,

explained that hospitals were receiving a subsidy of \$13,000 for a patient with apparent COVID-19-related health problems and \$39,000 if the patient was placed on a ventilator (Fox News, 2020). Dr. Jensen continued on to explain the pressure placed on how death certificates were signed by listing COVID-19 as the cause of death due to a particular area being a "hot bed" despite the patient having something similar to influenza or another condition. If a person was struck by a bus, transported to the hospital, diagnosed with a collapsed lung, and also COVID-19 positive, the death certificate would indicate that COVID-19 caused the collapsed lung that resulted in the death and not the blunt force trauma that directly caused the collapsed lung, explained Dr. Jensen (Fox News, 2020).

Based solely upon the interview of Dr. Jensen, on the surface, it appeared that hospitals were possibly committing fraud when listing the cause of death. Dr. Jensen was referring to Medicare payments for COVID-19 hospitalizations. The U.S. Department of Health and Human Services (HHS) is using a portion of the \$175 billion Provider Relief Fund to pay for uninsured patients with COVID-19-related health problems (U.S. Department of Health and Human Services, 2020). Currently, no evidence suggests that hospitals are fraudulently reporting COVID-19-related patients for reimbursement.

The CDC provided instruction to physicians and pathologists on how COVID-19 deaths should be declared. In April of 2020, the National Vital Statistics System (NVSS) (2020) issued guidance for certifying deaths due to COVID-19. Due to the general difficulty of completing a death certificate accurately, the NVSS has training designed for completing death certificates correctly. The most important aspect to remember about the information on a death certificate is that it is the medical opinion of the physician, medical examiner, or coroner based on the available information such as the presence or absence of a positive COVID-19 test.

At the beginning of the pandemic, there was a high priority on testing. The different types of available tests are diagnostic and antibody. The diagnostic test will identify if a person has an active COVID-19 infection. The antibody tests identify the presence of antibodies in the immune system. The tests are not perfect. There have been reports of individuals receiving false positive results. Could this inflate the number of cases, hospitalizations, and deaths reported daily? Even the Food and Drug Administration (FDA) (2021) stated, "The FDA cautions patients against using the results from any serology test as an indication that they can stop taking steps to protect themselves and others, such as stopping social distancing or discontinuing wearing masks" (para. 38). One could assume that the quality and speed of test results improved over time.

The CDC (2020) issued further guidance on the collection and submission of postmortem specimens from deceased persons with confirmed or suspected COVID-19. "Medical examiners, coroners, and other healthcare professionals should use professional judgment to determine if a decedent had signs and symptoms compatible with COVID-19 during life and whether postmortem testing is necessary" (CDC, 2020, para. 4.). The previous statement further cements the notion of relying on professional opinion and the available information at the time of examination of the deceased to whether specimens would be collected to test for COVID-19. Limited or bad information may result in a death being categorized as a COVID-19 death when in fact it is not.

David Oliver (2021) wrote an acute perspective article related to the mistruths and misunderstandings about COVID-19 death numbers. In the article, Oliver (2021) provided a quote that sums up the conundrum of the accurate number of COVID-19-related deaths, "[p]eople are not dying from, but with, COVID-19. Deaths classified as from COVID-19 result from largely false positive polymerase chain reaction (PCR) test results." (p. 1). Oliver (2021)

was referring to the deaths in England and the Wales, but his comment can be applied to the classification of deaths in the United States.

According to an editorial by Osmani (2020), Iran has similar issues related to the accurate reporting of COVID-19 statistics. Some issues addressed by Osmani (2020) included structural flaws to the collection and reporting of COVID-19. Similar to the United States, Iran had limitations with reliable diagnosing tools and the possible undercounting of patients due to the reliance of PCR results. The World Health Organization declared that the COVID-19 statistics were limited to one-fourth of the real number of patients (Osmani, 2020).

Did the decedent die *with* COVID-19 or *of* COVID-19? In Colorado, the discrepancy in the number of COVID-19 deaths is the result of people dying *with* COVID-19 versus *of* COVID-19 (Pappas, 2020). Colorado is following the federal reporting guidelines requiring their state health department to report any positive COVID-19 deaths to the CDC. This is the case even if the cause of death was not due to COVID-19. The certainty of over- or under-reporting of COVID-19-related deaths remains unclear.

In Florida, Tatar et al. (2021) analyzed the excess deaths during the COVID-19 pandemic. Tatar et al. (2021) forecasted the monthly deaths from January to September of 2020 in the absence of the pandemic. Then, a comparison was made with monthly recorded deaths and estimated deaths during the COVID-19 pandemic and deaths only from COVID-19 to measure excess deaths in Florida. The conclusions drawn from the study suggested that the total deaths were significantly higher than historical trends even when accounting for COVID-19-related deaths. Tatar et al. (2021) argued that the impact of COVID-19 on mortality was significantly greater than what COVID-19 data suggested.

There are several studies related to the overcounting of COVID-19 deaths, but what about undercounting? Krieger (2021) addressed the inequities related to COVID-19 deaths. The author suggested that individuals who lack health insurance or elders who lack access to adequate care may not get tested for COVID-19 or hospitalized for COVID-19. Krieger (2021) argued that the population most likely to be undercounted included the Black, Indigenous, and Latinos due to the lack of health insurance and the inability to receive adequate healthcare.

#### **Impact of COVID-19 on Criminal Justice**

The Council on Criminal Justice (CCJ) (2020) set out to identify the most effective measures to contain COVID-19 and produce an agenda of long-term policy changes to better balance public health and public safety. The Commission identified five key findings and provided recommendations for each.

The first finding identified was the ill-preparation of criminal justice agencies for a public health crisis such as the COVID-19 pandemic. The recommendation to overcome the lack of preparation is to engage all components of the criminal justice system with public health officials and community-based organizations and creating a crisis response plan (CCJ, 2020).

The criminal justice system is expansive to include law enforcement, courts, and corrections. The second finding was the absence of an effective public health coordination for such a large system to prevent and control COVID-19 (CCJ, 2020). The recommendation for improving the second key finding is to rebalance the public health and criminal justice responses in order to limit contact, maximize distance, and reduce density across the criminal justice system (CCJ, 2020).

The third key finding was the lack of consistency and variation among criminal justice agencies impeding responses to the COVID-19 pandemic (CCJ, 2020). The recommendation to overcome the inconsistencies in response to a pandemic is the adoption of shared standards and best practices for responding to public health emergencies (CCJ, 2020).

The fourth finding was the inability for criminal agencies to respond expeditiously to the pandemic due to the lack of reliable data and rigorous research (CCJ, 2020). The CCJ (2020) recommended increasing research and standardizing and collecting public health data concerning criminal justice involved populations.

The fifth and final key finding was the lack of transparency and lack of communication hindering criminal justice agencies' responses to the COVID-19 pandemic (CCJ, 2020). In order to overcome the fifth key finding, CCJ (2020) recommended developing and investing in reliable channels of communication to improve communication and increase transparency.

#### **Conclusion**

The exact number of COVID-19-related deaths will never be known. It would be safe to say that the only COVID-19-related deaths known are those who tested positive (alive or deceased), but that does not necessarily correlate with being the immediate cause of death when an underlying condition already exists. As mentioned earlier, there are many different reasons why the COVID-19 death count may not be accurate. On the positive side, the pandemic has opened the eyes of others to identify the shortcomings of the criminal justice system and providing recommendations to improve their response to another public health crisis thus preventing future deaths.

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# The Pursuit



The Journal of the Criminal Justice Association of Georgia