

Police Uniform Color and Citizen Impression Formation

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Clothing color and style are significant factors in impression formation in first-time dealings with strangers. Four common police uniform color schemes are evaluated for their influence on seven scales of impression formation with a sample of 737 citizens in a Midwestern city. Consistent with the previous literature, the all black color scheme was viewed most negatively on six of the seven scales. The light blue shirt and navy blue pants color scheme created the most positive impression on all seven scales. The implications of these findings for police-community relations and department uniform selection are discussed.

CLOTHING IS A powerful cue in impression formation. Clothing serves as a mental shortcut to aid in identifying a person's sex, socioeconomic status, group membership, legitimacy, authority, and occupation (Johnson, Schofield, & Yurchisin, 2002; Joseph & Alex, 1972; Kaiser, 1985). Connor and associates (1975), Lennon and Davis (1989), and Radeloff (1990) found that clothing was more important than physical attractiveness in the development of first impressions. Clothing style has been found to have an impact on impressions about the performance abilities of athletes (Harris, Ramsey, Sims, & Stevenson, 1974; Williams, 1964; Williams & McMurty, 1970), the competence of job applicants (Damhorst & Reed, 1986; Forsythe, Drake, & Cox, 1985), and the scholastic abilities of students (Behling, 1994). In addition to these external effects, clothing style has even been found to alter the moods and self-perceptions of the clothing wearer

(Hannover & Kuehnen, 2002; Johnson & Downing, 1979). Clothing has also been found to play an important role in impression formation within the criminal justice system.

Surveys by Balkin and Houlden (1983) and Singer and Singer (1985) found that the police officer's uniform conveyed impressions of safety, competence, reliability, and intelligence. Earlier studies discovered the influence the police uniform can have on the behaviors of others. Sigelman and Sigelman (1976) found that motorists were far less likely to commit illegal turn violations at an intersection if a person wearing a police-style uniform was standing near the corner. Bickman (1974) found that most pedestrians on a city street readily followed the commands of a research assistant if he was dressed in a police-style uniform even though the uniform lacked weapons or a badge. This obedience to the police-style uniform persisted even after the research assistant walked away and did not

watch to ensure compliance with the request (Bickman, 1974).

The specific details about a police officer's uniform can also have an influence on citizen perceptions of officers. Volpp and Lennon (1988) found that the type of hat worn by a police officer varied the level of authority attributed to that officer. Attempts to change the paramilitary style of the police uniform by some departments in the 1970's resulted in a loss of perceived authority and legitimacy. The agencies that temporarily switched from the traditional style of police uniform to a nontraditional sport coat and slacks actually experienced an increase in the number of physical assaults against their officers while the sport coat uniform was in use (Bell, 1982; Cizankas & Feist, 1975; Gundersen, 1987; Mauro, 1984; Shaw, 1973; Tenzel & Cizankas, 1973; Tenzel, Storms, & Sweetwood, 1976).

If the type of hat or tailoring of a police uniform can have an impact on public perceptions and impression formation it is also possible that impressions are influenced by the uniform's color. Colors have been found to be associated with specific moods and impressions. For example, red is generally associated with excitement and stimulation, blue with feelings of security and comfort, and black with evil (Scott & Luscher, 1969; Wexner, 1954). These results have remained stable when tested in Europe (Adams & Osgood, 1973; Scott & Luscher, 1969; Williams, Moreland, & Underwood, 1970), Asia (Adams & Osgood, 1973; Williams et al., 1970), Africa, and the Middle East (Adams & Osgood, 1973). Across most cultures white has been consistently associated with good while black was consistently perceived as evil. Valdez and Mehrabian (1994) also learned that people view

lighter colors as more pleasant and less dominant while dark colors elicit impressions of anger, hostility, dominance, and aggression.

Frank and Gilovich (1988) found that football and hockey players who wore black or dark blue uniforms were viewed more negatively by referees than players who wore lighter colored uniforms. They also found that referees generally assessed more penalties to team members who wore dark uniforms than players in light colored uniforms who committed the same violations (Frank & Gilovich, 1988). Vrij (1997) showed videotaped scenarios of an altercation to test subjects and alternated the aggressor's clothes between black and a light color. The aggressor was consistently rated as more threatening, aggressive, and evil while wearing black. Test subjects were also more convinced of the guilt of potential suspects after viewing mug shot photos if the suspect was wearing black clothing (Vrij, 1997). Even crime victims were found to be viewed as more dishonest and aggressive when wearing black (Vrij & Akeherst, 1997).

Is it possible that the uniform a police officer wears may be creating a negative impression formation with citizens based on its color? Most police uniforms in the United States today are of darker colors such as black, blue, brown, green, or grey, while a few agencies use lighter shades (NAUMD, 2003). Darker colors are easier to clean, help hide stains, and help conceal officers in tactical situations. Is it possible that the color variations of these uniforms produce different impression formation results on citizens? Is it possible that some uniforms promote a negative impression formation, thus making it more difficult than necessary for officers to overcome citizen apprehensions and anxieties?

In this era of community policing, law enforcement agencies are striving to improve their public image and increase cooperation with citizens. If the color of an officer's uniform is conveying negative attributes such as evilness, aggressiveness, or dishonesty, it may be harder to accomplish these community policing goals. The present study seeks to measure citizen impressions of four commonly used police uniform color combinations in order to determine if their uniforms evoke different emotions. It also seeks to determine which of these four uniform color combinations produces the least and the most negative impressions on citizens.

METHODOLOGY

An experimental design was used to measure the impact of the independent variable (uniform color) on seven impression-related dependent variables. The experiment was meant to test three hypotheses. First, that varying the color scheme of the police uniform will result in statistically significant changes in public perceptions of the uniform. Second, that some commonly used uniform schemes by municipal police agencies in the United States are viewed more negatively than others. Third, that police uniform color schemes of a darker hue will be perceived more negatively than similar uniforms of a lighter hue.

This experiment was conducted in a Midwestern city with a city population of 60,000, and a metropolitan area population of approximately 120,000. The experiment site was a large shopping mall within the city. Within the mall a researcher approached shoppers and requested their participation in evaluating a new uniform being considered by a local police department. Each test subject was

randomly shown an 8 inch by 10 inch color photo of one of four uniforms for evaluation. Each of the four uniforms was identical in tailoring and the photo involved the shirt and pants laid out neatly on a plain white background. Each uniform bore the same silver police badge pinned on the left breast and a name plate pinned on the pocket flap of the right shirt pocket. The uniforms were void of weapons, hat, or duty belt. The four uniforms varied only by color.

The first uniform consisted of a light blue shirt and navy blue pants, typical of the uniforms worn by such large police agencies as the Chicago Police Department, Philadelphia Police Department, Houston Police Department, and Kansas City Police Department. The second uniform consisted of a white shirt and black pants, typical of the uniforms worn by the Cincinnati Police Department and Columbus (OH) Police Department. The third uniform consisted of a black shirt and black pants, the most common municipal police uniform in the United States (NAUMD, 2003) and worn by the New York City Police Department, Indianapolis Police Department, Miami Police Department, and Atlanta Police Department. The last uniform consisted of a khaki shirt and khaki pants, typical of the uniforms worn by the Las Vegas Police Department and the Wichita Police Department.

While viewing one of the four photos, each test subject was asked to record their impressions of the uniform on a questionnaire that included seven, 5-point Likert scales. These Likert scales measured impression formation on the continuums of good/bad, nice/mean, warm/cold, gentle/forceful, friendly/unfriendly, passive/aggressive, and honest/corrupt. The questionnaire also

collected the test subject's age, sex, and race.

As illustrated in Table 1, the total sample consisted of 737 participants. The sample contained a larger number of males (54.7%) than females (45.3%), however police-citizen contact research has demonstrated that males are far more likely than females to have contact with the police (Langan et al., 2001). The participants ranged in age from 15 to 71, with a mean of age 28, suggesting a skewed distribution toward youthful respondents. The participants were also overwhelmingly Caucasian (87.2%), with only a small representation of African Americans (7.9%), Asians (3.3%), and Hispanics (1.6%). Of the 737 participants, 182 evaluated the light blue/navy blue uniform, 176 evaluated the white/black uniform, 189 evaluated the black/black uniform, and 188 evaluated the khaki/khaki uniform.

Table 1: Sample Descriptives (N=737)

<u>Sex</u>	N	
Male	403	54.7%
Female	334	45.3%
<u>Age</u>		
Mean = 28 years old		
SD = 10.7 years		
Minimum = 15 years old		
Maximum = 71 years old		
<u>Race</u>	N	
Caucasian	643	87.2%
African American	58	7.9%
Asian	24	3.3%
Hispanic	12	1.6%

RESULTS

Table 2 displays the mean score on each of the dependent variable scales for each uniform color combination. As this table demonstrates, the means of the five-point Likert scales showed wide variation, ranging from 1.92 to 4.16. However, the responses on these scales

appear to be fairly consistent, as all of the standard deviations are less than 1.28 and many are less than 1. On the scale of good/bad, the light blue/navy blue uniform had the most favorable ranking and the khaki/khaki uniform had the least favorable. On all of the remaining scales (nice/mean, warm/cold, gentle/forceful, friendly/unfriendly, passive/aggressive, honest/corrupt) the light blue/navy blue uniform was found to be the most favorable and the black/black uniform was least favorable. A composite mean and standard deviation were developed for each uniform color scheme by summing the means on each of the seven scales and dividing by seven. Based on this composite mean the light blue/navy blue color scheme was perceived most favorably, followed by the white/black scheme, the khaki/khaki scheme, and finally the black/black.

Based on the mean scores for each uniform, the black/black uniform typical of the type worn by police officers in Atlanta, Indianapolis, Miami, and New York produced perceptions as the most cold, mean, forceful, unfriendly, aggressive, and corrupt. Additionally, the light blue/navy blue uniform typical of the type worn by police officers in Chicago, Houston, Kansas City, and Philadelphia produced perceptions as the most good, nice, warm, gentle, friendly, passive, and honest. These results suggest that the public holds color-based perceptions and stereotypes that can be transferred onto a police officer based solely on the color of the uniform he or she wears.

Because the mean scores for each color combination fall within 2 standard deviations of each other on each scale, a one-way analysis of variance (ANOVA) test was conducted to determine if the variations between the different uniform means were statistically significant.

Table 2 : Uniform Style Mean Scores

	Mean Scores (Standard Deviations)			
	Lt. Blue/Navy Blue (n = 182)	White/Black (n = 176)	Black/Black (n = 189)	Khaki/Khaki (n = 188)
Good (1)/Bad (5)	2.96 (1.20)	3.29 (1.25)	3.22 (1.32)	4.16 (1.27)*
Nice (1)/Mean (5)	2.20 (0.90)	2.36 (0.82)	3.61 (1.16)*	2.63 (1.27)
Warm (1)/Cold (5)	2.82 (1.18)	2.98 (1.10)	3.53 (1.26)*	2.89 (1.33)
Gentle (1)/Forceful (5)	1.99 (0.89)	2.22 (0.85)	3.87 (0.83)*	2.31 (1.10)
Friendly (1)/Unfriendly (5)	2.01 (0.82)	2.29 (0.72)	3.44 (0.99)*	2.58 (1.13)
Passive (1)/Aggressive (5)	1.92 (0.87)	2.24 (0.84)	3.99 (0.82)*	2.22 (1.22)
Honest (1)/Corrupt (5)	2.01 (0.84)	2.37 (0.88)	3.44 (1.08)*	2.91 (1.16)
Composite Mean	2.27 (0.96)	2.54 (0.92)	3.59 (1.07)*	2.81 (1.21)

*Highest mean score for each dependent variable scale.

Table 3: One-Way ANOVA Test for Significance

Dependent Variables		Sum of Squares	df	Mean Square	F
Good/Bad	Between Groups	155.17	3	51.73	32.49***
	Within Groups	1167.08	733	1.59	
Nice/Mean	Between Groups	225.04	3	75.02	67.05***
	Within Groups	817.81	733	1.12	
Warm/Cold	Between Groups	59.20	3	19.73	13.24***
	Within Groups	1092.41	733	1.49	
Gentle/Forceful	Between Groups	499.23	3	166.41	182.91***
	Within Groups	666.87	733	0.91	
Friendly/Unfriendly	Between Groups	218.95	3	72.98	72.55***
	Within Groups	737.36	733	1.01	
Passive/Aggressive	Between Groups	416.25	3	138.75	162.15***
	Within Groups	627.21	733	0.86	
Honest/Corrupt	Between Groups	215.04	3	71.68	82.67***
	Within Groups	635.57	733	0.87	

* $p < .05$; ** $p < .01$; *** $p < .001$

As revealed in Table 3, the variation of mean scores on each scale was highly significant at the .001 level, producing 99.9% confidence that these results were not the result of random chance. Finally, in order to determine if the race, age or sex of the respondents produced significant variation in their ratings of the uniforms, regression analysis was run on each of the seven scales using age, race, and sex as the independent variables of prediction. None of these variables produced a statistically significant correlation

to any of the dependent variable scales and the r-squared values never rose above the .1 level. Therefore the results appear remarkably consistent across all races, age groups, and both sexes.

These results suggest support for the first hypothesis, that varying the color scheme of a police uniform produces different public perceptions of the uniform. Each of the four uniform color combinations evaluated produced statistically significant differences in mean ratings. The second hypothesis, that some com-

monly utilized police uniform color schemes are viewed more favorably than others, also appears to have been supported. The most common police uniform in the United States, a black shirt with black pants, was viewed least favorably on six of the seven measures, while the light blue shirt and navy blue pants combination was viewed most favorably on all seven measures. Nevertheless, the third hypothesis, that the lighter colored uniforms would be viewed more favorably than the darker colored uniforms, was not supported. While the darkest uniform combination was ranked least favorably, the uniform with the lightest hue overall, the khaki and khaki color combination, ranked least favorably in one measure. It also ranked behind both the light blue/navy blue combination and the white/black combination overall.

DISCUSSION

The impact of police uniform color on impression formation was investigated with four commonly worn uniform color schemes. The results revealed that uniform color does have an impact on public impression formation. The different color combinations in this study produced different impressions of the same style uniform. Furthermore, the results revealed that certain commonly worn uniform color schemes in the U. S. are viewed more favorably than others by the public. The uniform colors worn by the police departments of Chicago, Houston, Kansas City, New Orleans, Philadelphia, and Toledo – a light blue shirt with navy blue pants – produced the most favorable impressions. This uniform was perceived as least mean, cold, forceful, unfriendly, aggressive, and corrupt among the four color schemes

evaluated. The uniform color worn by the police departments of Atlanta, Detroit, Indianapolis, Miami, and New York – a black shirt and black pants – was perceived as the most cold, forceful, unfriendly, aggressive, and corrupt.

Although varying the color of the uniform caused it to be perceived differently, the hue of the uniform did not necessarily have the anticipated effect. The previous literature would suggest that darker uniforms would be perceived as more aggressive, evil, and corrupt, while bright uniforms would be perceived as warm, friendly, and honest (Frank & Gilovich, 1988; Valdez & Mehrabian, 1994; Vrij, 1997; Vrij & Akeherst, 1997). Consistent with the previous research, the all black uniform was perceived least favorably. However the lightest uniform colors – the all khaki and the white and black – were not perceived most favorably. In fact the all khaki uniform ranked least favorable of all the uniforms on one of the measures (good/bad). The darkest uniform was viewed least favorably while another relatively dark, or at least neutral, color uniform was viewed as most favorable.

This finding may suggest that it is not the colors per se that elicit impressions but a combination of the colors and the context – that of a police uniform. Citizens may have preconceived stereotypes about how a police officer should look that resulted in less favorable perceptions of the khaki and black and white uniforms and positive perceptions of the blue uniform. These stereotypes may be fueled by news media images in recent years. A number of police brutality incidents caught on tape that have received national media attention have involved uniforms similar to the all black uniform. For example the 1991 beating of Rodney King, the 2002 gas station beating by

Inglewood California officers, and the 2004 Los Angeles flashlight clubbing incident all involved officers who wore the all black uniform or uniforms that appeared black under the lighting conditions at the scene. These images may have been seared into the memories of U.S. citizens and seeing a similar uniform may evoke an initially negative impression.

Police executives should be aware of the initial impressions their department's uniforms may be creating. Consistent with the previous research, wearing black uniforms is likely to evoke negative impressions from the citizens in the community. This condition not only creates a more difficult situation from the perspectives of cooperation and community relations, but it could also affect officer safety. If an officer encounters a citizen who is already highly agitated, the impressions evoked by the black uniform (mean, cold, forceful, unfriendly, aggressive, and corrupt) may further prime the citizen and mentally justify resistance. The evidence suggests that people who deal with aggressive situations (athletes, police officers, crime victims, criminal offenders) should avoid wearing black if they want their actions to be viewed more positively.

Nevertheless, it is important to note that color was the only independent variable under evaluation here and the strength of the color-impression relationship in comparison to other factors is unknown. When a citizen first encounters a police officer they may apply stereotyped attitudes to the officer based on the uniform color because other impression-forming information is initially absent. However, as the citizen interacts with the officer more impression influencing information becomes available. The officer's words, actions, accent, non-verbal

cues, and demeanor may eventually negate any negative or positive impressions initially evoked by the uniform's color. Yet it is important to remember that how the officer behaves is determined in part by how the citizen initially behaves. If the citizen is primed with a negative and hostile impression of the officer at the time the officer appears, then the citizen is more likely to create a negative impression in the mind of the officer.

CONCLUSION

The color scheme of the uniform a police officer wears appears to influence the initial impression the citizen forms about the officer. This impression can prime the citizen's thoughts and emotions, setting the initial foundation for the police-citizen interaction. Wearing a police uniform consisting of black pants and a black shirt is likely to evoke negative impressions from the citizen, producing negative attributions the officer must overcome through behaviors. However, wearing a light uniform, such as khaki pants and a khaki shirt, is not likely to evoke positive impressions from a citizen. The uniform consisting of a light blue shirt and navy blue pants produced the most positive attributions of the four color schemes evaluated here. Citizens apparently have certain mental expectations about what a police uniform should look like, but these expectations may also be influenced by color.

Police executives should take note of these findings and understand the important psychological advantages and disadvantages the color of their agency's uniform creates. The uniform color can either assist in community relations or make officer-citizen interactions more difficult. The present study and the previous literature have demonstrated the

negative attributions that people attach to black clothing. With this evidence police executives should realize the detrimental impact the black uniform has on citizen perceptions of officers. Police chiefs should seek to reduce tensions in officer-citizen interactions through the adoption of a more soothing color scheme, such as the blue uniform evaluated here. This simple change can help improve the perceptions of individual officers and the department as a whole.

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