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Black Police Uniforms Implicitly Increase Hostile Perceptions And Behavior

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BLACK POLICE UNIFORMS IMPLICITLY INCREASE HOSTILE PERCEPTIONS AND BEHAVIOR

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BLACK POLICE UNIFORMS IMPLICITLY INCREASE HOSTILE

PERCEPTIONS AND BEHAVIOR

by

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DISSERTATION

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Abstract

Use of excessive, and sometimes deadly, force by U.S. law enforcement officers is a critical and costly problem. An enclothed cognition framework suggests that clothing, such as a uniform, can implicitly affect cognitive processing and behavior of the wearer (Adam & Galinsky, 2012). Previous research demonstrated that darker clothing implicitly affects judgments and behavior in two ways. First, persons who wear darker clothing are perceived more negatively (Vrig, 1997; Vrig & Akehurst, 1997). Second, actors wearing darker colored clothing demonstrate greater aggressive behavior than actors wearing lighter colored clothing (Frank & Gilovich, 1988; Peña, Hancock, & Merola, 2009). The present research investigated the psychological effects of wearing a black or a white police uniform. Experiment 1A found that, when provoked, participants evaluated a confederate as more aggressive when wearing a black versus a white t-shirt. Experiment 1B failed to replicate this effect using a confederate dressed in a police-like uniform. Experiment 2 tested the enclothed cognition effects of a police-like uniform on self-perceptions and judgments within ambiguous policing contexts. There was little support for the hypothesis that the color of a police uniform biases judgements of the wearer. Implications for policy and future research are discussed.

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Chapter 1: Introduction

Use of excessive, and sometimes deadly, force by U.S. law enforcement officers is a pressing and controversial problem. One need only to watch the daily news for new instances of potential police brutality. Incidents that have ended in civilian fatalities have been especially publicized (e.g, Trayvon Martin, Alton Sterling, Walter Scott, Eric Garner, Michael Brown, Freddie Gray, Philando Castile). Although no official national database currently exists documenting use force by police, estimates indicate that there were 1092 civilian fatalities due to police use of force in 2016 (The Guardian, 2017). The use of deadly force by police has sparked civilian protest, both peaceful and violent, and a national debate on police reform. The factors that contribute to aggressive police-civilian interactions are complicated. Extant research, however, shows that characteristics related to the suspect, the officer, the suspect-officer encounter, and the community all affect use of force reactions (Klahm & Tillyer, 2010; Bolger, 2015). Here I investigate one additional factor, police uniform color, on police-civilian behavior. Law enforcement officers often wear dark-colored uniforms, such as black or navy blue. The present studies focus specifically on contrasting the effects of black versus white colored uniforms.

Law enforcement use of force

Police use of force, although necessary at times, is problematic when excessive or perceived as excessive. It is estimated that law enforcement either threaten or use force in 1.7% of their interactions with civilians and in 20% of arrests (Hickman, Piquero, & Garner, 2008). Further, among a sample of 12 U.S. police departments, The Center for Policing Equity reported 14,731 incidents of police use of force between 2010 and 2015; 1% of these incidents involved lethal force (Center for Policing Equity, 2016, July). Further, lethal force accounts for the majority of police-related deaths and these incidents are likely to be under-reported (U.S. Department of Justice,

Office of Justice Programs, 2015). A number of these incidents might be justified, but data suggest that excessive force is sometimes used. For example, a National Institute of Justice study indicated that about 22% of U.S. law enforcement officers reported that police officers in their department "sometimes, often, or always" use more force than necessary when making an arrest (U.S. Department of Justice, National Institute of Justice, 2000). Further, a Bureau of Justice Statistics report found that large law enforcement agencies received over 26,000 citizen complaints regarding officer use of force and of these complaints 8% were substantiated as excessive use of force (U.S. Department of Justice, Bureau of Justice Statistics, 2006). Further, lethal force can be argued to be excessive when used against unarmed suspects. About 15% of the 1092 civilians who were killed by police in 2016 were unarmed (The Guardian, 2017). Similarly, data gathered from a sample of 10 police departments indicates that 21% of police shootings between 2000 and 2015 involved unarmed civilians (National Bureau of Economic Research, 2016). Although it is difficult to quantify just how often excessive force is used, data suggest that it occurs, or is perceived to occur, often enough to pose a public safety problem.

Causes of Use of Force

The most widely cited factors that predict use of force are grouped into four broad categories. These include characteristics related to the suspect (e.g., race, gender, age, intoxication), the encounter (e.g., presence of a weapon, arrest made, presence of other citizens), the officer (race, gender, age, experience), and the community (e.g., crime rate, economic conditions) (Klahm & Tillyer, 2010; Bolger, 2015). Klahm and Tillyer (2010) summarized 23 criminal justice studies on use of force published between 1995 and 2008. Using a simple tally method, the authors quantified how many studies found a relationship between use of force and suspect, encounter, and officer characteristics. They conclude that the evidence is mixed across

many of the predictors. The tally method used, however, ignores how studies differ in sample size and effect size. Thus, it is difficult to draw precise conclusions from these data.

Bolger (2015) conducted a systematic meta-analytic review of the use of force literature. The meta-analysis identified nineteen studies published between 1995 and 2013 that included use of force actions by U.S. patrol officers. Measures of use of force ranged from verbal to deadly force. Predictors of use of force included suspect, encounter, officer, and community variables. Results demonstrated several significant predictors of police use force. These included, (a) suspect race, sex, demeanor, social class, and intoxication (suspect characteristics), (b) officer sex (officer characteristics), and (c) offense seriousness, suspect resistance, arrest, conflict, number of officers, proactive police intervention (encounter characteristics). The average weighted effect size for each of these significant predictors, however, was quite small. Encounter characteristics accounted for the most variance (odds ratio = 1.57; r^2 = 0.02), followed by suspect characteristics (odds ratio = 1.17; r^2 = 0.002), and officer characteristics (odds ratio = 1.05; r^2 = 0.0002). Community characteristics were under represented in the selected studies and did not explain a significant amount of variance in use of force actions. Thus, the literature shows that officer use of force is poorly understood and there are likely other, under studied factors that predict use of force decisions.

Costs of Use of Force

Use of force results in tremendous costs for both civilians and law enforcement. One such cost for civilians and police is decreased community trust in law enforcement and anti-police attitudes. For example, excessive use of force might fuel public distrust of and negative attitudes toward law enforcement. A recent Gallop poll indicates that only about 52% of Americans report "a great deal" or "quite a lot" of confidence in the police, the lowest Gallop estimate of community

trust since 1993 (Jones, 2015, June 19). Negative attitudes toward officers leads to more difficult and dangerous policing environments. For instance, 86% of officers report that fatal encounters between police and civilians, have made their jobs more difficult (Pew Research Center, 2017). Most (93%) report greater concern for their own safety on the job and many (76%) report hesitation to use force even when they believe it to be appropriate (Pew Research Center, 2017). Civilian distrust, therefore, negatively impacts officers' perceived safety and ability to police their communities.

Use of force has great financial costs. For example, from 2010 to 2014 there was approximately a 50% increase in money spent on settlements and court judgments by the U.S.'s ten largest police departments; in 2014 this financial cost was $248.7 million (Elinson & Frosch, 2015, July 15). In response to federally mandated police reforms, departments are now spending more on officer training. Large U.S. cities have increased spending on officer training by 17% since 2013, with $317.9 million spent in 2015 (Jones, Niquette, & Nash, 2016). Thus, the financial consequences of police use of force are highly burdensome for taxpayers.

Use of force also results in civilian and officer injury and lives lost. Officer use of force increases the likelihood of injury to officers by over 300% and injury to suspects by over 50% (Alpert, Smith, Kaminski, Fridell, MacDonald, & Kubu, 2011). In terms of fatalities, law enforcement officers used lethal force against 1146 civilians in 2015 and 1092 civilians in 2016 (The Guardian, 2017). Moreover, public perceptions of police brutality recently culminated in the July 2016 shooting death of five officers in Dallas and three officers Baton Rouge. The perpetrators reported that they were motivated by recent police shootings of Black men (Fernandez, Pérez-Peña, & Bromwich, 2016, July 8; Visser, 2016, July 18). Excessive use of force, therefore,

potentially creates hostility between law enforcement and civilians. This hostility not only leads to loss of life, but also impedes officers' ability to safely and effectively serve their communities.

Public distrust of law enforcement has led to initiatives aimed at improving police-community relations. For example, in 2014 President Obama signed an executive order to establish the Task Force on 21st Century Policing. For these initiatives to be successful, we must identify and understand the social-psychological factors that foster police use of force. Effective policy reform will be mutually beneficial to police and their communities. The present studies identify and test one potential mitigating factor in hostile police-civilian interactions, uniform color. Here I test two complementary hypotheses. First, I test the hypothesis that uniform color affects others' perceptions of the wearer. I predict that black, compared to white, uniforms create increased hostile impressions. Second, I test the hypothesis that uniform color affects the wearer's perceptions and behaviors. I predict that wearing a black, compared to a white, uniform will lead to a more aggressive self-concept. Further, I predict that individuals who wear black uniforms support more aggressive behaviors toward criminal suspects and perceive criminal suspects more negatively. The following sections will describe the symbolism associated with black and white colors and the psychological impacts of wearing symbolic-laden, and particularly black or white, clothing.

Psychological effects of black versus white

Black is traditionally a symbol of darkness, evil and impurity, whereas white is traditionally a symbol of cleanliness, goodness, and purity (Hemphill, 1996; Sherman & Clore, 2009). For example, wedding gowns are historically white to represent purity and symbols of hope are often white (e.g., a white dove). In movies, the "good" characters most often wear white and the bad characters often wear black. Death is represented by the color black. This color meaning dichotomy

is woven in our history and has a deep-rooted meaning. Thus, at both a symbolic and literal sense, black and white represent evil and purity, respectively.

The association of black with evil and white with good are well learned and affect our emotional and perceptual experiences on explicit and implicit levels. Explicitly, the color black is consistently evaluated more negatively than lighter colors (Hemphill, 1996; Valdez & Mehrabian, 1994; Williams & McMurtry, 1970) and evaluated as more dominant and arousing than white (Valdez & Mehrabian, 1994). On an Implicit Association Test, individuals demonstrate an implicit preference for the color white over black (Kareklas, Brunel, & Coulter, 2014). Further, the color white is automatically associated with morality and black is automatically associated with immorality (Sherman & Clore, 2009). Participants are faster to correctly categorize a negative word when the word is presented in black, versus white, font and faster to correctly categorize a positive word when the word is presented in white, versus black, font (Meier, Robinson & Clore, 2004). Individuals, then, are aware of the cultural associations of the colors black and white and are biased to process these colors consistent with these associations.

Effects of dark and light clothing on perception and behavior

Previous research has demonstrated that clothing color can affect social perception such that actors wearing darker colors are perceived as more aggressive. In a series of studies, Frank and Gilovich (1988) demonstrated this effect within the realm of professional sports. In one study, participants rated darker colored professional football and hockey uniforms as looking more aggressive ("malevolent") than lighter colored uniforms. Professional football and hockey teams with darker uniforms also incurred more penalties. Webster, Urland, and Correll (2012) replicated this effect. They analyzed NHL data between 1984 and 2010, a total of 52,098 games played by

30 teams, and found that teams that wore black uniforms incurred more penalty minutes than teams who wore lighter colored uniforms.

Because these data are correlational, it is impossible to know whether sports teams who wear darker uniforms play more aggressively, are perceived by referees as playing more aggressively, or both. To test the possibility that referees' calls are biased toward penalizing teams with darker uniforms, participants were randomly assigned to view a defensive football team wearing either black or white and then judged the legality of an ambiguous play (Frank & Gilovich, 1988). Participants were more likely to penalize the defensive team when their uniforms were black than when their uniforms were white, although the teams' behavior was equivalent. Thus, the association of black with aggression led to biased perceptions of a team's aggressive behavior.

Comparable effects are found when judging individuals' potential involvement in crimes. Participants who viewed a videotape of a man behaving aggressively (i.e., walking toward a person with a knife or screwdriver) judged the man's behavior as more aggressive, threatening, and dangerous and also reported feeling more irritated, annoyed, and angry when he was wearing black versus light colored clothing (Vrig, 1997). Furthermore, a criminal suspect wearing black clothing versus light colored clothing in a mugshot photograph was evaluated as guiltier and more aggressive (Vrig, 1997). Clothing color also impacts evaluations of crime victims. Participants viewed a video tape of a woman describing alleged sexual harassment, for example. Participants evaluated the victim as more dishonest in her narrative when she was wearing black versus lighter colored clothing (Vrig & Akehurst, 1997). Across a variety of scenarios, therefore, individuals are biased toward evaluating targets wearing dark clothing as more threatening and less trustworthy than targets wearing lighter clothing.

Further, wearing darker clothing is associated with more aggressive behaviors (Frank & Gilovich, 1988), attitudes, and intentions (Peña, Hancock, & Merola, 2009). Frank and Gilovich randomly assigned participants to teams in which they wore black or white. Participants then choose several games that they could play against a competing team. Teams who wore black chose to play more aggressive games than teams wearing white. In virtual reality settings, avatars dressed in black are trusted less than avatars dressed in white (Peña & Yoo, 2014). Participants who played a virtual reality game with an avatar cloaked in black expressed greater intentions to virtually harm other players and more positive attitudes toward virtual aggression (Peña et al., 2009).

In sum, wearers of black clothing are perceived as more hostile than wearers of white clothing. Behaviorally there is also a bias to act more hostilely when wearing black than when wearing white. As discussed further below, law enforcement officers often wear black uniforms. The present research tests how uniform color impacts behavior of the wearer and perceptions of the wearer's behavior.

Psychological effects of clothing

Clothing has symbolic meaning. For example, a doctor's white coat symbolizes professionalism, intelligence, and credibility. Clothing's symbolic meaning allows one to use clothing to manage impressions. Professional attire (e.g., suit and tie; blouse and blazer) conveys competence, for example. Research demonstrates that clothing influences the kinds of impressions others form about the wearer. For instance, women who gave a class presentation were evaluated more positively when dressed in business versus casual attire (Gurung, Kempen, Klemm, Senn, & Wysocki, 2014). Further, a qualitative analysis of 93 studies published between 1955 and 2004 found evidence that clothing and appearance manipulations influence others' behavior toward the

wearer, including prosocial behavior, obedience, and aggression (Johnson, Yoo, Kim, & Lennon, 2008).

Clothing is not only useful for creating favorable impressions among others, but also is shown to impact the wearer's cognitive processing and behavior. This phenomenon is called "enclothed cognition" (Adam & Galinsky, 2012). According to this theory, if an item of clothing has symbolic meaning, then wearing and embodying it (i.e., the physical experience of wearing the clothing) activates the associated symbolic concepts. The heightened activation of these concepts then leads to behavior consistent with the symbolic meaning of the clothing. Enclothed cognition effects extend beyond mere priming effects, or mere exposure to the clothing. Thus, the psychological effects of clothing are contingent on two factors, 1) the clothing having symbolic meaning to the wearer and 2) the physical experience of wearing the clothing.

In a series of studies, Adam and Galinsky (2012) tested the effect of wearing a white lab coat, symbolically related to careful attention and precision, on measures of attention. Consistent with an enclothed cognition framework, participants who wore a white lab coat performed better on tasks measuring selective and sustained attention. This effect was only demonstrated among participants who wore a lab coat that was described as a doctor's, versus a painter's, coat. Thus, participants' behavior was consistent with the symbolic meaning of the lab coat. Further, this effect was not demonstrated among participants who were exposed to, but did not wear, a lab coat. Thus, clothing seems to affect behavior to the extent that it has symbolic meaning and is physically embodied by the wearer.

Enclothed cognition effects are demonstrated on a variety of tasks. For example, wearing a white lab coat is shown to impair performance on tasks that require less attentional control and greater reliance on "insight" (Van Stockum & DeCaro, 2014). Formal clothing is shown to increase

abstract thinking on several tasks (Slepian, Ferber, Gold, & Rutchick, 2015). Wearing nursing scrubs increases empathetic concern and prosocial behavior (López-Pérez, Ambrona, Wilson, & Khalil, 2015).

In sum, clothing can affect the wearer's cognitive processing and behavior to the extent that the clothing has symbolic meaning to the wearer. The extant research suggests that these effects occur through the activation of concepts related to the symbolic meaning of the clothing. These effects also appear to rely on the physical experience of wearing an item of clothing.

Law enforcement officers are required to wear specific uniforms, which are symbolic of their authority. The uniform, and its conveyed authority, influences perceptions of and behavior toward the wearer. For example, wearing a guard uniform elicits greater compliance with a command than wearing civilian clothing or a milkman uniform (Bickman, 1974). When in uniform, officers are perceived as more competent, reliable, intelligent, and helpful (Singer & Singer, 1985). According to the enclothed cognition framework, law enforcement officers' uniforms, through their symbolic associations, will have downstream effects on their cognition and behavior as well.

Law enforcement uniforms

The traditional blue uniforms worn by law enforcement were first implemented in London, England in 1829 with the establishment of the London Metropolitan Police, or the "New Police" (Emsley, 2011). The Metropolitan Police were centralized and tasked with the prevention, rather than just the detection, of crime. British citizens perceived a militarized police force, like France's *gendarmerie*, as threat to their liberties. Therefore, one goal of this new institution was to separate the police from the military. The police uniform was designed specifically for this purpose. In contrast to the British military's scarlet, short-tailed coats, the police uniform included top hats

and blue long-tailed coats. The use of blue colored uniforms, therefore, is a historical precedent initially aimed at cultivating civilian trust.

Some research suggests that police uniforms influence civilian perceptions. Militarized uniforms compared to civilian style uniforms elicit more negative civilian reactions (Bell, 1982). The presence of neckties and hats, conversely, has no effect on civilian impressions (Johnson, Plecas, Anderson, & Dolan, 2015). For historical and practical purposes law enforcement officers often wear black or dark blue uniforms. Wearing a dark colored uniform allows police to pursue suspects more inconspicuously, for example. Black or dark blue uniforms might also be easier to keep clean. Given the strength and breadth of the above described color biases, however, there is reason to believe that civilian perceptions are influenced by the symbolic associations of black and white and that police also fall prey to these enclothed cognition effects.

The demonstrated color bias suggests two distinct effects on police-civilian interactions. First, police may be perceived as more hostile when wearing a dark colored uniform. If so, these officers may be less trusted by civilians and civilians may behave more defensively when interacting with these officers. Second, police may unwittingly behave more aggressively when wearing dark versus light colored uniforms. If so, this increased hostile behavior may increase the likelihood of excessive use of force. These two predicted effects together may create hostile interactions between police and civilians.

To date there is limited research testing how the effects of dark versus white clothing color unfold during police-civilian interactions. In one study participants rated photographs of different colored uniforms, including white, light blue, khaki, and black, on a series of traits (Johnson, 2005). Participants formed more negative impressions of black uniforms than of lighter color uniforms. Black uniforms were perceived as more cold, unfriendly, mean, forceful, aggressive,

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and corrupt than any other color uniform. Another study, in contrast, demonstrated just the opposite. Students recruited from criminal justice courses evaluated photographs of male police officers wearing white, medium blue, navy blue, and black uniforms. Police wearing black or navy uniforms were evaluated more positively than police wearing white or medium blue uniforms (Nickels, 2008). It should be noted that participants in this study were mostly criminal justice majors, whose attitudes toward law enforcement are not likely to be representative of a general population. In support of this idea, participants who reported being criminal justice majors formed more positive impressions of the officers, overall. Results also revealed positive impressions of black uniforms in a condition where the officer wearing the uniform was White, but not when the officer was Black. Further, both of these studies were correlational and measured impressions associated with uniform color rather than impressions of or measures of the actor's behavior while in uniform.

Furthermore, one study tested the general hypothesis using actual data on reported civilian aggression toward officers and officer aggression toward civilians between 2000 and 2009 (Johnson, 2012). The sample of police departments included was fairly representative of U.S. law enforcement, including 250 departments from across the U.S. It was predicted that departments who require black uniforms (versus non-black uniforms) would report more civilian complaints against officers and more instances of use of excessive force. Additionally, data on six relevant community factors were also collected for inclusion in analyses as covariates. These community factors included city population density, violent crime rate, police officers per capita, percentage of Black residents, income inequality, and geographic region. Looking at the effect of uniform color alone, results demonstrated that police departments whose uniforms are dark- versus light-colored have higher rates of officer assaults and aggression toward civilians, particularly in the

form of lethal force. The author, however, concludes that the wearing of dark uniforms was not related to civilian and officer aggression. This conclusion was reached through the inclusion of the six covariates in analyses, which washed out the effect of uniform color.

There are two primary problems with the interpretation of these results. First, departmental uniform colors varied along a continuum from dark to light. These colors were then dichotomized into "dark" and "light" uniform categories. This dichotomization ignores the potential gradient effects of uniform color and therefore the results may underestimate the true effect. Second, the additional variables included in the analyses may be systematically related to the use of dark or light uniforms. For example, if the hypothesis that darker colors are evaluated as more aggressive is correct, then it is possible that departments opt for dark colored uniforms where crime rate or perceived threat is higher to consciously produce a more domineering persona to more effectively deal with these threats. This study, therefore, demonstrates a pattern of results that are consistent with our hypothesis, but fails to isolate the effects of uniform color on police behavior.

One can also observe documented instances of law enforcement behavior in the "real world". We conducted a Google image search for "police" paired with keywords that implied either aggressive or prosocial behavior. The first 100 color images were used and duplicates (i.e., photos clearly depicting the same officer) were omitted. We predicted that police would more often wear black, but that the proportion of officers wearing black when performing prosocial behaviors would be lower than when performing aggressive behaviors. Percentages of photos depicting officers wearing black, blue, white, and other colored (e.g., green) uniforms are found in Table 1. Black vests or black shirts worn with a colored vest were categorized as "black." The general pattern suggests that police are more often documented wearing black than any other color. When

documented engaging in prosocial versus aggressive behavior, however, a greater proportion of officers are wearing blue or white.

Table 1: Percent Uniform Color by Keyword

Keyword	Black	Blue	White	Other
"Police brutality"	80%	5%	3%	12%
"Police being violent"	82%	4%	3%	11%
"Police helping others"	69%	23%	3%	5%
"Police in the community"	72%	20%	4%	4%
"Police and children"	57%	23%	8%	12%

These findings suggest that there are two complementary effects of dark colored, heretofore defined as black, uniforms within a policing context. First, I predict that law enforcement officers wearing black creates more hostile perceptions at the interpersonal level. Second, I predict that law enforcement officers wearing black behave in a more hostile fashion and take on a more aggressive self-concept. Presumably, these effects operate implicitly. There may also be gradient effects of color. For example, navy blue may have differential effects compared to black. Presently, we will contrast the effects of the extreme ends of the continuum, black versus white, due to their symbolic associations.

Chapter 2: Experiment 1A

The extant research examining the hypothesis that police wearing black versus white uniforms leads to more aggressive impressions and behaviors is correlational in nature. A preliminary study tested the hypothesis that black, compared to white, clothing leads to biased perceptions of an authority figure under a condition of provocation.

Method

Participants

Data were collected from 122 undergraduate participants at the University of Texas at El Paso who received course credit for their participation (66 % women; 76% Latino; $M_{age} = 21.25$, $SD = 5.07$).

Design

The study used a 2 (Clothing color: black vs white) X 2 (Feedback: negative vs positive) between-subjects design. A confederate was randomly assigned to wear either a black or a white t-shirt. Participants were randomly assigned to a feedback condition.

Procedure

Participants were recruited for a study that ostensibly measured their basic mathematical aptitude. One participant was run per experimental session. One of three trained undergraduate confederates administered a math quiz comprised of five "common knowledge questions" to the participant; all problems were multiple choice. Participants were instructed to work out one problem at a time and then announce their answer out loud to the confederate. Participants were given only one minute to answer each problem. Depending on experimental condition, the confederate wore either a black or a white t-shirt and provided either negative or positive bogus

feedback to the participant. Confederates were kept blind to the experimental hypothesis and to the answers to the math quiz. Confederates were debriefed at the conclusion to the study and were probed for suspicion of the experimental hypothesis; none correctly reported the hypothesis.

After completing the math quiz, participants were instructed to complete the dependent variables on a computer. The confederate left the room at this time. Participants were then debriefed and thanked by an experimenter.

Materials

Demographics

Participants indicated their age, sex, ethnicity, class rank, proficiency in English, and political ideology (*1-extremely liberal; 7-extremely conservative*) prior to the experimental manipulation.

Feedback

Participants were randomly assigned to receive either positive or negative feedback from the confederate. To increase the believability of the feedback, one negative comment was provided in the positive condition and one positive comment was provided in the negative condition. Thus, the positive condition contained four positive comments and one negative comment, and the negative condition contained four negative comments and one positive comment.

> *Positive feedback condition*: "good job, you really know your stuff", "wrong", "it's so difficult, I can't believe you got it right!", "correct," and "you're one of the only people to get that right."
>
> *Negative feedback condition*: "bad try, too bad you don't know your stuff", "correct", "it's so easy, I don't see why you got it wrong," "wrong", and "everyone else knew that answer but you".

Confederates responded with one comment per participant answer. Confederates provided feedback comments in the same order for all participants.

Common knowledge questions

Five math-related questions were selected from the State of Texas Assessments of Academic Readiness standardized examination (STAAR; Texas Education Agency, 2015). Questions were printed on white paper, with one question per sheet, and each sheet was overlaid with a transparency. Participants were provided with a dry erase marker to work out each problem on the transparency and to select their answer.

Dependent variables

The confederate evaluation and retaliation task were counterbalanced. Participants then completed the guessing item and Social Vigilante Scale, respectively.

Confederate Evaluations

Participants completed trait evaluations of the confederate through Qualtrics online survey system. Two 8-item trait scales were presented, with all 16 items presented in randomized in order per participant. All ratings were on a 7- point Likert scale. The first scale measured the *perceived incompetence* of the confederate; participants rated the extent to which the confederate seemed intelligent, confident, informed, and to have made sense. This scale demonstrated adequate reliability ($\alpha = 0.78$). The second scale measured *perceived aggressiveness* of the confederate; participants rated the extent to which the confederate was rude, aggressive, mean, and strong. The 4-item scale demonstrated adequate reliability ($\alpha = 0.67$). Trait ratings were scored such that higher means indicate more negative evaluations (i.e., greater perceived incompetence and greater perceived aggressiveness). Participants were also asked to rate how much they liked the confederate (*1-not at all; 7-very much*).

Retaliation Task

Participants were provided with 15 math-related questions from the STAAR (Texas Education Agency, 2015). Questions varied in their difficulty level. Five questions were labeled as "easy", five were labeled as "moderate", and five were labeled as "difficult." Participants were told that the next participant would quiz the confederate experimenter and to select five questions for the quiz. The difference between the percentage of easy questions and percentage of difficult questions selected was computed for analyses.

Guessing

Participants completed a one-item indicator of the extent to which they guessed their answers on the math quiz (*1-not at all; 7-completely*).

Social Vigilante Scale

This is a 14-item scale to measure the extent to which participants were likely to resist persuasion (Saucier & Webster, 2010). This scale demonstrated adequate reliability ($\alpha = 0.80$). Participants always completed this measure last.

Results

We hypothesized that participants would perceive the confederate as more aggressive when the confederate wore black, versus white, clothing and when the confederate provided negative, versus positive, feedback. Each dependent variable was analyzed separately in a 2 (Clothing color: black vs white) X 2 (Feedback: negative vs positive) ANOVA. Across all analyses, we tested for confederate effects through inclusion of confederate as a covariate. Results were consistent across all three confederates (2 female and one male). Furthermore, Social Vigilantism as an individual difference did not moderate any of the reported effects and are not discussed further.

Perceived Aggressiveness

Results revealed a main effect of feedback, $F(1, 118) = 31.79$, $p < .0001$, $\eta^2 = 0.22$. Participants rated the confederate as more aggressive when the confederate provided negative ($M = 3.22$; $SD = 1.01$) compared to positive ($M = 2.38$; $SD = 0.71$) feedback. This was qualified by the predicted two-way interaction, $F(1, 118) = 11.27$, $p = .002$, $\eta^2 = 0.09$. Paired comparisons demonstrated that the confederate was perceived as more aggressive in the black clothing-negative feedback condition ($M = 3.56$; $SD = 1.04$) versus the white clothing-negative feedback condition ($M = 2.94$; $SD = 0.85$), $t(58) = 2.80$, $p = .006$, $d = 0.73$. Further, confederates in the black clothing-negative feedback condition were perceived as the most aggressive compared to all other experimental conditions. Means by condition can be found in Table 2.

Table 2. Perceived Aggressiveness by Experimental Condition

Condition	Mean (SD)
Black-Negative	3.56 (1.04)
White-Negative	2.94 (0.85)
Black-Positive	2.15 (0.60)
White-Positive	2.57 (0.74)

Perceived Incompetence

Results revealed a main effect of feedback, $F(1, 118) = 17.75$, $p < .0001$, $\eta^2 = 0.13$. Participants rated the confederate as more incompetent when giving negative ($M = 3.01$, $SD = 1.20$) than positive ($M = 2.08$, $SD = 1.03$) feedback. No other effects were significant (all p's > .15).

Liking of the Confederate

Results revealed a main effect of feedback, $F(1, 117) = 13.37$, $p = .0004$, $\eta^2 = 0.10$. Confederates were rated as more likable when they gave positive ($M = 5.89$; $SD = 1.29$) than negative ($M = 4.95$; $SD = 1.43$) feedback. The interaction between feedback and color was not significant, $F(1, 117) = 2.30$, $p = .14$.

Retaliation

There was no effect of experimental condition on the retaliation measure, $F(3, 113) = 0.75$, $p = .53$.

Guessing

Results revealed a main effect of feedback on reported guessing, $F(1, 118) = 16.79$, $p < .0001$, $\eta^2 = 0.12$. Participants reported greater guessing when they received negative ($M = 4.83$; $SD = 1.66$) compared to when they received positive ($M = 3.63$; $SD = 1.79$) feedback. No other effects were significant (all p's $> .15$). This result supports the believability of the manipulation. Participants likely tried to "save face" when they were told that they answered incorrectly.

Discussion

Experiment 1A tested the hypothesis that participants would evaluate a confederate as more aggressive when the confederate wore a black versus a white t-shirt and when participants were provoked with bogus negative versus positive feedback on a task. Results supported this hypothesis. Compared to every other experimental condition, participants rated a confederate as more aggressive, mean, and rude in the black clothing-negative feedback condition. Confederate clothing color had no effect, however, on how incompetent confederates were perceived. Thus, this study suggests that an authority's clothing color affects perceptions of their aggressive traits, while not necessarily leading to globally negative evaluations.

These data suggest that negative behaviors are perceived as more aggressive when the actor is wearing black compared to wearing white. This experiment, however, did not specifically test the effects of law enforcement uniform color within a policing context. The following experiments provide a better test of the effect of law enforcement uniform color on civilian impressions and behavior by using police-like uniforms.

Further, an alternative explanation for the above findings is that confederates who wore black unknowingly behaved more aggressively than confederates who wore white. Experiment 2 tested the hypothesis that wearing a black police-like uniform leads to more aggressive self-perceptions and more negative evaluations of and support for aggressive behaviors toward criminal suspects. This methodology also has greater relevance to scenarios in which law enforcement officers are trained to act. This series of studies therefore represents a systematic push to fully understand how and when clothing color influences human interactions within a policing context.

Chapter 3: Experiment 1B

This study conceptually replicated Experiment1A. A trained confederate was randomly assigned to wear either a black or a white police-like uniform. The confederate, who was blind to the experimental hypothesis, staged a stressful interaction with participants. In the previous study, there were no differences between the black-positive and white-positive conditions. There was only an effect of clothing color when participants were provoked. Thus, only a negative interaction condition was included. The study used a one-way between-subjects design, with two levels of uniform color (black versus white).

Participants

A power analysis indicated that 100 participants were needed to detect a large effect ($d = .73$; Experiment 1A). Ninety-two participants were recruited from the UTEP undergraduate subject pool. Five participants reported being suspicious of the cover story and one participant did not follow directions. Thus, data from 86 participants were included for analysis. Participants ($M_{age} = 20.67$; $SD = 5.12$) were mostly women ($n = 53$; 62%) and identified as Latino ($n = 64$; 74%). There were 51 participants in the black uniform condition and 35 participants in the white uniform condition.

Procedure

Participants arrived to the lab and each session consisted of either one ($n = 46$) or two ($n = 40$) participants. Participants were greeted by one of two male confederates. Both confederates were older than traditional college-aged students (>30 years) and had relevant law enforcement experience (military or security officer). Confederates, via random assignment, wore either a black or a white police-like uniform, including an imitation police badge. Consistent with Experiment 1A, participants were led to believe that the purpose of the study was to examine college student performance on "common knowledge" questions.

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At the start of the session, the confederate introduced himself as an officer with the El Paso Police Department and a psychology major volunteering in research as part of his degree. He further informed participants that he is in uniform because his shift starts soon after he is finished with his research sessions. Then, participants completed a short demographics questionnaire to indicate their age, sex, ethnicity, class rank, and undergraduate major. Participants were then instructed to individually complete 10 "common knowledge" math questions on the computer. Participants worked out their answers on scrap paper provided.

Immediately after providing participants with task instructions, the confederate excused himself to get more scrap paper, leaving the room for several minutes. Upon his return to the lab, the confederate remarked that he had left his phone on the table and followed a script to accuse participants of taking his phone. The confederate then remarked that he is going to find the experimenter and instructed participants to have their IDs ready to show. He then left the room and an experimenter arrived shortly after. The experimenter informed participants that the study needed to be ended and instructed participants to complete a final set of questions about their experience participating in the study. Here participants answered several questions regarding their perceptions of the confederate and their current emotional experience. Lastly, participants were debriefed and thanked.

Materials

Common Knowledge Questions

Consistent with Experiment 1A, 10 math-related questions were selected from the State of Texas Assessments of Academic Readiness standardized examination (STAAR; Texas Education Agency, 2015). All questions were in multiple choice format.

Confederate Evaluations and Affective Ratings

Participants rated the confederate on the same traits used in Experiment 1A. Thus, one scale measured perceived aggression of the confederate and included the traits aggressive, rude, mean, and strong. The trait "strong" was negatively and weakly correlated with correlated with this scale ($r = -0.19$) and was removed from analyses ($\alpha = 0.75$). A second trait scale measured perceived incompetence of the confederate and include the traits competent, intelligent, informed, and made sense ($\alpha = 0.86$). Participants also answered one item to indicate the extent to which they liked the confederate. Items were presented in random order for each participant. Additionally, participants rated the extent to which they feel anxious, threatened, stressed, angry, annoyed, irritated, comfortable (reverse coded), and nervous ($\alpha = 0.85$). Filler emotions (i.e., sad, lonely, excited, happy) were included to disguise the true purpose of the study. Items were presented in random order for each participant. All responses were made on a 7-point scale.

Hypothesis 1

Participants will evaluate the confederate higher in aggressive traits when he wears a black versus a white police uniform. No differences in evaluations of incompetence or liking are expected. This is a replication of Experiment 1A.

Hypothesis 2

Participants will report feeling more anxious, threatened, stressed, angry, annoyed, irritated, uncomfortable, and nervous after interacting with the confederate when he wears a black versus a white police uniform.

Results

Perceived Aggression and Incompetence

A repeated measures ANOVA was conducted with ratings of the confederate on aggression and incompetence as dependent variables and uniform color (black vs white) as a between-subjects

predictor. Confederate, the number of subjects per session (one or two), and participant gender were included as main and interaction effects, but no predictions of how these variables would impact the dependent variables were made. Confederate and number of subjects per session did not interact with uniform color to predict aggression and incompetence ratings (p's > .26) and were therefore removed from analyses.

Results demonstrated no significant difference on ratings of confederate aggression between the black ($M = 2.82$; $SD = 1.14$) and white ($M = 2.48$; $SD = 0.89$) uniform conditions, $F(1, 82) = 2.67$, $p = .11$, $d = .33$. Additionally, the main effect of subject gender was not significant, $F(1, 82) = 1.20$, $p = .28$. Subject gender also did not interact with uniform color $F(1, 82) = 1.76$, $p = .19$.

Similarly, incompetence ratings did not differ between the black ($M = 5.20$; $SD = 1.31$) and white ($M = 5.34$; $SD = 1.44$) uniform conditions, $F(1, 82) = 0.60$, $p = .45$. The main effect of subject gender was not significant, $F(1, 82) = 2.30$, $p = .14$. There was, however, a marginal interaction between subject gender and uniform color, $F(1, 82) = 3.64$, $p = .06$. Women rated confederates as less competent in the white uniform condition ($M = 4.90$; $SD = 1.58$) than did men ($M = 5.93$; $SD = 0.98$), $t(33) = 2.25$, $p = .03$.

A post-hoc analysis tested the effect of uniform color separately for women and men using the same repeated measures ANOVA. For women, there was no difference in ratings of confederate aggression between the black and white uniform conditions, $F(1, 51) = 0.07$, $p = .80$. Ratings of competence between the black and white uniform conditions were also not different, $F(1, 51) = 0.76$, $p = .39$. Results only demonstrated an effect of trait type, such that women evaluated confederates as more competent ($M = 5.11$; $SD = 1.42$) than aggressive ($M = 2.54$; $SD = 0.99$), $F(1, 51) = 59.01$, $p < .0001$.

For men, however, there was a marginal effect of uniform color, $F(1, 31) = 3.14$, $p = .09$. Male participants rated the confederate more highly on aggressive traits when he wore a black ($M = 2.85$; $SD = 1.40$) versus a white ($M = 2.16$; $SD = 0.65$) uniform. Male participants also rated the confederate marginally more highly on competence traits when he wore a white ($M = 5.93$; $SD = 0.98$) versus a black ($M = 5.13$; $SD = 1.47$) uniform, $F(1, 31) = 3.31$, $p = .08$. Further, there was a marginal interaction between trait type and uniform color, $F(1, 31) = 3.93$, $p = .06$. Therefore, male participants rated a confederate wearing a black uniform as more aggressive and less competent than a confederate wearing a white uniform.

To explore this unpredicted gender effect further, Experiment 1A data were re-analyzed to test that same pattern. Experiment 1A results did not support the marginal non-predicted effects from Experiment 1B. Thus, that post-hoc effect is no longer discussed.

Liking of Confederate

A one-way ANOVA was conducted with liking as the dependent variable and uniform color as predictor. Confederate, the number of subjects per session (one or two), and participant gender were included as main and interaction effects, but no predictions of how these variables would impact the dependent variables were made. Number of subjects per session did not predict liking of the confederate, $p = .60$, and was therefore removed from analyses.

Results demonstrated no significant difference in liking of the confederate between the black ($M = 5.20$; $SD = 1.47$) and white ($M = 5.51$; $SD = 1.34$) uniform conditions, $F(1, 78) = 0.48$, $p = .50$. There was a main effect of confederate, $F(1, 78) = 4.58$, $p = .04$, such that Confederate 2 ($M = 5.61$; $SD = 1.21$) was liked more than Confederate 1 ($M = 4.91$; $SD = 1.64$). Results revealed an interaction between uniform color and subject gender, $F(1, 78) = 7.43$, $p = .008$, such that men reported liking the confederate more ($M = 6.05$; $SD = 1.06$) in the white uniform condition than

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women ($M = 4.70$; $SD = 1.36$), $t(33) = 2.64$, $p = .02$. Further, men liked the confederate less in the black uniform condition ($M = 4.94$; $SD = 1.68$) than in the white uniform condition ($M = 6.05$; $SD = 1.06$), $t(46) = 2.26$, $p = .03$. No other effects were significant, all p's $> .16$.

Affective Ratings

A one-way ANOVA was conducted with affective ratings as dependent variable and uniform color as predictor. Confederate, the number of subjects per session, and participant gender were included as main and interaction effects, but no predictions of how these variables would impact the dependent variables were made. Number of subjects per session and participant gender did not predict affective ratings and was therefore removed from analyses, $p = .12$ and .31, respectively.

Results demonstrated no significant difference in reported negative affect between the black ($M = 2.47$; $SD = 1.16$) and white ($M = 2.30$; $SD = 1.01$) uniform conditions, $F(1, 78) = 0.29$, $p = .60$. There was no main effect of confederate, $p = .07$, or interaction between confederate and uniform color, $p = .43$, on affective ratings, as well. Although there were no predictions made for differences in individual item ratings, post-hoc analyses demonstrated that participants reported feeling more irritated in the black ($M = 2.18$; $SD = 1.79$) versus the white ($M = 1.50$; $SD = 0.86$) uniform condition, $F(1, 83) = 4.21$, $p = .044$. There were no differences on any of the other item affective items (all p's $> .17$).

Discussion

Experiment 1B provided a conceptual replication of Experiment 1A and a more direct test of the hypothesis that law enforcement officers who wear black uniforms are perceived as possessing more aggressive traits than officer who wear white uniforms. Further, this study tested

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whether a provocation initiated by an officer in a black, compared to a white, uniform leads to greater negative, stress-related emotions.

Results provided partial support for these hypotheses. Although results did not find a difference between mean aggressiveness ratings for confederates wearing a black versus a white uniform, the magnitude of the mean difference between uniform conditions was moderate ($d =$ .33). The true effect size may be smaller than found in Experiment 1A, but nonetheless important. Further, confederates were perceived as marginally more aggressive among male, but not female, participants when he wore a black compared to a white uniform. Male participants also reported liking the confederate less when he wore a black uniform compared to when he wore a white uniform. Further, participants' self-reported negative affect did not differ between uniform conditions.

In this study, confederates wore a police-like uniform and badge, whereas in Experiment 1A, confederates wore civilian clothing. A law enforcement uniform may attenuate perceptions of hostility due to their positive association with authority. It is also possible that the staged confrontation did not mimic actual police-civilian interactions closely enough for uniform color to bias participant judgments. The provocation involved was minimal, with little direct confrontation with participants. In real-life scenarios, there is potential for arrest and greater potential for hostile escalation, including the use of a weapon.

Further, the staged confrontation was less ambiguous than in Experiment 1A. In Experiment 1A, participants did not know whether the negative feedback provided was accurate or not. In Experiment 1B, participants knew that the accusation against them (i.e., taking the phone) was not true. Thus, participants may not have perceived the confrontation as believable or threatening.

I also assumed a large effect of uniform color on perceptions, which was used to derive the target sample size. Although a large effect ($d = .73$) was found in Experiment 1A, it is reasonable to assume that the true effect is smaller. Thus, this study is likely under-powered and a larger sample is required to fairly test the hypothesis.

Moreover, although our confederates' dialogue and behavior was scripted to be equivalent across uniform color conditions, it is possible that uniform color exerts an implicit impact on the wearer's behavior. This is consistent with the theory of enclothed cognition. Experiment 2 was designed to test how wearing a black or a white police uniform affects perceptions of one's self-concept and judgments on a policing task.

Chapter 4: Experiment 2

Consistent with an enclothed cognition framework, Experiment 2 tested the hypothesis that wearing a police-like uniform affects self-perceptions and judgments regarding ambiguous criminal scenarios. The experiment tested the prediction that wearing a uniform will increase self-perceptions related to strength, competence, and courteousness as compared to not wearing a uniform. I also tested the prediction that wearing a black uniform leads to perceiving oneself as higher on strength-related traits as compared to wearing a similar white uniform or no uniform. Further, I predicted that participants assigned to wear a black uniform, versus a white uniform or no uniform, would demonstrate support for more aggressive behaviors toward and more negative evaluations of a criminal suspect described in an ambiguous encounter with police.

Lastly, I tested the effects of uniform condition on social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994). SDO refers to a preference for social hierarchies (Pratto et al., 1994). Persons who score more highly on a measure of SDO support social inequalities that allow some social groups to dominate over other groups and demonstrate greater support for hierarchy enhancing policies, such as those related to law and order (Pratto et al., 1994).

Law enforcement officers are, themselves, authority figures that exist within a social hierarchy. It makes sense, then, that persons enacting this role will demonstrate greater support for maintaining the social structure that bestows their authority within it. Officers are shown to be higher in SDO than jurors, public defenders, and a general undergraduate population (Sidanius, Liu, Shaw, & Pratto, 1994). In the present study, I tested the effect of wearing a uniform on SDO scores. I also tested whether SDO is enhanced when wearing a black, versus white, uniform.

Pre-test

Research on race-based discrimination indicates that biased judgments are likely to occur under conditions of ambiguity, in which biased responses can be rationalized (Dovidio & Gaertner, 2000; Gaertner & Dovidio, 2005). Thus, nine descriptions of police interactions with civilians were pre-tested for perceived ambiguity of suspect guilt and police behavior.

Participants ($N = 22$) rated five ambiguous and four non-ambiguous descriptions of police-civilian interactions on perceived suspect guilt and justification of officer behavior. All scenarios described citizen interactions with the local police department. Descriptions were presented in randomized order for each participant and responses were made on a 7-point scale. Ambiguous descriptions included evidence that the suspect was guilty of a crime and counter-evidence of their innocence; descriptions varied in their depiction of police use of force. Three non-ambiguous descriptions described clearly criminal behavior without any police use of force, and one non-ambiguous description portrayed clear police misconduct against an innocent civilian (reverse coded). All suspects were described as male; no information regarding race/ethnicity was provided.

One ambiguous description was removed for high mean ratings of suspect guilt ($M = 5.14$; $SD = 1.88$). The four remaining ambiguous scenarios were rated close to the mid-point on suspect guilt ($M = 3.74$; $SD = 0.92$) and on justification of police behavior ($M = 3.51$; $SD = 1.22$). In contrast, the three non-ambiguous descriptions were rated highly on suspect guilt ($M = 6.70$; $SD = 0.38$) and on justification of police behavior ($M = 6.60$; $SD = 0.90$). Guilt ratings and police justification ratings differed significantly between ambiguous and non-ambiguous descriptions, p's < .0001. Thus, eight (4 ambiguous; 4 non-ambiguous) descriptions of police interactions with civilians were included in the experiment.

Design

The study used a one-way between-subjects design, with three levels of uniform, black versus white versus no uniform. A no uniform, control, condition was included to tease apart the effects due to wearing a uniform versus the effects of the color of the uniform.

Participants

Based on the effect size from Frank and Gilovich (Study 4; $d = .60$), a power analysis indicated that 150 participants were required. One-hundred and eighty participants were recruited through the UTEP undergraduate subject pool. Of these, 16 participants were excluded for not following protocol. Thus, data from 156 participants ($M_{age} = 20.33$; $SD = 4.46$) were included for analysis. Participants were mostly female ($n = 92$; 59%) and Latino ($n = 118$; 76%).

Procedure

Participants completed the study individually. Participants completed informed consent, a short demographics questionnaire, a measure of attitudes toward police, and a measure of experiences with police. Then, participants were randomly assigned by their shirt size to wear either a black or a white police-like uniform shirt, or a control shirt. The control shirt was similar in style to the uniform shirts (e.g., button up, collared), but was orange, blue, and white plaid. Participants in the uniform conditions also wore a police-like badge. Random assignment by shirt size was used to ensure equal distributions of participant body size between experimental conditions.

Participants, regardless of experimental condition, were then given a "police officer induction" task. They were instructed to imagine themselves as a police officer as they view themselves in a full-length mirror. Then, they rated themselves along three trait dimensions, including strength, competence, and courteousness.

Next, participants evaluated eight crime scenarios. The crime scenario evaluations were completed first because these were of primary interest. Participants were instructed to imagine themselves in each situation and to put themselves in the shoes of the officer. Participants evaluated how they would act if they were the officer in each scenario and evaluated the suspect and officer behavior along a series of questions. Then, participants completed a measure of SDO. All materials were administered through Qualtrics online survey system. Lastly, participants were debriefed and thanked.

Materials

Attitudes toward Police

Participants completed seven items to indicate their attitudes toward police (Nickels, 2008; see Appendix). Example items included, "Police are usually courteous to people" and "Most police officers enjoy using their authority to push people around" (reverse coded). Items were scored on a 7-point scale and demonstrated good reliability ($\alpha = 0.84$).

Past Experiences with Police

Participants completed 8 items (yes/no) regarding their past experiences with police (see Appendix). Five items assessed negative interactions with police. Example items included, "Have you ever filed a complaint against police?" and "Have you ever been mistreated or unfairly targeted by police?" The three additional items assessed whether participants had experience serving as an officer ($n = 0$), were closely related to a law enforcement officer ($n = 50$), and if they had ever reported a crime or solicited a service from police ($n = 71$). The proportion of "yes" responses to items assessing negative interactions with police were calculated. Thus, scores on this measure ranged from 0 (no negative experiences) to 1 (five negative experiences).

Self-Perception Scales

The *strength scale* included powerful, intimidating, forceful, authoritative, aggressive, and dominant. Because participants rated their self-identification with these traits, we chose traits that could be construed as positive and avoided traits with a clear negative connotation (e.g., mean, rude). The *competence scale* included professional, competent, informed, sensible, and intelligent. The *courteousness scale* included courteous, polite, considerate, helpful, warm, honest, fair, and friendly. All scales demonstrated acceptable reliability (α's = 0.82, 0.85, and 0.93, respectively). Some of these traits (e.g., aggressive, informed, intelligent) were used in Experiments 1A and 1B and therefore represent a built in replication of those effects. Traits were presented on a computer in random order to each participant. Participants rated the extent to which each trait describes them (*1-not at all; 7-completely*).

Crime Scenario Evaluations

The eight pre-tested scenarios were included (see Appendix). Scenarios were presented in random order to each participant. Participants completed two scales after reading each scenario. One scale asked participants to evaluate the police's behavior from the first-person point of view (e.g., "In this situation I think it is appropriate to use at least some amount of force on the suspect."). Another scale asked participants to evaluate the suspect along a series of items (see Appendix). Scale items were presented in randomized order to each participant and responses were made on a 7-point scale. Items were coded such that higher scores indicated greater support for more aggressive police behavior and more negative evaluations of suspects.

Social Dominance Orientation Scale

Participants completed a 14-item measure of Social Dominance Orientation (SDO; Pratto et al., 1994; see Appendix). This scale measures individual differences in preference for policies and ideologies that maintain social hierarchies. Participants indicated the extent to which they

agreed with each statement on a 7-point scale (*1-strongly disagree; 7-strongly agree*). The scale demonstrated good reliability ($\alpha = 0.86$).

Hypothesis 1

Participants in the uniform conditions, compared to the control condition, will evaluate themselves as higher in strength, competence, and courtesy. There will also be an effect of uniform color. Participants in the black uniform condition will evaluate themselves higher on the strength traits compared to participants in the white uniform or uniform condition. Consistent with prior research demonstrating an implicit association between the color white and morality, I expect participants in the white, versus the black, uniform condition to rate themselves more highly on courtesy traits. Consistent with Experiment 1A, no differences are expected on the competence traits between the black and white uniform conditions.

Hypothesis 2

There will be an effect of wearing versus not wearing a uniform on ratings of police behavior and evaluations of criminal suspects. Participants in the uniform, compared to the control, conditions will demonstrate greater support for more aggressive police behavior and will rate criminal suspects more negatively. This effect will be greatest in the black uniform condition as compared to the white uniform and control conditions.

Hypothesis 3

Participants in the uniform conditions, compared to the no uniform condition, will demonstrate higher scores on SDO. Participants in the black uniform condition will demonstrate higher scores on SDO compared to participants in the white uniform condition.

Results

Self-Perception Ratings: Strength Traits

A principal components analysis supported a one factor trait scale. All items loaded onto one factor, with factor loadings over .64. One factor explained 53% of the variance in responses. Thus, a one-way ANOVA with condition (the uniform versus control) as predictor was conducted. Results demonstrated no difference between wearing a uniform ($M = 3.87$; $SD = 1.12$) versus not wearing a uniform ($M = 3.95$; $SD = 1.18$) on self-ratings of strength-related traits, $F(1, 154) = 0.17$, $p = .69$.

Next, a one-way ANOVA with the three uniform conditions and participant gender as predictors was conducted. There were no effects due to participant gender ($p = .96$) and this was removed from analyses. Results demonstrated no effect of uniform condition, $F(2, 153) = 0.50$, $p = .62$. Participants did not differ in their self-ratings on strength-related traits between the black uniform ($M = 3.78$; $SD = 1.19$), white uniform ($M = 3.98$; $SD = 1.02$), and control condition ($M = 3.95$; $SD = 1.18$).

Self-Perception Ratings: Competence Traits

A principal components analysis supported a one factor scale. All items loaded onto one factor, with factor loadings over .69. One factor explained 63% of the variance in responses. Thus, this trait scale was analyzed in a one-way ANOVA. First, condition (the uniform versus control) was included as predictor. Results demonstrated no effect of wearing ($M = 5.50$; $SD = 0.93$) versus not wearing ($M = 5.41$; $SD = 0.77$) a uniform on self-ratings of competence, $F(1, 154) = 0.35$, $p = .56$. Next, a one-way ANOVA including the three uniform conditions was conducted. No effects were due to participant gender ($p = .19$) and therefore this was not included in the model. Results revealed no effect of uniform condition on self-ratings of competence, $F(2, 153) = 0.36$, $p = .71$.

Self-Perception Ratings: Courteous Traits

A principal components analysis supported a one factor scale. All items loaded onto one factor, with factor loadings over .75. One factor explained 69% of the variance in responses. Thus, this trait scale was analyzed in a one-way ANOVA. First, condition (the uniform versus control) was included as predictor. Results demonstrated no effect of wearing ($M = 5.86$; $SD = 0.99$) versus not wearing ($M = 5.70$; $SD = 0.94$) a uniform on self-ratings of courtesy, $F(1, 154) = 0.93$, $p = .34$. Next, a one-way ANOVA including the three uniform conditions and participant gender as predictors was conducted. Results revealed no effect of uniform condition on self-ratings of courtesy, $F(2, 152) = 0.99$, $p = .38$. Additionally, there was a marginal effect of participant gender, $F(1, 152) = 3.29$, $p = .08$, such that women rated themselves as higher on courtesy ($M = 5.92$; $SD = 1.00$) than did men ($M = 5.63$; $SD = 0.93$).

Crime Scenario Evaluations

One control scenario described police misconduct and was excluded from analyses. A principle components analysis was conducted for each dependent variable (support for police behavior and suspect evaluations) on ambiguous and control scenarios separately. For each dependent variable, most items loaded onto one factor. For the police behavior scales, the two reverse coded items ("I would attempt to reason with the suspect." and "I would avoid a physical confrontation with the suspect.") loaded on to a separate factor. This factor was not interpretable and therefore these two items were removed from analyses. Similarly, for the suspect evaluation scale, the two reverse coded items ("To what extent was the suspect cooperative?" and "To what extent was the suspect obedient?") loaded onto a separate, uninterpretable factor. These two items were also removed from analyses. See Table 3 for descriptive statistics.

Additionally, attitudes toward police were included as a covariate in all analyses. Experiences with police and participant gender did not predict support for aggressive police behavior or evaluations of criminal suspects and thus they are not discussed further.

Manipulation check

A 2 (scenario type: ambiguous vs control) X 2 (uniform condition: uniform vs control) repeated measures ANOVA was conducted with uniform condition as a between-subjects predictor on both support for aggressive police behavior and suspect evaluations. Attitudes toward police was included as a covariate. These analyses confirmed that participants responded differently to ambiguous versus control scenarios. Participants reported greater support for aggressive police behavior in the control scenarios ($M = 5.35$; $SD = 0.71$) compared to the ambiguous scenarios ($M = 3.82$; $SD = 0.96$), $F(1, 153) = 40.26$, $p < .0001$. Further, participants evaluated suspects more negatively in the control scenarios ($M = 5.21$; $SD = 0.71$) compared to the ambiguous scenarios ($M = 3.53$; $SD = 0.86$), $F(1, 153) = 51.05$, $p < .0001$. This supports the validity of the manipulation. Control scenarios are thus not included in subsequent analyses.

Table 3. Descriptives for Support for Police Behavior and Suspect Evaluations by Experimental Condition

Condition	Ambiguous Police Behavior ($\alpha = 0.88$)	Control Police Behavior ($\alpha = 0.77$)	Ambiguous Suspect Evaluations ($\alpha = 0.91$)	Control Suspect Evaluations ($\alpha = 0.83$)
Black Uniform	3.85 (0.93)	5.35 (0.76)	3.73 (0.83)	5.29 (0.80)
White Uniform	4.00 (0.97)	5.41 (0.65)	3.66 (0.92)	5.27 (0.73)
Control	3.71 (0.96)	5.32 (0.71)	3.36 (0.85)	5.15 (0.66)

Support for aggressive police behavior

A one-way ANOVA with the three levels of uniform color (black vs white vs control) as between-subjects predictor was conducted. Attitudes toward police did not interact with uniform

condition, $F(2, 150) = 0.93$, $p = .40$. Thus, attitudes toward police was included as a covariate. Results demonstrated no differences between the black, white, and control conditions on support for police aggressive behavior, $F(1, 152) = 1.38$, $p = .26$. More positive attitudes toward police, however, predicted greater support for aggressive police, $F(1, 152) = 14.74$, $p = .0002$, B = 0.27, SE = 0.07.

Suspect evaluations

A one-way ANOVA with the three levels of uniform color (black vs white vs control) as between-subjects predictor was conducted. Attitudes toward police interacted with uniform condition, $F(2, 150) = 3.57$, $p = .04$. More positive attitudes toward police predicted more negative suspect evaluations in the black uniform condition, $F(1, 53) = 7.87$, $p = .008$, B = 0.36; SE = .09, and in the control condition, $F(1, 49) = 5.19$, $p = .03$, B = 0.31; SE = .11. This effect was not found in the white uniform condition, $p = .92$.

Further, results revealed a marginal effect of uniform color on ratings of suspect behavior, $F(1, 152) = 2.49$, $p = .09$. Consistent with hypotheses, participants rated suspects more negatively in the black uniform condition ($M = 3.71$; $SD = 0.83$) compared to the control condition ($M = 3.37$; $SD = 0.85$), $t(104) = 2.04$, $p = .05$. Suspects, however, were rated similarly between the black and white ($M = 3.67$; $SD = 0.92$) uniform conditions, $t(103) = 0.19$, $p = .85$, and marginally more negatively in the white uniform condition compared to the control condition, $t(99) = 1.81$, $p = .08$. Further, when included as a covariate, more positive attitudes toward police predicted more negative evaluations of suspects, $F(1, 152) = 9.33$, $p = .003$, B = 0.20; SE = .06.

Social Dominance Orientation

There were no effects due to participant gender and therefore this was not included in analyses. SDO did not differ between the uniform ($M = 2.38$; $SD = 0.99$) and no uniform ($M =$

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2.13; *SD* = 0.82) conditions, $F(1, 153) = 2.21$, $p = .14$. Similarly, there was no effect of uniform color (black vs white vs control) on levels of SDO, $F(1, 152) = 1.13$, $p = .33$. More positive attitudes toward police predicted higher levels of SDO, $F(1, 152) = 5.14$, $p = .03$, B = 0.16; SE = 0.07.

Discussion

According to an enclothed cognition framework, clothing can impact perceptions and behavior of the wearer via the activation of its symbolic associations (Adam & Galinsky, 2012). Black is symbolically associated with evil, immorality, and impurity (Hemphill, 1996; Sherman & Clore, 2009). In line with an enclothed cognition framework, research demonstrates that wearing black clothing leads to more aggressive behavior (Frank & Gilovich, 1988), intentions, and attitudes (Peña, Hancock, & Merola, 2009).

The purpose of Experiment 2 was to test the enclothed effects of wearing a black or white police uniform on self-perceptions and judgments within a policing task. It tested the hypotheses that wearing a black, compared to a white, police uniform leads to a more aggressive self-concept, more negative evaluations of a criminal suspect, and an increased social dominance orientation. It was predicted that these effects would be over and beyond the effect due to simply wearing a police uniform.

Results provided mixed support for predictions. No differences on self-ratings of strength, competence, or courteousness emerged across uniform conditions. Further, wearing a black uniform did not increase support for more aggressive police behavior within an ambiguous policing context. Wearing a black uniform shirt, however, led to marginally more negative evaluations of criminal suspects in ambiguous scenarios as compared to wearing a non-uniform

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shirt, in partial support of the hypotheses. Levels of social dominance orientation also did not differ between experimental conditions.

Here the experimental task involved participants perceiving themselves in a full-length mirror. The purpose of this task was to make the uniform salient to participants and thus prime the uniform's symbolic meaning. This task may have been ineffective at heightening the salience of the uniform. Research shows that viewing oneself in a mirror increases objective self-awareness (Duval & Wicklund, 1973). The mirror task, therefore, may have increased participants' awareness of their self-concept and moral standards, over-powering any effect of the uniform.

It is also possible that the black and white uniform shirts and badges were not perceived as legitimate symbols of authority, as they were not authentic. Further, consistent with an enclothed cognition framework, the effect of the uniform on participants' judgments on the policing task should be expected to reflect their symbolic associations with that uniform. In this study, we assessed participants' attitudes toward police, but we did not assess participants' symbolic associations with police uniforms.

Although the experimental task here involved policing-related decisions, future research will benefit from using methodologies that have greater ecological validity. For example, law enforcement officers often make decisions under stress and time pressure. Stress may heighten perceptions of threat, especially when one is wearing a black uniform and primed to act in a hostile manner.

Chapter 5: General Discussion

Tensions between U.S. law enforcement and civilians present a public safety problem. Recently, numerous incidents of police use of excessive force have been highly publicized and have led to backlash against law enforcement officers. In addition to lives lost on both sides, the undue hostility, whether real or perceived, impedes officers' ability to effectively and safely protect their communities. The studies presented here aimed to test one factor that may contribute to hostile police-civilian interactions, uniform color.

The color black is symbolically associated with evil, darkness, and impurity, whereas the color white is symbolically associated with goodness, light, and morality (Hemphill, 1996; Sherman & Clore, 2009). These color associations bias responding on implicit tests (Meier et al., 2004; Sherman & Clore, 2009). Further, an enclothed cognition framework predicts that clothing, through its symbolic meaning, affects perceptions and behavior of the wearer (Adam & Galinsky, 2012). For example, social targets wearing black clothing are perceived as more aggressive and threatening (Frank & Gilovich, 1988; Vrig, 1997; Vrig & Akehurst, 1997). Black clothing also leads to increased aggressive behaviors and attitudes of the wearer (Frank & Gilovich, 1988; Peña et al., 2009). It makes sense, then, to test effect of the color of law enforcement uniforms on civilian perceptions of police and police behavior.

The three studies presented here test two complementary hypotheses. Experiments 1A and 1B tested the hypothesis that actors who wear black, versus white, are perceived as more aggressive under conditions of provocation. This effect was demonstrated using black and white t-shirts (Experiment 1A). A confederate who wore a black compared to a white t-shirt while giving participants insulting feedback on a task were subsequently rated as higher on aggressive traits. Experiment 1B tested a conceptual replication of this effect using black and white police-like

uniforms. A confederate acted out the role of law enforcement officer while wearing either a black or white uniform, and then falsely accused participants of stealing. These results suggested that when wearing a black compared to a white uniform, the confederate was perceived as marginally more aggressive among male, but not female, participants. This study further tested how uniform color affected participants' self-reported negative affect. Results demonstrated that participants' negative affect did not differ between uniform conditions.

Although the clothing color effect did not replicate well across experiments, it may be that this effect, especially within a police context, is rather small. Experiment 1B was underpowered to detect a small effect. Additional data are needed to fully test the effect of black versus white police uniforms on civilian perceptions of police aggression. Even a small effect can have important real-world implications if black uniforms lead to civilians reacting with greater hostility and distrust toward law enforcement.

The general pattern of results from Experiments 1A and 1B provide some support for the hypothesis that black clothing leads to more aggressive perceptions of the wearer under conditions of provocation or irritation. Encounters with law enforcement are likely to be stressful and therefore represent the type of situation in which perceptions may be biased by uniform color. The results presented here suggest that officers should avoid wearing black, especially when interactions with civilians are likely to provoke stress and irritation.

Experiment 2 tested the hypothesis that black and white police uniforms have different effects on the wearer. Specifically, this experiment tested the hypotheses that wearing a black uniform, compared to a white or no uniform, leads to a more aggressive self-concept, more negative evaluations of a criminal suspect, greater endorsement of more aggressive police

behaviors toward a criminal suspect, and higher levels of social dominance orientation. Results did not support these predictions.

Results suggest that wearing a black uniform may not bias perceptions of the wearer. The theory of enclothed cognition served as the theoretical rationale for these studies. Enclothed cognition falls under the umbrella of embodied cognition, which posits that information processing involves the simulation of bodily states (Landau, Meier, & Keefer, 2010). This area of research has been the subject of recent scientific scrutiny (e.g., Firestone, 2013; Mahon & Caramazza, 2008). For example, a classic embodied cognition study purportedly showed that participants walked more slowly after being primed with words related to "elderly" (Bargh, Chen, & Burrows, 1996). Researchers have since been unable to replicate this effect (Doyen, Klein, Pichon, & Cleeremans, 2012; Pashler, Harris, & Coburn, 2011). Some embodied effects may be real, while others may not. Here I tested the embodied effects of clothing, specifically police uniforms, and did not find support for the effect.

Future directions

The series of studies here used a civilian undergraduate population. It is of interest to test how uniform color affects perceptions and behavior of trained law enforcement. For example, prior research demonstrates that police training can attenuate implicit race bias on use of deadly force decisions (Correll, Park, Judd, Wittenbrink, Sadler, & Keesee, 2007; Sim, Correll, & Sadler, 2013). Training may, therefore, overwhelm any effect of uniform color on behavior. It is also of interest to investigate how negative interaction with or biases against law enforcement affect perceptions of law enforcement officers in dark versus light colored uniforms.

Further, the present research tests the effects of the extreme ends of the color continuum, black and white. Law enforcement uniforms vary in color from darker (black, navy blue, green) to

lighter (light blue, tan, white). Uniforms also vary in the extent to which they are militarized. Future research will test the gradient effects of uniform color and the effects of militarization on civilian perceptions of hostility. Militarization is likely to have more pronounced effects on perceived hostility of officers and potential civilian reactions to a perceived threat.

An enclothed cognition framework suggests that other aspects of officers' attire may have psychological and behavioral effects. For example, professional, or traditional, versus tactical uniforms likely have different symbolic meanings. Professional uniforms, such as those used in the studies reported here, may symbolize courteous, prosocial, honest behaviors, whereas tactical uniforms may symbolize aggressive, intimidating behaviors. Future research will investigate how uniform type influences civilian impressions of officers and officers' attitudes and behaviors toward civilians.

Future research will also benefit from designs that increase ecological validity. The results presented here provide some support for the idea that individuals who wear black clothing are perceived as more hostile. This effect was reflected in trait ratings of the wearer. In actual interactions with law enforcement, however, civilian perceptions of police aggression may be reflected in complaints of mistreatment, ratings of distrust, and behaviors that reflect retaliation or resistance. Thus, it is important to measure these outcomes in future investigations.

Moreover, the conditions in which law enforcement officers make use of force decisions may impact the extent to which uniform color biases perceptions and behavior. For example, officers often make decisions under conditions of uncertainty, stress, and time pressure. Research shows that racial bias in decisions to shoot in a first person shooter game are exacerbated under conditions of high cognitive load or fatigue (i.e., lack of sleep; Ma, Correll, Wittenbrink, Bar-Anan, Sriram, & Nosek, 2013). The effects of uniform color may be more pronounced under these

circumstances. Further, research demonstrates that officers who police communities with higher minority crime rates demonstrate a bias to shoot Black, versus White, targets in a first person shooter game (Sim, Correll, & Sadler, 2013). Officers who have learned through experience to respond to civilians, and especially minorities, as threats may show heightened effects of wearing a black uniform.

An enclothed cognition framework also emphasizes the importance of the wearer's symbolic associations with an item of clothing on its resulting perceptual and behavioral impact. Future studies will benefit from directly measuring the wearer's associations with different types of uniforms. For example, although most officers report that they perceive their primary role equally in terms "protectors" and "enforcers", some (8%) report that they view themselves primarily as enforcers of the law (Pew Research Center, 2017). For these officers, the effects of uniform color may be more pronounced, as they may associate the uniform with more authoritative and dominant concepts. Further, 29% of civilians report that they perceive enforcing the law as officers' primary role, while 16% report that they perceive officers as protectors (Pew Research Center, 2017). Uniform color may exert different effects among civilians depending on these expectations.

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Appendix

Crime scenarios: Ambiguous scenarios

On Monday, police received an anonymous phone call claiming that a homeless man was harassing passersby and peddling stolen goods. The suspect has lived on the streets of downtown Dallas for two years. The suspect was found on a busy street corner in downtown Dallas, where he was selling art work. The caller said the he saw the suspect enter a neighboring art shop with a backpack, calling the behavior "suspicious." Nearby store owners reported that the suspect often appears intoxicated and scares off their customers, but could not confirm any theft. Two uniformed Dallas police officers approached the suspect, who was confrontational during the interaction. The suspect was insistent that he was not breaking any laws and that the police had no reason to question him. The suspect further argued that he created the art himself to sell to have enough money to eat. Police proceeded to ask the suspect routine questions, to which he sometimes responded incoherently. The suspect refused to let the police search his backpack, and in fact, he held it tightly against his chest with both hands. Some yelling ensued as the police asked the suspect to put down his backpack. They feared that he had a handgun in the backpack. Police were further concerned that the situation might escalate if the suspect was somehow mentally ill or intoxicated. The suspect was forced to the ground and despite the fact he never struck at the officers, he was struck several times when he tried to get up.

A thirty-year-old suspect was taken into custody after being stopped at a routine Texas security check point. At the checkpoint, the suspect appeared nervous and police requested to inspect his vehicle. The suspect said he was driving from Colorado to Texas to visit his sister and that the police did not have probable cause for searching his vehicle. He claimed that his nervousness was from too much coffee to stay awake during the long drive. Their main probable cause, beyond the apparent nervousness, was that there had been a recent influx of cocaine trafficking incidents by people who fit the suspect's demographics. The suspect was in his early 30s, driving an early 2000s model large sedan, and he was driving at night. After searching, police

found 5 grams of marijuana, under the front passenger seat, but no cocaine. The suspect claimed he did not know it was there, stating that the vehicle belonged to a friend and he had only borrowed it earlier that day. Police confirmed that the suspect did not own the vehicle, which had Colorado license plates. The suspect had no prior drug-related convictions. Police then forcibly took the suspect into custody. Video of the arrest from the surveillance cameras clearly showed that the suspect resisted being removed from the vehicle, but he did not strike or hit the police. During the arrest, the suspect's arm and nose were broken, and he received multiple abrasions.

Karen Mendez knows all her neighbors and is always on the lookout for suspicious activity in her neighborhood. Mendez was awoken one night by a neighboring car alarm. She checked outside and reported that an unknown man was walking along her street at 1:00am, looking into her neighbor's car. Police responded to her report of suspicious activity and questioned the suspect. The suspect stated he was invited to a friend's party a couple of blocks away and he had gotten lost, an alibi that was confirmed by a nearby resident. He was released without further questioning, though it was noted that the suspect had previous arrests for theft and illegal possession of a firearm. Two nights later, at approximately the same time, Mendez was awoken by her car alarm and found her car doors wide open and several items, including an iPod, missing. Police immediately went to the suspect's residence to question him. The suspect was just pulling into the driveway of his home around 2am when police arrived. The suspect refused entry to his home unless the police could produce a search warrant. During questioning, the suspect quickly became aggressive and told the police to leave his property. The police attempted to arrest him and a scuffle ensued. During the ensuing arrest attempt, the suspect was shot twice by the police. (*Removed for Experiment 2*)

On Sunday, September 1st, the suspect was accused of stealing from Hollister Company, located in the Coronado Shopping Plaza. The suspect had a receipt showing that he had purchased several items at 12:06pm. Cameras show the suspect leaving Hollister Company at 12:10pm, when the security alarm was triggered. The suspect protested when the store manager asked to inspect his receipt and bag, saying that he had done nothing wrong. Cashiers claimed the store was busy

due to their Labor Day sale. They do not remember seeing the suspect put additional items in his shopping bag after he was rung up. The manager called police after the suspect defiantly walked out of the store, bag in hand. Off duty police, working as mall security, stopped the suspect in the mall parking lot, just as he was approaching his vehicle. The suspect continued to protest that he had done nothing wrong and that he was running late to his cousin's birthday party. He refused to follow police orders to stop and hand over his bag. The suspect continued to walk to the driver's side of his vehicle. At that point, the suspect turned toward police and muttered something under his breath. The suspect reached into his pocket. Police immediately used a taser to subdue him and they then handcuffed him.

At 11:00pm on December 18 the Mini Mart was robbed by an armed man wearing a mask. According to the police report, the owner of the Mini Mart was counting receipts when an armed man barged into the store. The man pointed the gun at the owner and demanded he empty the cash register. The owner obeyed and was not injured. The man left the store with approximately $350 in cash. The store owner described the man as large and with a "big handgun". No other personal description could be provided as the store owner was clearly shaken from the event. His vehicle was described as a newer model small car, like a Ford Focus. The owner was not sure of the car make, and he could not get a license number. The suspect was pulled over in a vehicle matching the store owner's description at approximately 12:45pm driving a small Chevrolet. He provided a movie stub for a show that started 60 minutes before the robbery took place and no weapon was found on him. He reported that he went to the movie alone and he proceeded to describe the plot (which was from a famous current hit movie). The suspect did, however, have approximately $200 in cash on him and a small amount of drugs worth approximately $150. Despite his protests that he was innocent, the suspect was taken into custody for armed robbery (description adapted from Levinson & Young, 2010).

Crime scenarios: Control scenarios

Over the weekend, a 19 year old suspect pulled out a gun while running from the police. The foot chase happened about 9:20pm Friday, while patrol officers conducted a "Hotspot" detail

in the North End in response to a recent increase in gun-related crimes. The officers saw a 2016 Toyota Camry speeding south in the center of Barbour Street and pulled the car over. As officers approached the vehicle, the occupant got out and ran. Police observed the suspect remove a gun from his waistband. The suspect held the gun in his hand while running, but did not aim it at the officers. After a 5 minute chase, the suspect surrendered to the officers, placing the gun on the ground without incident. The officers recovered the gun, which had 13 live rounds. Officers were able to avert a tragedy by making a peaceful arrest. The suspect was arrested without injury. The suspect had an arrest record and was charged with possession of a firearm without a permit, possession of a high capacity magazine, and weapons in a motor vehicle.

About 2:16 am on Saturday, gunshots rang out at a Chevron gas station and police were called. The shooting occurred just 2 miles down the street from Rumors Night Club. Officers are often called to the club for fights and to break up the crowds that often gather outside after the club closes. Witnesses say the suspect and his friends had gotten into a fight with another group of clubgoers earlier in the night. Security at the club broke up the fight. One of the groups left the club after it closed and went to the gas station. Officers say the suspect, 25, followed them to the gas station where he hopped out of his vehicle, opened fired, and then jumped back in the car and sped away. One woman was fatally shot and another was injured. The women did not appear to be the intended targets. The pair were socializing and standing near members of the group the suspect had fought with. The suspect had 17 prior felony arrests and 4 felony convictions, turned himself into the police station at about 6 pm later that day. He was arrested for multiple offenses, including first degree murder and attempted first degree murder.

An off-duty Vero Beach police officer is on administrative leave after being arrested early Monday morning. Police said they responded to Filthy's Bar to perform a foot patrol of the bar at 12:45am. It was there that officers said they found the off-duty officer intoxicated and walking home. Police said they were concerned about the officer's well-being after he refused a ride home. So they followed him to make sure he didn't wander into traffic. The police report says that the officer then became angry in the 1600 block of 16th St. near the Vero Beach Citrus Bowl because

he was being followed. Police said he then started cursing at one of the officers at the scene, yelling to leave him alone. The officer then angrily punched a patrol car and hit the right side mirror, causing it to fall off. Officers said the off-duty officer admitted to punching the mirror and was taken into custody. He was charged with criminal mischief and disorderly intoxication. At a Tuesday morning news conference, the Vero Beach Police Chief spoke about the arrest saying, "We police our community, and we police ourselves, and we're not above the law. It's about doing the right thing and we feel that we've done that."

On September 11, a man, 32, was protesting near a police DUI checkpoint in West Hartford. He had his cell phone camera out and was recording the scene. When an officer noticed what he was doing, he angrily approached the protester and seized his phone, saying it was illegal to record him. Unbeknownst to the officer, the protester's cell phone was still recording as the officer went back to his patrol car to confer with his colleagues. With the phone still recording, the officers proceeded to call a Hartford police officer to see if he or she had any "grudges" against the protester that they could use and opened an investigation of him in the police database. Their investigation failed to uncover any prior arrests or warrants for the protester's arrest. Despite lack of probable cause, the officers can be heard on the recording discussing what they could get away charging the protester with. One officer remarked, "Let's give him something." The officers decided to fabricate a story that several citizens were complaining about the protester's supposedly "disruptive actions," but these "witnesses" did not want to stay on the scene, so the officers just had to take action on their own. The protester was arrested and detained for several hours before being released.

Ratings of Police Behavior

1. In this situation I think it is appropriate to use at least some amount of force on the suspect. *(1-strongly disagree; 7-strongly agree)*

2. In this situation I would use: *1-less force than described; 7-greater force than described*

3. I this situation I have probable cause to question the suspect. *(1-strongly disagree; 7-strongly agree)*

4. In this situation I have probable cause to arrest the suspect. *(1-strongly disagree; 7-strongly agree)*

5. In this situation I need to put the suspect in his place. *(1-strongly disagree; 7-strongly agree)*

6. In this situation I would attempt to reason with the suspect. *(1-strongly disagree; 7-strongly agree)* reverse coded

7. In this situation I would avoid a physical confrontation with the suspect. *(1-strongly disagree; 7-strongly agree)* reverse coded

8. I need to use whatever means are necessary to control this situation. *(1-strongly disagree; 7-strongly agree)*

9. How justified was the police's behavior? *(1-not at all; 7-completely)*

Ratings of the Suspect

1. To what extent do you believe the suspect is guilty of a crime? *(1-not at all guilty; 7-definitely guilty)*

2. To what extent was the suspect dangerous? *(1-not at all dangerous; 7-extremely dangerous)*

3. To what extent was the suspect disrespectful? *(1-not at all; 7-very much)*

4. To what extent was the suspect cooperative? *(1-not at all; 7-completely)* reverse coded

5. To what extent was the suspect aggressive? *(1-not at all; 7-extremely aggressive)*

6. To what extent did the suspect challenge the police's authority? *(1-not at all; 7-very much)*

7. The situation could have been avoided if the suspect had known his place. *(1-strongly agree; 7-strongly disagree)*

8. To what extent did the suspect escalate the situation? *(1-not at all; 7-very much)*

9. To what extent was the suspect forceful? *(1-not at all; 7-extremely forceful)*

10. To what extent was the suspect obedient? *(1-not at all; 7-completely)* reverse coded

Social Dominance Orientation

1. Some groups of people are simply not the equals of others.

2. Some people are just more worthy than others.

3. This country would be better off if we cared less about how equal all people were.

4. Some people are just more deserving than others.

5. It is not a problem if some people have more of a chance in life than others.

6. Some people are just inferior to others.

7. To get ahead in life, it is sometimes necessary to step on others.

8. Increased economic equality.

9. Increased social equality.

10. Equality.

11. If people were treated more equally we would have fewer problems in this country.

12. In an ideal world, all nations would be equal.

13. We should try to treat one another as equals as much as possible.

14. It is important that we treat other countries as equals.

Attitudes Toward Police

1. Police are usually courteous to people.

2. Incidents of police brutality are common.

3. Most police treat people the same regardless of race or wealth.

4. Most police officers are fair in their dealings with people.

5. The police adhere to high ethical standards when enforcing the law.

6. Most police officers enjoy using their authority to push people around.

7. Police often break the law and get away with it due to their position.

Past Experiences with Police

1. Have you ever been ticketed by police?

2. Have you ever been stopped by police?

3. Have you ever been arrested by police?

4. Have you ever reported a crime or disturbance to the police or otherwise called for service?

5. Have you ever filed a complaint against police?

6. Have you ever served as police officer?

7. Are you closely related to someone who has served as police officer?

8. Have you ever been mistreated or unfairly targeted by police?

Vita

Amber Kristin Lupo was born in St. Louis, Missouri to Karen and Terry Lupo. She graduated from McCluer North High School in 2002 and began undergraduate studies at Saint Louis University in Missouri in Fall 2002. Under the mentorship of Dr. Richard Harvey, she earned a Bachelor of Arts degree in Psychology in 2006. Amber then started a Master of Arts program in Cognitive and Social Processes at Ball State University. She completed her Master's thesis "Moral Obligation and Motivation to Control Prejudice Mediate the Relationship between Egalitarianism and Prejudice-Related Personal Standards" under the guidance of Dr. Bernard Whitley and graduated in July 2008. Her interest in prejudice and stereotyping from a social cognitive perspective led her to pursue a doctorate with Dr. Michael Zárate at the University of Texas at El Paso in 2011. Amber co-authored a book chapter on prejudice reduction and co-authored papers published in *Psychological Science* and *Personality and Individual Differences*. She also earned a graduate certificate in Quantitative Methods during her tenure at UTEP.

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