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COLLEGE STUDENTS' PERCEPTIONS OF LEGITIMACY IN POLICE USE OF
FORCE INCIDENTS

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ABSTRACT

This thesis explores how three primary variables (Race of the Police Officer, Race of the Suspect, and Level of Suspect Resistance) in vignette experiments affects college students' perceptions of legitimacy in police use of force incidents. The study is a 2 x 2 x 3 subject experiment design as there are two levels for Race of the Police Officer (Black and White), two levels for Race of the Suspect (Black and White), and three levels for Suspect Resistance (Unarmed, Knife and Gun). The dependent variable is the college students' perception of legitimacy measured through questions of justification about the police officer's use of force. The participants in this study were 373 undergraduate students from four introductory-level criminology classes at The Pennsylvania State University. The findings demonstrate that suspect resistance is significant in predicting perceptions of legitimacy in police use of force incidents while suspect and officer race are not significant. Respondents that are males, from rural hometowns, multiracial, and have positive attitudes of police were more likely to perceive officer use of force as legitimate in all vignette scenarios. The implications of these findings for police-community relations and police use of force policies are discussed.

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Chapter 1

Introduction

Police use of force incidents involving African American victims have received considerable news coverage in recent years exhibited notably through the deaths of George Floyd, Breonna Taylor, Philando Castile, Tamir Rice and Alton Sterling. These events have led to widespread domestic and international protest that reflect the general distrust that minorities, specifically Blacks, have for the police (Jones 2015; 2020; Tyler 2005; Huang & Vaughn, 1996). Research illustrates that race and gender play key roles in shaping attitudes about police and police use of force (Thompson & Lee 2004; Lloyd 2020). A 2020 Gallup Panel Web study found that fifty-nine percent of Blacks reported having a positive overall experience with police in the last year compared to seventy-nine percent of Whites (Lloyd 2020). Additionally, analysis of the 1998 General Social Survey shows that racial minorities and women were more likely to disapprove of police striking citizens (Thompson & Lee 2004). Women were sixty-seven percent less likely than men and blacks were fifty-three percent less likely than whites to approve of a police officer hitting an escaping citizen (Thompson & Lee 2004). While studies demonstrate a pronounced racial difference in perceptions of police use of force, there are not many that pay attention or manipulate the race of the officer or the suspect to measure citizens' attitudes about police violence. Furthermore, the studies that do manipulate these variables tend to manipulate the race of the officer or suspect, few examine both. Additionally, these studies do not account nor manipulate the level of suspect resistance. This substantial gap in the literature undermines

the validity and generalizability of the studies as they are sporadic and implement different methods.

This study seeks to fill this cavity in literature by examining how perceptions of police use of force incidents are shaped by micro-level characteristics of police-citizen interactions. In this research experiment, I administer police use of force vignette surveys to college students in introductory-level criminology courses to measure their perceptions of legitimacy in police shootings. I accomplished this by manipulating the Race of the Police Officer, Race of the Suspect and Level of Suspect Resistance. Questions following the vignette target participants' attitudes about police, experience with procedural justice, participants' level of racism, code of the street, and demographic information.

Chapter 2

Literature Review

Police Use of Force

Police use of force is often defined and measured through a continuum structure that can implement a linear, modified linear or matrix approach (Terrill & Paoline 2012). This means that police use of force is measured as a wide variety of actions and not simply one action by a police officer. These actions range from: the presence of an officer, an officer speaking to an individual (verbal restraint), an officer punching an individual (physical restraint), an officer using a Taser or pepper spray on an individual (less lethal force), and ultimately an officer shooting an individual (lethal force) (NIJ 2020). Individual police departments decide whether they list a continuum in their policies and they choose the type they list. Despite the absence of a universally agreed upon definition of force, the National Institute of Justice (2020) states that all police officers should only use the amount of force necessary to mitigate an incident, make an arrest, or protect themselves or others from harm. They also emphasize that “use of force is an officer’s last option” and that context is important to the decision to use force or not.

The constitutional precedent that governs police use of force is *Graham v. Connor* which ruled: “reasonableness of a particular use of force must be judged from the perspective of a reasonable officer on the scene rather than with the 20/20 vision of hindsight” (Obasogie 2020). Researchers constantly point to the broadness and ambiguity that this case sets as it does not specify what situation police officers can use force nor what constitutes a reasonable officer

(Garrett & Stoughton 2017; Obasogie & Newman 2019; 2019; Terrill & Paoline 2012; Klinger & Brunson 2009). Garrett and Stoughton (2017) assert that the doctrine is notoriously opaque and fact dependent thus providing little meaningful guidance to police officers and rarely resulting in compensation to persons injured by officers. Obasogie and Newman (2019) agree with this perspective and add that the ‘objective reasonableness’ standard contributes to the perpetuation of police excessive force in minority communities. They argue this because *Graham v. Connor* was not decided under the Fourteenth Amendment which has the potential to be capable of dealing with group-based harms and structural oppression under its “equal protection” and substantive “due process” clauses. In their qualitative examination of two hundred and fifty federal cases of excessive force claims before and after *Graham v. Connor* in 1989, they found that while only twenty-eight percent of cases referenced the Fourth Amendment prior to the precedent, an astounding ninety percent of cases have referenced the amendment since (Obasogie & Newman 2019). Thus, they believe that the lack of specificity of the standard and the “Court’s doctrinal choice in analyzing claims of excessive force primarily under the Fourth Amendment” has in part led to a pattern of excessive force in communities of color.

Frank Zimring’s *When Police Kill*, likewise underscores the importance of changing the specific procedures that determine police use of force specifically deadly force (2017). Zimring stresses that “clear restrictions on when lethal force can be used” and “clear mandates on when a shooting should stop after it begins” are key to lessening the frequency of police violence especially for African Americans who are 2.3 times more likely to be killed by police than Whites (Zimring 2017). This not only explains how police use of force can be addressed, but it also highlights the significance of addressing police violence for minorities as they are disproportionately affected. Research on police use of force and shootings consistently

demonstrate racial disparities that show Blacks are more likely than Whites to be subjected to police violence (Walker et al. 2018; Edwards et al. 2018; 2019; Smith & Holmes 2014; Jacobs & O'Brien 1998; Kramer & Remster 2018). Data gathered from Fatal Encounters from 2012 to 2018, a public web-based database, shows that Blacks are 3.2 to 3.5 times more likely to be killed by police than White men and that Latino men are 1.4 to 1.7 times more likely to be killed by police than White men (Edwards et al. 2018). They also found that risk is high in large urban metropolitan areas, but also significant in smaller and rural metropolitan locations (Edwards et al. 2018). This study is limited though as it relies upon a database that collects its data from public records and media reports leading to a significant undercounting of deaths, but it is still more reliable than other collection databases from the Bureau of Justice Statistics or the Federal Bureau of Investigation (Edwards et al. 2018).

Research on explanations for racial disparities in policing and police use of force is more mixed. Some studies believe that race is an influential variable in police use of force due to implicit bias (Nix et al. 2017; Payne 2001; Kahn et al. 2017). A study of 990 police shootings compiled by The Washington Post in 2015 examined the data for evidence of implicit bias by measuring whether the civilian was attacking the officer(s) or others before being shot and whether the civilian was unarmed (Nix et al. 2017). Findings reveal that “other minority groups” (Blacks, Latinos, Pacific Islanders and Mixed) were significantly more likely than Whites to not have been attacking the officer(s) or other civilians right before being shot. Furthermore, Blacks were more than twice as likely as Whites to have been unarmed when they were fatally shot by police (Nix et al. 2017). While this study also relied on a database that collects its data based on public information and news reports, it is evidence that suggests race and implicit bias may lead officers to fatally shoot Black civilians more than White civilians. Another study examined 139

use of force case files from a large urban police department to examine disparities in the application of force during police-citizen interactions (Kahn et al. 2017). The study found that Black and Latino suspects received more force earlier in their interactions with police than White suspects did indicating that officers exercised different levels of discretion based on suspect race. Data also showed that when Blacks and Latinos resisted, they received significantly more force than Whites, a suggestion that perceived threat from racial minorities is greater than that of Whites (Kahn et al. 2017). This is due to the widespread stereotype that Blacks and Latinos are criminals, aggressive and dangerous thereby justifying more force (Payne 2001; Wilson et al. 2017). The researchers note that the study is limited as it is from a west coast police department that might not be representative of cities nationwide and the data was only from the perspective of the officer and not the suspect.

Research that considers the interaction of the race of the suspect and neighborhood context to explain racial disparities in police use of force is much more prominent in the literature. One research project used data from the Mapping Police Violence database that collected statistics from 2013 to 2015 on police shootings of suspects thought to be unarmed and correlated this to a structural racism index (Mesic et al. 2018). This index measured indicators of structural racism in the form of residential segregation, incarceration rates, educational attainment, economic indicators, and employment status (Mesic et al. 2018). The results demonstrate that the state racism index was a significant predictor of the racial disparity of police shootings. Specifically, residential segregation, economic indicators, and employment status were significant positive predictors of the racial disparity in police officers shooting suspects thought to be unarmed (Mesic et al. 2018). Nationally, unarmed Blacks were shot at a rate 4.5 times higher than Whites (Mesic et al. 2018). Another study completed by Jacobs and O'Brien

(1998) that analyzed one hundred and seventy cities found that elevated levels of civilian violence, female-headed families, poverty, and a large population of Blacks had increased rates of police shootings of Black civilians. This illustrates the importance of not only the race of the citizen, but the socioeconomic conditions of the area in explaining why police are more likely to use force against Blacks than Whites. It also provides evidence for the minority threat hypothesis which states that the greater the proportion of minority residents in a city, the greater the use of coercive crime control mechanisms because the police will view the growing number of minorities as a threat (Jacobs & O'Brien 1998; Smith & Holmes 2014). Therefore, it is essential to acknowledge how the racial disparity in police use of force may shape perceptions of police legitimacy especially by race of the respondent.

Attitudes towards Police

Overall, research on perceptions of police illustrate a significant difference in opinion between Blacks and Whites. Gallup's annual poll on Americans' confidence in U.S institutions reported that fifty-six percent of White adults report having confidence in the police while only nineteen percent of Black adults are confident in the institution (Jones 2020). This stark contrast marks the largest racial gap reported in the poll for confidence in any of the sixteen U.S institutions for 2020. What is more, Gallup states that there have been "persistent, wide racial differences in Americans' confidence in the police since adding it to the roster of institutions measured in 1993" (Jones 2020). Researchers have attempted to explain these vast racial differences in perceptions of the police through race, class status, age, gender, neighborhood contexts, personal and vicarious experiences with police officers, and exposure to mass media

coverage of police behavior (Thompson & Lee 2004; Sethuraju et al. 2017; Weitzer 1999; Weitzer & Tuch 2004; 2005; Gau & Brunson 2009; Barkan & Cohn 1998).

Research on perceptions of police generally agree that the race of the individual perceiving the police is an important and predictive variable for determining attitudes towards police (Thompson & Lee 2004; Weitzer 2002; 1999; Hurst et al 2000; Hurst & Frank 2000; Brown & Benedict 2002; Tyler 2005; Decker 1981). Research completed by Tyler (2005) examined the effect public trust in the police has on public willingness to cooperate with them, and the relationship of police practices to trust in the police. A multiethnic sample of New Yorkers interviewed over the phone reported their opinions regarding their trust and willingness to cooperate with police, and perceptions of police procedural fairness. While findings indicated a moderately positive level of trust with the police, minority-group members were reportedly more distrustful of the police with African Americans reporting the lowest level of trust. Moreover, although high levels of cooperation were also reported, African Americans ranked last while Whites ranked first in willingness to cooperate with police. Tyler (2005) found that both Whites and African Americans viewed the police engaging in racial profiling and harassment as a strong predictor of perceptions of procedural justice. White and African American respondents were more likely to view the police as less procedurally fair if they believed the police had engaged in racial profiling. This highlights another way that race can affect perceptions of police and their legitimacy. It also accentuates how perceptions of procedural fairness can establish or diminish relationships between the police and the public specifically when involving potentially race-based policing tactics.

Procedural justice is accomplished through four integral tenets: treating citizens with respect, allowing them to voice any comments or concerns during interactions, making decisions

that are unbiased and factually based, and presenting oneself as trustworthy and sincere (Tyler & Wakslak 2004; Gau & Brunson 2009). These practices are important for police officers to satisfy because of the lasting consequences they have on police-community relations. Research has illustrated that procedural justice policing can improve perceptions of police legitimacy, reduce police use of force, and complaints against officers (Wood et al. 2020; Tyler et al. 2015). Police legitimacy is established through public trust and confidence in the police, the willingness of the public to defer to police authority, and the public belief that police action is morally justified and appropriate (Tyler 2014; Kahn & Martin 2016). This means that if police officers treat citizens with respect and give them opportunities to speak freely, they can foster trust and confidence within the communities they police. Moreover, officers could lower the number of complaints made against them and potentially avoid dangerous situations that would require them to use force.

Another research project done by Thompson and Lee (2004) underscores the salience of race in predicting perceptions of police legitimacy in incidents of force. They used responses to the 1998 General Social Survey to examine if the conflict perspective explains what demographics are more likely to approve of police use of force. The results show that minorities and women were more likely to disapprove of a police officer hitting a citizen with Blacks expressing more negative attitudes than Whites regarding police violence (Thompson & Lee 2004). While this study is important evidence as to why respondent race and gender are significant in perceptions of police use of force, it is limited in that its scenarios of police violence are minor. It does not measure the difference in attitudes towards police violence when an officer applies less than lethal force or uses deadly force. These differences in severity are critical to measure because high profile incidents of police use of force commonly involve an

officer shooting a citizen as seen in the cases of Tamir Rice, Breonna Taylor, Alton Sterling, and Terence Crutcher (Kahn & Martin 2016). When measuring perceptions of police use of force, the examples and questions should resemble real life incidents to accurately obtain attitudes.

Other research on attitudes about police point to an interplay between race, class, and neighborhood similar to studies that seek to explain the racial disparity in police use of force through these factors. A qualitative analysis of one hundred and sixty-nine residents from three neighborhoods in the District of Columbia exemplified how race and neighborhood can shape attitudes and experiences with police (Weitzer 1999). The results show that Black and White middle-class residents were less likely to perceive and experience police abuse in comparison to Black lower-class residents. Police abuse was measured by asking respondents about their experiences and perceptions of unjustified street stops, verbal abuse, and use of excessive force. Specifically, while almost all White and Black middle-class residents stated that police never or only occasionally use excessive force, Black lower-class residents were significantly more likely to perceive use of excessive force as frequent (Weitzer 1999). More findings that control for individual-level variables such as: age, gender, class, race, and education reveal that neighborhood-class explains thirty-seven percent of perceptions and experiences of police misconduct in comparison to neighborhood-race which accounts for twenty-nine percent, and individual-level traits which explains twenty-eight percent (Weitzer 1999). These results stress the prominent role of the socioeconomic status of the neighborhood over the neighborhood racial composition or individual traits in shaping attitudes and experiences about police abuse.

It is worthy to note that individual race was salient in examining which residents were more likely to be stopped outside of their neighborhood in this study. Middle-class Black residents were more likely than lower-class Black residents and middle-class White residents to

be stopped outside of their neighborhood (Weitzer 1999). This provides evidence to the “Blacks out of place” theory (Brunson 2005; Wilson 1972) that states “Blackness conceals, for many police officers, the important differences in social class and respectability among blacks”. Therefore, when middle-class Blacks travel outside of their neighborhood, they are no longer protected by the respectability of living in a middle-class community that does not experience police misconduct as frequently as lower-class Black neighborhoods. Middle-class Blacks described being stopped for minor traffic violations that they otherwise would not be stopped for inside their neighborhood and attributed this to the difference in power of the neighborhoods (Weitzer 1999). While middle-class Blacks and Whites believed the police had little opportunity to abuse their power and would suffer from widespread community outrage if they did due to the social standing of residents, lower-class Blacks believed they lacked the capacity to hold officers accountable because of their lower economic status (Weitzer 1999). This study is limited in that the sample sizes of the neighborhoods are not large, there is no examination of attitudes from a lower-class White neighborhood, and there were only a small number of White and Black respondents from the majority Black and White neighborhoods respectively. The inclusion of more White respondents within the Black lower and middle-class neighborhoods and more Black respondents in the White middle-class neighborhood could improve the validity of the findings that neighborhood-class is a stronger predictor than neighborhood-race. Nonetheless, the findings demonstrate a clear interaction between neighborhood-class, neighborhood-race, and individual characteristics which emphasize that other variables are capable of being predictors of perceptions on police and police use of force.

One study that examined the perceptions of forty young Black men residing in disadvantaged urban neighborhoods illustrates the effect that neighborhood conditions, vicarious

and personal experiences with police officers, and race can have on perceptions of police and their legitimacy (Brunson & Miller 2005). Neighborhood disadvantage was measured through level of racial segregation, and disproportionate rates of poverty, unemployment, and female-headed households in a community. They found that eighty-eight percent of respondents reported being harassed or mistreated by police and ninety-three percent reported knowing someone that had been harassed or mistreated by police (Brunson & Miller 2005). Respondents perceived themselves as symbolic assailants (Anderson 1990) and believed that they were unfairly targeted by police because of their race and neighborhood. They were especially resentful of being stopped in law-abiding contexts such as when they traveled to school or were standing outside their residence and frequently reported that officers used antagonistic language, cursed at them, and used racial epithets (Brunson & Miller 2005). The researchers found more negative views of police and police legitimacy when these young Black men believed they were unjustifiably stopped, subjected to disrespectful language, and knew people who had been mistreated by police (Brunson & Miller 2005).

Correspondingly, a qualitative examination of perceptions of police legitimacy from forty-five Black and White male adolescents living in impoverished St. Louis neighborhoods added to the previous study by demonstrating how vicarious and personal experiences across races shape attitudes about police (Gau & Brunson 2009). Researchers found that order maintenance policing which greatly relies on discretionary stops for minor and suspected offenses produced dissatisfaction with police. Although White adolescents had less troubled relationships with police and more positive views than Black adolescents, almost half of all participants experienced direct police harassment and sixty percent knew someone that was treated poorly by police (Gau & Brunson 2009). Black participants were more likely to report

disrespectful language during stops that they believed were unjustified and that they were more likely to talk back to officers that approached them in an unprofessional manner (Gau & Brunson 2009).

These findings match those of another study that examined perceptions of Black and White residents living in fragile communities which refers to geographic areas with concentrated poverty, and limited educational and economic opportunities according to US census data (Lloyd & Naguib 2020). Researchers found that young Black adults were not only twice as likely as the national average to know “some” or “a lot” of people who were treated unfairly by police, but that this directly translated into a decrease in confidence in police and a greater likelihood of perceiving unfair treatment from police (Lloyd & Naguib 2020; Lloyd 2020). Despite the persistence of a racial disparity in perceptions, these studies signify the role that location plays in police practices and treatment of citizens. Perceptions of mistreatment are not simply limited to Black citizens as the data demonstrates that when White adolescents and adults know people who have been mistreated by police, they are more likely to experience mistreatment themselves. Thus, it is important to measure vicarious and personal experiences with police when examining perceptions of police legitimacy to account for outside factors that assist in shaping these attitudes.

Race of the Police Officer

Research examining the effect of officer race on perceptions of legitimacy in police use of force events is dated and scarce. While there is a slowly growing body of literature on the role that officer race plays in general attitudes towards police and police satisfaction, there are few

studies that manipulate the race of an officer in an incident of police use of force. One such example is an experiment that tested the effect of officer race on perceptions of violence and illegality during a police arrest (Levin & Thomas 1997). Researchers produced three videotapes that involved two officers using slight, but legal force against a Black citizen to arrest them. The race of the officer varied as two White officers, one Black officer and one White officer, and two Black officers were used in the three videotapes. Twenty-eight White and thirty-three Black college students from Northeastern University participated in the experiment. The findings demonstrate that the respondents were significantly more likely to see violence and illegality when both arresting officers were White, and Black respondents were more likely to perceive violence and illegality in general (Levin & Thomas 1997). Despite this slight racial difference in perceptions, the results suggest that the White respondents were as likely as Black respondents to perceive brutality based on racial bias (Levin & Thomas 1997). Additionally, the results showed that the presence of a Black officer with a White partner tended to mitigate a negative perception of racial bias (Levin & Thomas 1997). While this study offers evidence that suggests officer race does influence perceptions of police legitimacy when police use force, it is limited in a few ways. The experiment uses a convenience sample of college students, only measures perceptions of illegality and violence, and it does not manipulate the race of the citizen to measure whether a White citizen would yield similar results. Although all participants successfully identified the race of each police officer and citizen involved in their situation, the inclusion of a White citizen would provide greater information on how attitudes of legitimacy differ depending on who is subjected to the use of force. This is extremely important because it can provide further evidence that suggests a racial bias component is at play when determining police legitimacy in violent interactions. Likewise, more questions on whether respondents believed the officers were

legitimate and justified in their use of force, and questions about respondents' experiences with police may offer alternative explanations for their perceptions of police legitimacy.

Other research on officer race and attitudes about police evaluate police-citizen interactions to find differences among Blacks and Whites. One project that examined 3,439 self-reported cases of police-citizen interactions through the Bureau of Justice Statistics Police-Public Contact Survey investigated whether racial variation in evaluations of police behavior is moderated by officer race (Cochran & Warren 2011). The study specifically noted the severe lack of empirical research on officer race in shaping attitudes about police and their legitimacy. The findings suggest that officer race can be integral to producing perceptions of police specifically for Black citizens. They found that generally when citizens were stopped by minority officers, they were significantly more likely to express beliefs that they were stopped for illegitimate reasons than when stopped by White officers (Cochran & Warren 2011). Black citizens were not only more likely than White citizens to report being stopped for an illegitimate reason, but they were also more likely to negatively evaluate police behavior when the stop is initiated by a White officer (Cochran & Warren 2011). These findings suggest that Black citizens were more likely to rate a minority officer more objectively while they approached White officers with more skepticism when stopped. This is evidence that claims for greater racial diversity in police departments through an increase in Black officers may improve police-citizen relations. However, this study is limited in that it does not account for respondents' exposure to media coverage of police use of force incidents, vicarious experiences nor neighborhood context which are essential variables in creating opinions of police and their legitimacy.

Other research on the effect of officer race on perceptions of police legitimacy uses the community accountability hypothesis and sociocultural impacts on police behavior as

frameworks to explain how officer race shapes these attitudes. The community accountability hypothesis recommends a micro-level approach to fixing interactions between police and the public by increasing the number of Black officers who will instinctively “get” Black citizens and in turn reduce police abuse (Smith & Holmes 2014). The sociocultural impact on police behavior perspective rejects this solution and asserts that the social disorganization, poverty, and crime of neighborhoods will continue to result in police dissatisfaction because of police tactics (Brunson & Gau 2011). Research by Brunson and Gau (2011) examined what role officer race played in forty-four African Americans’ experiences with and perceptions of local police in East St. Louis. The results show that despite the local police department being ninety-four percent Black, Black residents reported negative views of the police due to a perceived lack of police resources and poor officer performance in law enforcement capabilities (Brunson & Gau 2011). No officer race effect emerged throughout the analysis of the interviews demonstrating no support for the community accountability hypothesis. This study is limited as the forty-four residents are not a representative sample of Eastern St. Louis residents nor is the neighborhood representative of cities nationwide. However, it is still useful in investigating whether citizens view officer race as a factor in their perceptions of police and police legitimacy. It underscores the importance of filling this gap in perceptions of police use of force literature. By manipulating officer race, among other variables, the present study will advance the few empirical findings on this topic and seek to explain how influential a Black or White officer can be in judging an incident of police use of force as legitimate or not.

Race of the Suspect

Research on how suspect race shapes attitudes about police and police legitimacy is slightly more abundant than that of officer race. However, findings on suspect race are also mixed on its involvement in perceptions of police legitimacy. An experiment that utilized police use of force vignettes found that suspect race and ethnicity did not predict perceptions of legitimacy among college students (Girgenti-Malone et al. 2017). However, the three hundred college students from a northeastern college that were used in the experiment showed that respondent race and gender were significant predictors for perceptions of legitimacy. The findings demonstrate that non-whites and females are significantly less likely than Whites and males respectively to perceive the police use of force as justified regardless of the race of the suspect in the vignette (Girgenti-Malone et al. 2017). The study also found that respondents who have a relative or close friend who is a police officer are more likely to perceive use of force as justified than those who do not. This study was limited due to its convenience sample, majority White respondents, and most participants knew people who were police officers. Nonetheless, its test design is integral to improving the scholarship that examines the influence of suspect race on perceptions of legitimacy in use of force events. It also highlights how relationships with police officers may lead an individual to perceive the police as more legitimate when using force, an extension of vicarious and personal experiences with police officers. Additionally, it even requests that future research investigates the relationship between officer and suspect race on perceptions of police use force, one of the primary goals of the current study.

Another study that examines the influence of procedural justice and race of citizen interacting with an officer on respondents' confidence and trust in police, and police legitimacy suggests that suspect race may play a role (Johnson et al. 2017). Five hundred and twenty-three

undergraduate students watched six videos depicting a simulated traffic stop. Procedural justice conditions were manipulated in that officers were either positive, negative, or neutral in their disposition, language, and mood towards either a White or African American driver. The results demonstrate that procedural justice improved police legitimacy and that Black respondents assessed the police less favorably than non-black respondents (Johnson et al. 2017). Most importantly, the positive effect of procedural justice on police legitimacy was larger when the driver was White (Johnson et al. 2017). This suggests that there is a relationship between suspect race and perceptions of police legitimacy contrary to other findings (Girgenti-Malone et al. 2017). The effect of suspect race is consistently explained through the common stereotype perpetuated by the media that Black men are criminals, aggressive and stronger than White men (Wilson et al. 2017; Holbrook et al. 2016; Dixon & Maddox 2005; Eberhardt et al. 2004).

One experiment involved seven separate studies that showed White participants pictures of same-sized Black and White males which resulted in perceptions that the Black males were taller, heavier, and more muscular than the White males (Wilson et. 2017). Consequently, the participants were more likely to indicate that hypothetical police use of force was justified to detain Black males in comparison to White males despite them being the same size (Wilson et al. 2017). Another study found that White participants associated physical formidability and aggressiveness as greater for individual's with Black names than those with White names (Holbrook et al. 2016). These studies demonstrate how implicit bias can potentially lead to beliefs that Blacks are stronger and more aggressive thus requiring police officers to use more force when restraining them. Moreover, other studies have shown that when police officers and college students are primed with Black and White faces, and apes and non-ape animals, they are more likely to implicitly associate Black citizens with apes (Goff et al. 2008; Goff et al. 2014).

This implicit association of Black citizens with apes not only increases endorsement of police violence against Black suspects among college students, but it also predicted actual racial disparities in police violence toward Black children (Goff et al. 2008; Goff et al. 2014).

Additionally, these studies demonstrate the importance of manipulating suspect race when measuring perceptions of police legitimacy in police use of force incidents. The ambivalent results of empirical research on suspect race affecting attitudes towards police use of force requires more experiments and analyses to reach a conclusive decision on the impact of suspect race. The current study will add to this gap in literature and provide more data which will be useful in explaining the importance of suspect race in perceptions of police legitimacy during use of force events.

Level of Suspect Resistance

Research on the effect of suspect resistance in perceptions of police legitimacy during use of force incidents is severely lacking. Literature on perceptions of police use of force tend to focus primarily on suspect race and as a result, officer race and level of suspect resistance have been continuously neglected. Two randomized experiments that tested suspect race and demeanor on police officers' perceptions of the threat of violence and importance of exercising procedural justice yielded important results (Nix et al. 2017). The first study presented police officers from a mid-size municipal police department with four different vignettes involving a suspicious person call. The suspect was either Black or White and exhibited a respectful or disrespectful demeanor. The second study presented police officers from a separate and larger department with six different vignettes involving a suspicious person call. The suspect was either

Black or White and exhibited respectful, verbally disrespectful, or symbolically disrespectful demeanor. Symbolically disrespectful demeanor was portrayed as the suspect walking away or refusing to talk whereas verbally disrespectful demeanor involved the suspect using insults and antagonistic language. The results demonstrated that suspect race was statistically insignificant while suspect demeanor was statistically significant (Nix et al. 2017). The police officers perceived a greater threat of violence and indicated that it was less important to exercise procedural justice when suspects were disrespectful (Nix et al. 2017). Although these experiments examine the perceptions of police officers, they are nonetheless important to informing how differing levels of suspect resistance can influence perceptions. However, research on perceptions of legitimacy in police use of force incidents would greatly benefit from the administration of these types of vignettes on the public. The present study will tremendously inform attitudes literature on attitudes of police legitimacy in use of force events by manipulating level of suspect resistance.

The Current Study

The main hypothesis examines whether the race of the suspect involved in the incident influences whether an individual feels the officer is justified in shooting. I predict that respondents will believe that officer shootings are more justified when the suspect is Black than when the suspect is White.

The second hypothesis examines an interaction between the race of the suspect and the type of weapon reported in the incident. I predict that respondents will overall believe that officer shootings are more justified when the suspect is Black than when the suspect is White, but that the seriousness of the weapon involved will decrease the justification gap between Black and White suspects. I predict that respondents will believe officer shootings are equally justified when both Black and White suspects have a gun. Additionally, I predict that respondents will believe that officer shootings are slightly more justified against unarmed Black suspects than unarmed White suspects.

The third hypothesis examines a three-way interaction between the race of the suspect, the presence and type of weapon, and the race of the officer involved in the shooting. I predict that respondents will overall believe that shootings initiated by a White officer are more justified than those initiated by a Black officer for suspects armed with a knife or unarmed. Accordingly, I predict that respondents will believe that White officers are more justified when shooting a Black suspect than a White suspect when suspects are armed with a knife or unarmed. Additionally, I predict that respondents will believe that Black officers are more justified when shooting a Black suspect than a White suspect when suspects are armed with a knife.

Table 1. Hypotheses

Hypothesis 1	Black Suspect → High Justification White Suspect → Low Justification
Hypothesis 2	Black Suspect with Gun → High Justification White Suspect w Gun → High Justification Black Suspect with Knife → High Justification White Suspect with Knife → Moderate Justification Black Suspect with No Weapon → Moderate Justification White Suspect with No Weapon → Low Justification
Hypothesis 3	White Officer, Black Suspect, Gun → High Justification White Officer, White Suspect, Gun → High Justification Black Officer, Black Suspect, Gun → High Justification Black Officer, White Suspect, Gun → High Justification White Officer, Black Suspect, Knife → High Justification White Officer, White Suspect, Knife → Moderate Justification Black Officer, Black Suspect, Knife → Moderate Justification Black Officer, White Suspect, Knife → Low Justification White Officer, Black Suspect, No Weapon → Moderate Justification White Officer, White Suspect, No Weapon → Low Justification Black Officer, Black Suspect, No Weapon → Low Justification Black Officer, White Suspect, No Weapon → Low Justification

Chapter 3

Methodology

Participants

373 undergraduate students from introductory-level criminology classes at The Pennsylvania State University participated in the experiment. Participants were required to sign consent forms before taking part in the vignette experiments as mandated by the Institutional Review Board. Participants understood that they had the right to decline or stop taking the surveys at any time without fear of penalty. The consent form explained the purpose of the study, duration of the survey, safeguarding techniques for identifiable information, and whom to contact if additional questions arose after the completion of the experiment.

Vignette Surveys

The vignette surveys instructed the participants to answer the questions following the vignette scenarios and notified them that their responses were completely anonymous. Following these directions was the police use of force vignette. In each vignette, the officer shot and killed the suspect. Following the vignette, the participants were asked a series of questions about their attitudes about the use of force incident including how justified the officer was in using force. These questions were rated on a 0 to 6 scale ranging from “Strongly Disagree” to “Strongly Agree”. The last question in this set was a text box that asked them to explain their answer to question 8 which asked about the justifiability of the use of force.

The experiment was a 2 (Race of Police Officer) x 2 (Race of Suspect) x 3 (Level of Suspect Resistance) subject-experiment design. The race of the police officer was either Black or White. The race of the suspect was either Black or White as well. The level of suspect resistance was portrayed three different ways: the suspect was unarmed, possessed a knife, or possessed a gun. In all scenarios, the suspect yelled: "I wasn't doing anything! Leave me alone!" The next section inquired about the participant's attitudes about police; whether police make factual decisions, respect people's rights, and treat everyone equally. These questions were rated on a 0 to 6 scale ranging from "Strongly Disagree" to "Strongly Agree".

The following set of questions were inspired by Elijah Anderson's *Code of the Street* (1999) which delved into the subculture of African American neighborhoods and sought to explain the preponderance of violence within these communities. These questions were answered on a scale from 0 to 6 from "Strongly Disagree" to "Strongly Agree". They connect to the vignette by asking how justified it is to be violent or aggressive in order to be treated fairly. This refers to the level of resistance by the suspect as possession of a knife or gun would illustrate aggression and the response is the officer shooting the suspect. Likewise, it gauges how accepting the participants are of violence and aggression in general which could heighten their likelihood of perceiving the use of force as legitimate.

The next three questions were asked as "Yes" or "No" and dealt with participant's personal interactions with police. It asked whether they had been stopped by police, arrested, or questioned by them. The ensuing questions built upon whether the participants had answered "Yes" indicating that they had interacted with the police before. These questions derive from procedural justice theory (Tyler et al. 2015; Tyler & Wakslak 2004) which emphasizes that citizens' perceptions of legitimacy are contingent upon the police officer treating them with

respect and allowing them to voice their opinions. The first question was scaled from 0 to 6 ranging from “Not Satisfied” to “Very Satisfied” and the following were 0 to 6 ranging from “Strongly Disagree” to “Strongly Agree”.

The upcoming questions served as the racism scale for the vignette survey as it asked about the participant’s feelings of closeness and interactions with different ethnicities and races (McConahay 1986). These answers were scored from 0 to 6 ranging from “Never” to “Very Frequently”; “Not Close at All” to “Very Close”; “None” to “A Lot”; and “Strongly Disagree” to “Strongly Agree”. There were also questions about the amount of discrimination the participants feel Black Americans and White Americans face in today in the United States. These questions were integral because they could demonstrate if the perceptions of legitimacy were correlated to participants’ relationships with other ethnicities and races. This could suggest a certain level of implicit bias (Trinkner et al. 2019; Kahn et al. 2017).

The last set of questions asked participants about their demographic information. Age, gender identity, race/ethnicity, hometown, and family’s annual income of participants were collected. Choices for gender identity were: Male, Female, Transgender, and Nonbinary. Choices for race/ethnicity were: White/Caucasian, Black/African American, Asian/Pacific Islander, Hispanic, Native American/American Indian, Multiracial, and Other. Options for hometown were: Rural area, Urban area, Suburban area, and Other. Options for the family's annual income were: Less than \$50,000; \$51,000 - \$75,000; \$76,000 - \$100,000; and More than \$100,000.

Procedure

The data for the experiment was gathered through the administration of the vignette surveys. Twelve different types of vignettes were distributed with differing variables for the race of the police officer, race of the suspect, and level of suspect resistance (See Appendix C and D).

Professors of introductory-level criminology courses were contacted by e-mail for permission to use their classes for the study. The vignette surveys were administered to four introductory-level criminology classes at The Pennsylvania State University. Professors agreed to provide extra credit opportunities for students that completed the survey. In addition, alternative extra credit assignments were available for those that did not participate or were under the age of 18.

Participants were informed before taking the vignette surveys that they were under no obligation to complete the survey and would not be penalized for refusing to participate. They were told that they would receive extra credit from their professor if they participated, but that alternatives would be provided. Participants were also informed that they must be 18 to participate and that they would be participating in a research study if they signed the consent form. The consent form stated that the study would be examining attitudes towards police shootings and officer use of force (See Appendix B). The vignette surveys were distributed at the beginning portion of the course allowing the maximum number of participants to be present.

The vignette surveys consisted of two sets of consent forms and two pages of questions. The first consent form was for the study and the second was for the participants. Each consent form consisted of an information sheet on the front that contained information about the purpose, risks, and benefits of the study; the backside contained the signature portion.

Participants were directed to read the information about the study and sign the consent form on the other side if they wished to participate. Participants were also told to sign the first consent form and pass it down to one end of the row. They kept the second consent form for their own records. Participants then completed the surveys and passed them to the opposite end of the row. In this manner, the collection of the consent forms and vignette surveys were separated. The signed consent forms were used to create excel sheets sent to the professors to assign extra credit to the students that participated.

Chapter 4

Results

The results section consists of three parts. The first section is composed of two tables of descriptive statistics of the participants, and scales that measure perceived legitimacy in police use of force incidents, respondents' attitudes about police, respondents' experience with procedural justice, and respondents' racism level. The second section consists of one-way ANOVA analyses between all vignette scenarios and perceptions of legitimacy. These analyses are in Appendix E. The third section is composed of three linear regression models that analyze perceptions of legitimacy in all vignette scenarios. The first table in this section examines perceptions of legitimacy across all vignettes with vignette 1 as the control and comparison group. The second table examines the effect that respondents' attitudes about police, experience with procedural justice, and racism level have on their perceptions of legitimacy in all vignettes. The third table analyzes the effect that respondents' demographic characteristics have on perceptions of legitimacy in all vignette scenarios.

Respondent Demographic Characteristics

A total of 373 participants responded to the vignette surveys. As displayed in Table 2, of 368 participants (five failed to respond to the demographic questions), 190 were female (50.9%), 175 were male (46.9%), and 3 identified as nonbinary (0.8%). The study included a variety of races and ethnicities: (73.9% White, 7.2% Multiracial, 5.8% Black/African American, 5% Hispanic, 4% Asian/Pacific Islander, 1.3% identified as "Other" and 0.5% Native American/American Indian). The participants also responded to descriptions of their hometown:

224 were from Suburban areas (60%), 76 Rural areas (20.3%), 60 Urban areas (16%), and 7 from areas described as “Other” (1.9%). Most participants had an annual family income over \$100,000 (47.1%). Finally, each vignette scenario received a similar number of participant responses.

Table 2. Respondent Demographic Characteristics

Gender	Frequency (mean)	Percent
Male	175	46.9
Female/Non-Binary	193	51.7
Missing	5	1.3
Race/Ethnicity	Frequency (mean)	Percent
White/Caucasian	276	73.9
Black/African American	22	5.8
Asian/Pacific Islander	15	4.0
Hispanic	19	5.0
Multiracial	27	7.2
Missing	5	1.3
Hometown	Frequency (mean)	Percent
Rural	76	20.3
Urban	60	16.0
Suburban	224	60.0
Missing	5	1.3
Annual Family Income	Frequency (mean)	Percent
Less than \$50,000	32	8.5
\$51,000 - \$75,000	72	19.3
\$76,000 - \$100,000	84	22.5
More than \$100,000	176	47.1
Missing	5	1.3
Respondents per vignette	Frequency (mean)	Percent
Vignette 1	34	9.1
Vignette 2	32	8.6
Vignette 3	31	8.3
Vignette 4	33	8.8
Vignette 5	31	8.3
Vignette 6	27	7.2
Vignette 7	31	8.3
Vignette 8	35	9.4
Vignette 9	30	8.0
Vignette 10	29	7.8
Vignette 11	31	8.3
Vignette 12	29	7.8
Missing	0	

Descriptive Statistics for Perceived Legitimacy, Police Attitudes, Procedural Justice & Racism Scales

In Table 3, the mean score of respondents' perceptions of legitimacy, police attitudes, procedural justice, and racism level across all vignette scenarios are shown. Perceptions of legitimacy were measured by questions 1, 2, 7 and 8 (Appendix C). These questions asked how appropriate it was for the officer to shoot the suspect, did the level of force used fit the situation, was this the best choice possible, and how justified the officer was in using force against the suspect. The mean score for perceptions of officer legitimacy across all vignette scenarios was 9.4758 out of a possible 24. This indicates that perceptions of officer legitimacy in all vignettes were fairly low.

Attitudes about police were measured by questions 1 through 5 on the second page of the survey (Appendix C). These questions asked if the police treat people with trust, make decisions based on facts, give honest explanations for decisions, respect people's rights, and treat everyone equally. The mean score for attitudes about police across all vignette scenarios was 13.6361 out of a possible 30. This demonstrates that respondents were generally ambivalent and mixed on attitudes about police.

Experience with procedural justice was measured by questions 1 through 5 on the third page of the survey (Appendix C). Respondents answered these questions if they ever had an interaction with the police. These questions asked if respondents were satisfied with the way the officer handled the situation, would want to see the situation handled the same way, were treated as anyone else would be, officer made factually based decisions, and showed concern for respondents' rights. The mean score for experience with procedural justice was 17.7660 out of a

possible 30. This indicates that of those respondents that did have interactions with police, they were generally mixed about receiving fair and equal treatment from the officer.

Racism level was measured by questions 1 through 6 on the third page of the survey (Appendix C). These questions asked how often respondents have positive interactions with someone of a different race, how close they feel to individuals of different races, how much discrimination against Black and White Americans happens today in the United States, how relaxed they are when interacting with individuals from a different race, and how often they have genuine interactions with someone of a different race. The mean score for respondents' racism level across all vignette scenarios was 25.5134 out of a possible 36. This demonstrates that respondents were generally comfortable, relaxed and had genuine interactions with individuals of a different race.

Table 3. Perceived Legitimacy of Police Use of Force, Attitudes about Police, Experience with Procedural Justice, and Racism Scales

	Frequency	Mean	Standard Deviation
Perceived Legitimacy	372	9.4758	4.75853
Police Attitudes	371	13.6361	4.03360
Procedural Justice	282	17.7660	6.15302
Racism Level	372	25.5134	3.55509

One-Way ANOVA Analyses of Vignette Scenarios

One-Way ANOVA analyses were completed for all twelve vignette scenarios and their perceptions of legitimacy in police use of force incidents (See Appendix E). They compared perceptions of legitimacy from one vignette scenario to all other vignette scenarios. Vignette 1

was statistically significant meaning respondents were more likely to perceive a White officer shooting an unarmed White suspect as less legitimate than the rest of the vignettes. Vignette 2 was statistically insignificant meaning respondents were not more likely to perceive a White officer shooting a White suspect armed with a knife as less/more legitimate than the rest of the vignettes. Vignette 3 was statistically significant meaning respondents were more likely to perceive a White officer shooting a White suspect armed with a gun as more legitimate than the rest of the vignettes. Vignette 4 was statistically significant meaning respondents were more likely to perceive a White suspect shooting an unarmed Black suspect as less legitimate than the rest of the vignettes. Vignette 5 was statistically insignificant meaning respondents were not more likely to perceive a White officer shooting a Black suspect armed with a knife as less/more legitimate than the rest of the vignettes. Vignette 6 was statistically significant meaning respondents were more likely to perceive a White officer shooting a Black suspect armed with a gun as more legitimate than the rest of the vignettes.

Vignette 7 was statistically insignificant meaning respondents were not more likely to perceive a Black officer shooting an unarmed White suspect as less/more legitimate than the rest of the vignettes. Vignette 8 was statistically insignificant meaning respondents were not more likely to perceive a Black officer shooting a White suspect armed with a knife as less/more legitimate than the rest of the vignettes. Vignette 9 was statistically significant meaning respondents were more likely to perceive a Black officer shooting a White suspect armed with a gun as more legitimate than the rest of the vignettes. Vignette 10 was statistically significant meaning respondents were more likely to perceive a Black officer shooting an unarmed Black suspect as less legitimate than the rest of the vignettes. Vignette 11 was statistically insignificant meaning respondents were not more likely to perceive a Black officer shooting a Black suspect

armed with a knife as less/more legitimate than the rest of the vignettes. Vignette 12 was statically significant meaning respondents were more likely to perceive a Black officer shooting a Black suspect armed with a gun as more legitimate than the rest of the vignettes.

Linear Regression Model of Perceptions of Legitimacy in Vignette Scenarios

In Table 4, a linear regression model was run to examine the relationship between perceptions of legitimacy in vignette scenarios with Vignette 1 serving as the control and comparison group. Only vignettes 4, 7 and 10 are not statistically significant in their perceptions of legitimacy in comparison to vignette 1. Vignette 3 is the most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a White officer shooting a White suspect armed with a gun as more legitimate than a White officer shooting an unarmed White suspect. Vignette 9 is the second most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a Black officer shooting a White suspect armed with a gun as more legitimate than a White officer shooting an unarmed White suspect. Vignette 6 is the third most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a White officer shooting a Black suspect armed with a gun as more legitimate than a White officer shooting an unarmed White suspect. Vignette 12 was the fourth most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a Black officer shooting a Black suspect armed with a gun as more legitimate than a White officer shooting an unarmed White suspect.

Vignette 5 was the fifth most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a White officer shooting a Black suspect armed with a knife as more legitimate than a White officer shooting an unarmed White suspect. Vignette 8 was the sixth most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a Black officer shooting a White suspect armed with a knife as more legitimate than a White officer shooting an unarmed White suspect. Vignette 2 was the seventh most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a White officer shooting a White suspect armed with a knife as more legitimate than a White officer shooting an unarmed White suspect. Vignette 11 was the eighth most statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were more likely to perceive a Black officer shooting a Black suspect armed with a knife as more legitimate than a White officer shooting an unarmed White suspect.

Vignette 7 was not statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were not more likely to perceive a Black officer shooting an unarmed White suspect as more legitimate than a White officer shooting an unarmed White suspect. Vignette 10 was also not statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were not more likely to perceive a Black officer shooting an unarmed Black suspect as more legitimate than a White officer shooting an unarmed White suspect. Finally, vignette 4 was also not statistically significant in its perceptions of legitimacy in comparison to vignette 1. This means that respondents were not more likely to perceive a White officer shooting an unarmed Black suspect as more legitimate than a White

officer shooting an unarmed White suspect. In fact, the negative significance level indicates that respondents were more likely to view vignette 4 as less legitimate than vignette 1 although this relationship is not statistically significant.

Table 4. Linear Regression Model of Perceptions of Legitimacy in Vignette Scenarios

	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
Vignette 1 (Constant)	.720		8.296	.000
Vignette 2	1.034	.238	3.898	.000
Vignette 3	1.042	.364	6.002	.000
Vignette 4	1.034	-.002	-.032	.974
Vignette 5	1.042	.272	4.485	.000
Vignette 6	1.082	.353	5.984	.000
Vignette 7	1.042	.077	1.266	.206
Vignette 8	1.011	.260	4.185	.000
Vignette 9	1.051	.355	5.894	.000
Vignette 10	1.061	.035	.580	.562
Vignette 11	1.042	.219	3.619	.000
Vignette 12	1.061	.297	4.969	.000

Linear Regression Model of Perceptions of Legitimacy and Attitudes about Police, Experience with Procedural Justice, and Racism Level Scales

In Table 5, a linear regression model was run to examine the relationship between perceptions of legitimacy in vignette scenarios and attitudes about police, experience with procedural justice, and racism level with Vignette 1 serving as the control and comparison group. Of these three variables, only attitudes about police were statistically significant in predicting perceptions of legitimacy across all vignettes. This means that respondents with positive attitudes about police were significantly more likely to perceive police use of force as legitimate across all vignette scenarios. Procedural justice was statistically insignificant in predicting perceptions of legitimacy across all vignettes. Therefore, respondents that had experienced procedural justice

were not more likely to perceive less/more legitimacy in all vignette scenarios. Additionally, racism level was statistically insignificant in predicting perceptions of legitimacy across all vignettes. This means that respondents' racism level did not affect their perceptions of legitimacy in all vignette scenarios.

Table 5. Linear Regression Model of Perceptions of Legitimacy and Attitudes about Police, Experience with Procedural Justice, and Racism Level Scales

	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
Vignette 1 (Constant)	2.507		.774	.440
Vignette 2	1.129	.241	3.806	.000
Vignette 3	1.082	.426	6.628	.000
Vignette 4	1.084	.038	.593	.554
Vignette 5	1.119	.291	4.625	.000
Vignette 6	1.143	.331	5.366	.000
Vignette 7	1.135	.068	1.086	.278
Vignette 8	1.050	.241	3.687	.000
Vignette 9	1.089	.358	5.628	.000
Vignette 10	1.157	-.018	-.284	.777
Vignette 11	1.268	.197	3.372	.001
Vignette 12	1.148	.365	5.903	.000
Police Attitudes	.070	.340	5.776	.000
Procedural Justice	.044	-.014	-.256	.798
Racism Level	.075	-.035	-.662	.509

Linear Regression Model of Perceptions of Legitimacy and Demographic Characteristics

In Table 6, a linear regression model was run to examine the relationship between perceptions of legitimacy in vignette scenarios and demographic characteristics with Vignette 1 serving as the control and comparison group. Other comparison groups for this table include: White/Caucasian (race), suburban (hometown), more than \$100,000 (annual family income) and female/nonbinary (gender). These comparison groups were chosen because they held the most respondents for their respective categories. Only respondents that identified as multiracial or

were from rural hometowns or identified as males were statistically significant in predicting their perceptions of legitimacy across all vignettes.

Black/African American, Asian/Pacific Islander, and Hispanic respondents were not more likely than White/Caucasian respondents to perceive more/less legitimacy across all vignette scenarios. Multiracial respondents were significantly more likely to perceive more legitimacy than White respondents across all vignette scenarios. However, there were only twenty-seven Multiracial respondents suggesting that a couple of respondents with high scores on perceptions of legitimacy could have skewed the results resulting in this relationship. Respondents from urban hometowns were not more likely than respondents from suburban hometowns to perceive more/less legitimacy across all vignette scenarios. Respondents from rural hometowns were significantly more likely to perceive more legitimacy than respondents from suburban hometowns across all vignette scenarios. Respondents whose annual family income was less than \$50,000; \$51,000 - \$75,000; and \$76,000 - \$100,000 were not more likely than respondents whose annual family income was more than \$100,000 to perceive more/less legitimacy across all vignette scenarios. Additionally, male respondents were significantly more likely than female/nonbinary respondents to perceive more legitimacy across all vignette scenarios.

Table 6. Linear Regression Model of Perceptions of Legitimacy and Demographic Characteristics

	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
Vignette 1 (Constant)	2.645		.052	.959
Vignette 2	1.133	.221	3.493	.001
Vignette 3	1.077	.394	6.065	.000
Vignette 4	1.086	.006	.090	.928
Vignette 5	1.124	.245	3.810	.000
Vignette 6	1.146	.291	4.632	.000
Vignette 7	1.150	.037	.583	.561
Vignette 8	1.051	.224	3.368	.001
Vignette 9	1.079	.340	5.318	.000
Vignette 10	1.172	-.044	-.699	.485
Vignette 11	1.250	.173	2.949	.003
Vignette 12	1.167	.347	5.551	.000
Police Attitudes	.075	.334	5.237	.000
Procedural Justice	.045	-.046	-.832	.406
Racism Level	.076	.001	.012	.990
Black/African American	1.025	.066	1.290	.198
Asian/Pacific Islander	1.167	-.013	-.240	.810
Hispanic	1.087	-.072	-1.465	.144
Multiracial	1.009	.117	2.336	.020
Rural	.616	.157	3.029	.003
Urban	.698	.011	.219	.827
Annual Family Income	.249	.013	.250	.803
Male	.520	.168	3.155	.002

Chapter 5

Discussion

This experiment tested three hypotheses that examined the role of suspect and officer race, and level of suspect resistance on perceptions of police use of force incidents. Firstly, I hypothesized that perceptions of legitimacy would be higher for Black suspects than White suspects. As demonstrated by the means for all vignette scenarios derived from the One-Way ANOVA Analyses, this was not the case. Perceptions of legitimacy for Black and White suspects were not meaningfully different from one another. In other words, respondents were not more likely to perceive use of force against Black suspects as more legitimate than use of force against White suspects. In fact, police use of force was only perceived as more legitimate against Black suspects than White suspects twice; in vignettes 5 and 6. However, these differences in perceptions were not meaningful either.

Secondly, I hypothesized that the race and level of resistance of the suspect would affect perceptions of legitimacy. I predicted that officer shootings would have equal level perceptions of legitimacy when Black and White suspects were armed with guns. I also predicted that officer shootings would have higher perceptions of legitimacy for Black suspects than White suspects when unarmed. The first part of this hypothesis is correct, vignettes that involved officers shooting Black and White suspects armed with guns received similar perceptions of legitimacy. These police use of force incidents also received the highest perceptions of legitimacy most likely due to the presence of a gun which is arguably the most serious threat to an officer. The second half of this hypothesis is incorrect, there were not meaningful differences in perceptions

of legitimacy for unarmed Black and White suspects. While unarmed Black and White suspect vignettes received the lowest level of perceptions of legitimacy, respondents were not more likely to perceive police use of force as more legitimate against unarmed Black suspects than White suspects.

Finally, I hypothesized that the race of the suspect and officer, and level of suspect resistance would affect perceptions of legitimacy. I predicted that perceptions of legitimacy would be higher for shootings initiated by White officers in comparison to those initiated by Black officers for suspects armed with a knife or unarmed. I also predicted that White and Black officers would have higher perceptions of legitimacy when shooting a Black suspect than a White suspect when suspects are armed with a knife. This hypothesis was proven incorrect as perceptions of legitimacy for White officers were not meaningfully different than those for Black officers when shooting suspects armed with a knife or unarmed. In other words, respondents were not more likely to perceive White officers as more legitimate than Black officers when shooting suspects armed with a knife or unarmed. Additionally, perceptions of legitimacy for White and Black officers that shot Black suspects armed with knives were not meaningfully different from when they shot White suspects armed with knives. In other words, respondents were not more likely to perceive White and Black officers as more legitimate for shooting Black suspects than White suspects when suspects are armed with knives.

Linear regression models showed that attitudes about police, and respondents that identified as multiracial, males, and were from rural hometowns were statistically significant in predicting perceptions of legitimacy across all vignettes. Specifically, respondents with positive attitudes about police were significantly more likely to perceive more legitimacy in all vignette scenarios. Respondents that were males and from rural hometowns were also significantly more

likely to perceive legitimacy in all vignettes. This result is consistent with empirical research that illustrates males are more likely to support police use of force than females (Sethuraju et al. 2017; Thompson & Lee 2004; Girgenti-Malone et al. 2017). Respondents that identified as Multiracial were significantly more likely to perceive more legitimacy in all vignettes, however due to the small sample size of Multiracial respondents this relationship should be considered cautiously.

Limitations

One limitation of this study is that its participants came from a convenience sample of students from four introductory-level criminology classes at The Pennsylvania State University which may not be generalizable to other populations, though the vignettes were randomly assigned to students. There is evidence that criminal justice majors, similar to criminology, may perceive police misconduct as a general problem in comparison to other majors (Sethuraju et al. 2017). A second limitation to this study is the large percentage of white participants (74%) which makes it more difficult to see if other races/ethnicities have any significant variances in attitudes about legitimacy in police use of force incidents. This was the case when considering the validity of the result that showed Multiracial respondents were significantly more likely to perceive legitimacy across all vignette scenarios. A third limitation is the absence of measures for respondents' media exposure to recent incidents of police use of force. This is valuable because it may explain why perceptions of legitimacy were fairly low across all vignettes (Sethuraju et al. 2017; Girgenti-Malone et al. 2017). A fourth limitation is that the vignette design only accounted for Black and White officers and suspects. The inclusion of a Hispanic and/or Asian officer and

suspect may reveal patterns in perceptions of legitimacy for police use of force incidents across racial groups. A fifth limitation is that some respondents circled the “Strongly Disagree” or “Strongly Agree” options for responses resulting in scores from 0 to 6 instead of scores from 1 to 5. This may have impacted other responses as participants may have been unsure if they were able to select these options or had to select a number. Future instructions should be clear that respondents are only to select between 0 to 5 to ensure that the scale is consistent for all participants.

Future Research

Future research should employ a similar design that manipulates officer and suspect race, and level of suspect resistance for different populations. This study should be replicated at Historically Black Colleges and Universities to gain a more representative sample of African Americans and other racial minorities perceptions of legitimacy in police use of force incidents. The inclusion of other academic majors may reveal trends in perceptions of legitimacy as well (Sethuraju et al. 2017). Future research should also consider showing recorded arrest scenarios that involve police use of force (Johnson et al. 2017; Levin & Thomas 1997) to measure differences in perceptions of legitimacy in comparison to designs that use written vignettes. Furthermore, this design should also be replicated for middle-aged and older adults instead of simply relying on universities for samples. This would improve the generalizability of the research and allow a greater range of demographics to participate and provide their perceptions of legitimacy when police use force. Other studies should also test how perceptions of legitimacy differ when less than lethal force is applied by officers in addition to a manipulation of race and

suspect resistance (Thompson & Lee 2004). For example, it would be interesting to examine how respondents perceive White, Black, and Hispanic officers that use Tasers on White, Black, and Hispanic suspects that are unarmed or have knives and guns. Finally, the inclusion of questions that ask respondents about their exposure to mass media coverage of police use of force incidents is integral to future studies. This measure could examine pre-existing attitudes about police use of force and test their consistency through the vignettes.

Policy Implications

This study has numerous policy implications for current law enforcement practices and police use of force standards. Firstly, respondents' attitudes about police were generally ambivalent and mixed. This is in direct contrast to empirical findings that suggest that Americans have generally positive attitudes about police (Jones 2020; Tyler 2005). Only eleven percent of respondents indicated that police treat everyone equally. Furthermore, an astounding sixty-nine percent of respondents believe that police do not treat everyone equally. This raises significant alarm about why respondents believe this and may be an explanation for their overall low perceptions of legitimacy in all vignette scenarios. Secondly, respondents' experience with procedural justice was also mixed. This again points to what types of interactions are college students having with police officers that do not allow them to definitively say that officers made unbiased decisions and showed concern for their rights. While it may be idealistic to aim for one hundred percent satisfaction in all citizen interactions, police officers must be instructed on the overall benefits of procedural justice for police-community relations (Tyler et al. 2015). It has not only been linked to building trust within the community, but it has also been identified as a

strategy to decrease interactions in which civilians experience disrespectful treatment or unjustified use of force (Tyler et al. 2015). Additionally, the work of constitutional law scholars demonstrates the need to add greater detail to the *Graham v. Connor* precedent for police use of force policies for the general public and specifically the communities of color that are disproportionately affected (Obasogie & Newman 2019; Zimring 2017). Attention to this standard and increasing the restrictions on police use of deadly force will save lives and improve police-citizen relations across the United States. In conclusion, this thesis has provided a much-needed template for future research on citizens' perceptions of legitimacy in police use of force incidents and exemplified that further empirical studies must be completed to fill the gap in police use of force literature and improve police-citizen relationships for the benefit of everyone involved.

Appendix A

IRB Exemption Determination



PennState

Office for Research Protections
Vice President for Research
The Pennsylvania State University
205 The 330 Building
University Park, PA 16802

814-865-1775
Fax: 814-865-8699
orp@psu.edu
research.psu.edu/orp

EXEMPTION DETERMINATION

Date: July 19, 2019

From: Julie James,

To: Iman Said

Type of Submission:	Initial Study
Title of Study:	An Examination of the Predictors of Attitudes Towards Police-Use-of-Force
Principal Investigator:	Iman Said
Study ID:	STUDY00012174
Submission ID:	STUDY00012174
Funding:	Not Applicable
Documents Approved:	<ul style="list-style-type: none">PoliceAttitude_IRBProtocol (2.01), Category: IRB ProtocolPoliceForce_Survey (3), Category: Data Collection Instrument

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are **not** required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual ([HRP-103](#)), which can be found by navigating to the IRB Library within CATS IRB (<http://irb.psu.edu>).

This correspondence should be maintained with your records.

We would like to know how the IRB Program can better serve you.
Please fill out our survey; it should take about a minute: <https://www.research.psu.edu/irb/feedback>.

10/27

Principal Investigator

Name	Financial Interest	E-mail
Iman Said	no	ixs228@psu.edu

Study Team

Name	Roles	Financial Interest	Involved in Consent	E-mail
Victor Alleyne	Co-Investigator	no	yes	vma5110@psu.edu
R. Barry Ruback	Advisor	no	yes	rbr3@psu.edu

Appendix B

Consent Forms

Information Sheet
Pennsylvania State University
Department of Sociology & Criminology
Principal Investigator: Iman Said
Faculty Advisor: Dr. Barry Ruback

Introduction: You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

Who is doing this research study?

The person in charge of this research study is Iman Said at Pennsylvania State University. She is working with Victor Alleyne. Both are being guided in the research by Dr. Barry Ruback.

What is the purpose of this research study?

This study examines attitudes towards police shootings and officer use of force.

Who will be in this research study?

You may be in this research study if you are a student at Pennsylvania State University.

What will you be asked to do in this research study, and how long will it take?

You will be asked to complete the attached survey. It will take up to 20 minutes.

Are there any risks to being in this research study?

Some questions may make you uncomfortable. You can refuse to answer any questions that you don't want to answer. If you want to talk to someone because this research made you feel upset, please consult the Pennsylvania State University Counseling & Psychological Services (CAPS).

Crisis Line: 1-877-229-6400
<https://studentaffairs.psu.edu/counseling>
501 Student Health Center
University Park, PA 16802

Are there any benefits to being in this research study?

You will probably not get any benefit from taking part in this study. But, being in this study may help criminal justice researchers and sociologists understand how young adults view incidents of officer use of force.

What will you get because of being in this research study?

You will not be paid or given anything to take part in this study?

Do you have choices about taking part in this research study?

If you do not want to take part in this research study, you may choose to exit the survey and not participate.

How will your research information be kept confidential?

Information about you will be kept private by keeping your research data on a password protected computer and by using a study ID number instead of your name. No identifying information will be collected and all results will be reported in an aggregate form.

Your information will be kept on a password protected secure computer for the duration of the study. After that, the individual results will be deleted. All signed consent forms will be stored in a locked cabinet accessible only by the principal investigator. The data from this research study may be published but you will not be identified by name or by any other potentially identifying information.

Agents of the Pennsylvania State University may inspect study records for audit or quality assurance purposes. The researcher cannot promise that information sent by the internet or email will be private.

What are your legal rights in this research study?

Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

What if you have questions about this research study?

If you have any questions or concerns about this research study, you should contact Iman Said at ixs228@psu.edu

Or, you may contact Dr. Barry Ruback at rbr3@psu.edu.

The Pennsylvania State University Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected.

If you have questions about your rights as a participant, complaints and/or suggestions about the study, you may contact the Penn State IRB at (814) 865-1775, or write to The 300 Building Suite 205, University Park PA 16802, or email the IRB office at IRB-ORP@psu.edu.

Do you HAVE to take part in this research study?

No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. You may skip any questions that you don't want to answer.

You may start and then change your mind and stop at any time. To stop being in the study, you should close the survey packet without completing it.

Agreement:

I have read this information and have received answers to any questions I asked. I give my consent to participate in this research study.

Participant Name (please print) _____

Participant Signature _____ Date _____

Signature of Person Obtaining Consent _____ Date _____

RETURN THIS COPY TO THE PRINCIPAL INVESTIGATOR

Your information will be kept on a password protected secure computer for the duration of the study. After that, the individual results will be deleted. All signed consent forms will be stored in a locked cabinet accessible only by the principal investigator. The data from this research study may be published but you will not be identified by name or by any other potentially identifying information.

Agents of the Pennsylvania State University may inspect study records for audit or quality assurance purposes. The researcher cannot promise that information sent by the internet or email will be private.

What are your legal rights in this research study?

Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

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You may start and then change your mind and stop at any time. To stop being in the study, you should close the survey packet without completing it.

Agreement:

I have read this information and have received answers to any questions I asked. I give my consent to participate in this research study.

Participant Name (please print) _____

Participant Signature _____ Date _____

Signature of Person Obtaining Consent _____ Date _____

KEEP THIS COPY FOR YOUR RECORDS

Appendix C

Vignette-Survey

Instructions: Please read the scenario and answer the questions following it. All of your responses are completely anonymous.

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!" Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Please rate your agreement with the following statements. Circle **one** answer.

1. It was appropriate for the officer to shoot the suspect.

Strongly Disagree 1 2 3 4 5 Strongly Agree

2. The level of force that the officer used fit the situation.

Strongly Disagree 1 2 3 4 5 Strongly Agree

3. The suspect posed a serious threat to the officer.

Strongly Disagree 1 2 3 4 5 Strongly Agree

4. The suspect was a dangerous individual.

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. This officer was highly trained.

Strongly Disagree 1 2 3 4 5 Strongly Agree

6. This officer had a lot of experience.

Strongly Disagree 1 2 3 4 5 Strongly Agree

7. This officer made the best choice possible in this situation.

Strongly Disagree 1 2 3 4 5 Strongly Agree

8. The officer was justified in using force against the suspect.

Strongly Disagree 1 2 3 4 5 Strongly Agree

9. In one or two sentences, explain your answer to Question #8.

Instructions: Please rate your agreement with following statements. Circle **one** answer.

1. Police treat people as if they can be trusted to do the right thing.
Strongly Disagree 1 2 3 4 5 Strongly Agree
2. Police make decisions based on facts, not their personal biases or opinions.
Strongly Disagree 1 2 3 4 5 Strongly Agree
3. Police usually give an honest explanation for their decisions.
Strongly Disagree 1 2 3 4 5 Strongly Agree
4. Police respect people's rights when decisions are made.
Strongly Disagree 1 2 3 4 5 Strongly Agree
5. Police treat everyone equally.
Strongly Disagree 1 2 3 4 5 Strongly Agree
6. When someone disrespects you, it is important that you use physical force or aggression to teach that person not to disrespect you.
Strongly Disagree 1 2 3 4 5 Strongly Agree
7. Sometimes you might need to be aggressive to get people to treat you fairly.
Strongly Disagree 1 2 3 4 5 Strongly Agree
8. Sometimes you have to use physical force or aggression to defend your rights.
Strongly Disagree 1 2 3 4 5 Strongly Agree
9. If someone uses violence against you, it is important that you use violence against that person in order to get even.
Strongly Disagree 1 2 3 4 5 Strongly Agree
10. Have you ever been stopped by the police, but not arrested?
 - a. Yes
 - b. No
11. Have you ever been arrested?
 - a. Yes
 - b. No
12. Other than traffic stops, have you ever been questioned by the police?
 - a. Yes
 - b. No

If you have ever had an interaction with the police, please answer the following questions. Circle **one** answer.

1. How satisfied were you with the way the police officer handled the situation?
Not Satisfied 1 2 3 4 5 Very Satisfied
2. In a similar situation in the future, I would like to see the situation handled the same way.
Strongly Disagree 1 2 3 4 5 Strongly Agree
3. I was treated the same as anyone else would be in the same situation.
Not Satisfied 1 2 3 4 5 Very Satisfied
4. The police officer made a decision based on facts.
Strongly Disagree 1 2 3 4 5 Strongly Agree
5. The police officer showed concern for my rights.
Strongly Disagree 1 2 3 4 5 Strongly Agree

Instructions: Please answer the following questions. Circle **one** answer.

1. How often do you have friendly or positive interactions with someone who is of a different race or ethnicity than you?
Never 1 2 3 4 5 Very Frequently
2. In general, how close do you feel towards individuals from different races or ethnicities?
Not Close at All 1 2 3 4 5 Very Close
3. How much discrimination against Black Americans do you feel there is in the United States today?
None 1 2 3 4 5 A Lot
4. How much discrimination against White Americans do you feel there is in the United States today?
None 1 2 3 4 5 A Lot
5. When I interact or think about interacting with individuals from a different race or ethnicity, I feel relaxed.
Strongly Disagree 1 2 3 4 5 Strongly Agree
6. How often do you have genuine, non-superficial, interactions with individuals from a different race or ethnicity?
Never 1 2 3 4 5 Very Frequently

Instructions: Please answer the following questions about yourself.

1. How old are you? _____
2. What gender do you identify as?
Male Female Transgender Nonbinary
3. What race/ethnicity do you identify as?
 - a. White/Caucasian
 - b. Black/African American
 - c. Asian/Pacific Islander
 - d. Hispanic
 - e. Native American/American Indian
 - f. Multiracial
 - g. Other
4. Which of the following best describes your hometown?
Rural area Urban area Suburban area Other
5. What is your family's annual income?
 - a. Less than \$50,000
 - b. \$51,000 - \$75,000
 - c. \$76,000 - \$100,000
 - d. More than \$100,000

This is the end of the survey. Thank you for your participation. Please return this survey and one signed copy of the consent form to the principal investigator.

Appendix D

Vignette Scenarios

Other Scenarios

The scenario in the survey above can be regarded as Version 1 of 12. Listed below are the other 11 version, appropriately marked.

Version 2 of 12:

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a knife. Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 3 of 12:

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a gun. Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 4 of 12:

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!" Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 5 of 12:

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a knife. Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 6 of 12:

Jim Walker is a police officer with the Chicago Police Department. One day, while on duty, Jim received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jim was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a gun. Jim told the man to put his hands up and when the man did not comply, Jim pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 7 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!" Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 8 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a knife. Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 9 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", white, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a gun. Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 10 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!" Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 11 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a knife. Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Version 12 of 12:

Jermaine Walker is a police officer with the Chicago Police Department. One day, while on duty, Jermaine received a dispatch call describing a sale of drugs in the park. The dispatch described the suspect as a male, 5'10", black, with short black hair. He was last seen in the neighborhood of East Chatham, wearing a gray tracksuit.

Later that day, Jermaine was walking down Drexel Ave. with two other officers when they saw a man who matched the description of the suspect from the dispatch call. When they called out to him, the man began to run. The police officers chased him into the third floor of a nearby apartment building. The man turned and yelled "I wasn't doing anything! Leave me alone!", then pulled out a gun. Jermaine told the man to put his hands up and when the man did not comply, Jermaine pulled out his gun and shot him in the chest. Although he was rushed to a hospital, the man did not survive the shooting.

Appendix E

One-Way ANOVA of Vignette Scenarios

Vignette 1

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	338	9.8284	4.75390	.25858	9.3198	10.3370	.00	24.00
1.00	34	5.9706	3.13809	.53818	4.8757	7.0655	.00	13.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	459.764	1	459.764	21.422	.000
Within Groups	7941.018	370	21.462		
Total	8400.782	371			

Vignette 2

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	340	9.4265	4.78665	.25959	8.9159	9.9371	.00	24.00
1.00	32	10.0000	4.48654	.79312	8.3824	11.6176	4.00	19.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.620	1	9.620	.424	.515
Within Groups	8391.162	370	22.679		
Total	8400.782	371			

Vignette 3

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	341	9.2258	4.68904	.25393	8.7263	9.7253	.00	24.00
1.00	31	12.2258	4.72377	.84841	10.4931	13.9585	4.00	24.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	255.750	1	255.750	11.618	.001
Within Groups	8145.032	370	22.014		
Total	8400.782	371			

Vignette 4

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	340	9.8088	4.76794	.25858	9.3002	10.3174	.00	24.00
1.00	32	5.9375	2.87298	.50788	4.9017	6.9733	.00	13.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	438.334	1	438.334	20.369	.000
Within Groups	7962.449	370	21.520		
Total	8400.782	371			

Vignette 5

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	341	9.3695	4.76366	.25797	8.8621	9.8769	.00	24.00
1.00	31	10.6452	4.61554	.82898	8.9522	12.3382	4.00	20.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46.243	1	46.243	2.048	.153
Within Groups	8354.540	370	22.580		
Total	8400.782	371			

Vignette 6

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	345	9.2435	4.66916	.25138	8.7490	9.7379	.00	24.00
1.00	27	12.4444	4.97944	.95829	10.4746	14.4142	2.00	20.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	256.568	1	256.568	11.656	.001
Within Groups	8144.214	370	22.011		
Total	8400.782	371			

Vignette 7

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	341	9.6745	4.79119	.25946	9.1641	10.1848	.00	24.00
1.00	31	7.2903	3.80520	.68343	5.8946	8.6861	.00	15.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	161.527	1	161.527	7.254	.007
Within Groups	8239.255	370	22.268		
Total	8400.782	371			

Vignette 8

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	337	9.4006	4.85410	.26442	8.8805	9.9207	.00	24.00
1.00	35	10.2000	3.69260	.62416	8.9315	11.4685	4.00	17.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.262	1	20.262	.895	.345
Within Groups	8380.520	370	22.650		
Total	8400.782	371			

Vignette 9

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	342	9.2398	4.74337	.25649	8.7353	9.7443	.00	24.00
1.00	30	12.1667	4.11962	.75214	10.6284	13.7050	4.00	20.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	236.276	1	236.276	10.708	.001
Within Groups	8164.506	370	22.066		
Total	8400.782	371			

Vignette 10

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	343	9.7201	4.74099	.25599	9.2166	10.2236	.00	24.00
1.00	29	6.5862	4.01352	.74529	5.0595	8.1129	.00	16.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	262.617	1	262.617	11.940	.001
Within Groups	8138.166	370	21.995		
Total	8400.782	371			

Vignette 11

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	341	9.4516	4.80883	.26041	8.9394	9.9638	.00	24.00
1.00	31	9.7419	4.22664	.75913	8.1916	11.2923	4.00	20.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.395	1	2.395	.106	.745
Within Groups	8398.387	370	22.698		
Total	8400.782	371			

Vignette 12

Descriptives

Legitimacy

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
.00	343	9.3265	4.68213	.25281	8.8293	9.8238	.00	24.00
1.00	29	11.2414	5.36294	.99587	9.2014	13.2813	4.00	24.00
Total	372	9.4758	4.75853	.24672	8.9907	9.9609	.00	24.00

ANOVA

Legitimacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	98.043	1	98.043	4.369	.037
Within Groups	8302.739	370	22.440		
Total	8400.782	371			

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ACADEMIC VITA

Victor Alleyne

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EDUCATION:

The Pennsylvania State University, University Park, PA Expected Graduation: May 2021
Bachelors of Arts in Criminology
Minor(s): French

WORK EXPERIENCE:

The Georgetown Landscaping Company, Washington, D.C August 2017- Present
Student Landscaping Designer

- Organized the required daily tools in the vehicle to ensure efficient completion of jobs
- Constructed daily plans to successfully accomplish goals in line with company expectations

The Pennsylvania State University, University Park, PA August 2017- August 2019
Auxiliary Officer

- Responsible for directing traffic during congested events on campus in accordance with police guidelines
- Maintained the safety of all attendees of events on campus in tandem with Penn State University Police
- Dutifully patrolled resident halls on campus ensuring their security and key card access competence

The Federal Bureau of Investigation, Washington, D.C June 2018- August 2019/August 2020- Present
Student Workforce Trainee/Intern

- Assisted in the endeavors of operational squads and their missions in line with intern expectations
- Provided linguistic expertise and translation for specific assignments to further investigations
- Organized documents and spreadsheets containing sensitive information with the highest degree of security
- Developed and enhanced pre-existing methods to secure data linked with current investigations

LEADERSHIP EXPERIENCE:

Alpha Phi Alpha Fraternity, Incorporated, University Park, PA December 2019- May 2020
Chapter President

- Oversaw ten member organization and managed budget of \$20,000
- Developed and executed programming, fundraising and community service vision
- Facilitated equal opportunity and academic success of members

Paterno Fellows Honors Program, College of the Liberal Arts, University Park, PA August 2016- Present
Scholar

- Completion of advanced coursework over a period of four years including honors classes
- Completion of thesis work requiring collaboration with department faculty and graduate student
- Completion of leadership and service requirements in line with program expectations

Schreyer's Honors College, University Park, PA August 2018- Present
Scholar and Ambassador

- Maintaining a 3.4 GPA while completing rigorous academic courses
- Representing the Honors College through a series of panels, interviews, and tours
- Accomplishing independent study work in cooperation with faculty and staff

ADDITIONAL INVOLVEMENT

Black and Latino Male Empowerment Group August 2016- May 2020
Facilitator

- Leading bi-weekly discussions about race, politics, international relations, and local news
- Creating a safe-space for minoritized students to express sentiments about their experiences

SKILLS/INTERESTS:

Skills: Spanish and French fluency, 3rd Degree Black Belt, 2019 Embedded Criminology Study Abroad in Curaçao, 2019 MLK Day of Service Team Leader & 2016 French and Spanish Cultural Immersion Trip to France and Spain