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Colleagues:

This year was a good one for the Journal. Over 30 articles were submitted for review. Not only have submissions increased in number, they have also increased in quality. In addition to the five quality articles published herein, at least four additional submissions are currently undergoing revision and will likely be included in Volume 3, Issue 1 next Spring.

My interim term of editorship for the Journal has come to an end. As such, I would like to thank those who assisted in its production. First, and foremost, I would like to thank the production editor, David Vasek, who was responsible for copy editing the articles and preparing the Journal for publication in its entirety. I would also like to thank Myrna Cintron, head of the Department of Justice Studies here at Prairie View A&M University, for her continued financial support. Also, I would like to thank the board for suggesting, and the membership for assenting, that my room charges at this year's annual conference in Oklahoma City be paid by SWACJ.

While numerous individuals have assisted me throughout this year, I want to single out Trey Williams and Marilyn McShane, who expended energy on several articles published in Volume 2. Finally, I would like to thank the reviewers, without whom this entire enterprise would not be possible. The list includes all of the associate editors, each of whom was recruited to review at least one article, along with the following individuals:

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Jon Sorensen



## **Vehicle Cues and Racial Profiling: Police Officers' Perceptions of Vehicles and Drivers**

**Michael A. Ikner**

*Arlington, Texas, Police Department*

**Janice Ahmad**

*University of Texas at Arlington*

**Alejandro del Carmen**

*University of Texas at Arlington*

### **ABSTRACT**

*Vehicle symbols/cues are used to examine police officers' perceptions of vehicle driver characteristics and the propensity of individual officers to be involved in racial profiling based on vehicle type. Videos of different vehicles and locations were shown to a sample of police officers employed by a large police department in north Texas. A pattern of response by officers with regards to race and ethnicity of drivers was found. Implications for police training and policy are discussed.*

### **INTRODUCTION**

From arrest to imprisonment, minorities are overrepresented in the criminal justice system. This overrepresentation can be contributed to perceptions and attitudes held and the actions taken by workers within the criminal justice system. This chain of events starts when police officers, as gatekeepers to the criminal justice system, engage in activities such as racial profiling that target minorities. Prior research has examined overrepresentation as an organizational phenomena rather than the result of decisions made at the individual level. In particular, racial profiling has been examined, for the most part, at the agency level to determine if the practice is occurring. However, for an agency to be involved in this practice, individual police officers must be making contact with minorities at a high rate as the starting point of minority overrepresentation in the criminal justice system.

The purpose of this article is to examine individual police officers' decisions to make traffic stops based on associating a particular type of vehicle to a specific racial or ethnic group. This utilization of an extra-legal factor could furnish one explanation of minority

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**Ikner, Ahmad, del Carmen — Vehicle Cues and Racial Profiling (2005)**

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overrepresentation in the criminal justice system. We hold that vehicle symbols/cues are extra-legal factors that police officers use to determine which vehicles to stop and such decisions may be one cause for the overrepresentation of minorities in the criminal justice system.

## **LITERATURE REVIEW**

Race-based policing, from the southern slave patrol to the current alleged practice of racial profiling, has had a profound impact on the public and police (Bass, 2001). This policing strategy may have contributed to African-Americans being overrepresented in the criminal justice system for over a century (Lafree and Russell, 1993). Minorities' claims that the police unfairly subject them to biased policing strategies have been supported by the disproportional rates of arrests, convictions, and incarceration of minorities (see Bing and del Carmen, 2000; Haas and Alpert, 1999; Herivel and Wright, 2003; Tonry, 1999). In fact, Bing and del Carmen (2000) allege that law enforcement agencies, courts, and corrections often make decisions based on race or racial and ethnic stereotypes.

### **Police Socialization and Perceptions**

Police officers, like most people, are socialized in both personal and professional settings, which affects their decision-making. If these environments exhibit prejudiced racial attitudes, the environments may perpetuate the stereotype of young African-American men as criminals and influence officers' decisions when it comes to race and the enforcement of the law (Harris, 1999; McMorris, 2001; Milner, 1983).

According to Barak, Ericson, Graber, and Warr (in Kappeler et al., 2000) the media are the primary and most consistent sources of information on crime, criminals, crime control policies, and the criminal justice system for most Americans. The media often depicts African-Americans and Latinos as perpetrators of crime more than whites. Additionally, these groups are far less likely to be portrayed as police officers. These depictions tend to create stereotypes, bias, suspicion and connection of minorities with criminality (Bing, 1990; Busselle and Crandall, 2002; Dixon and Linz, 2000; Kappeler et al., 2000; Romer et al., 1998). When combined with people's unique experiences, the depictions tend to form schemas about certain types of people. These schemas are then activated when interacting frequently with minorities, thereby increasing the efficiency at which information about others and their actions are processed (Ruby and Brigham, 1996). This perception may be carried into adulthood and may affect the way people perform their job.

This outlook may also be reinforced through socialization into the police culture through the use of war stories that not only teach lessons, but also provide officers with a world-view of the streets (Crank in Jackson and Lyon, 2001). In addition, some officers have adopted an image of certain citizens as symbolic assailants (Skolnick, 1994), and as a result, developed aggressive policing tactics to address this perceived danger (Jackson and Lyon, 2001, Kraska and Kappeler, 1997). Additionally, isolation of police from the community has created a sense of solidarity amongst the police and created what Skolnick (2000) coined the "blue wall of silence." All of

these factors combine to create a police culture and may create distorted views of minorities as likely criminals, thereby causing these officers to engage in misconduct, including the practice of racial profiling.

To engage in behavior that results in racial profiling, officers act on the negative imprint of stereotypical views of minorities, the types of vehicles they might drive, driver characteristics, and other symbols/cues. Officers act upon these cues when deciding to stop minorities for minor traffic infractions under the legally sanctioned tactic of pretext but within their use of discretion (see Brooks, 2001; Hassell et al., 2003; Ramirez et al., 2000). Once this pretextual stop has been made, an investigation into possible criminality is done often only based on the officer's negative perceptions of the driver. Such tactics fuel the racial profiling debate.

### **Pretext Stops, Extra-Legal Factors, and Racial Profiling**

A pretext traffic stop is based on the justification (legal or extra-legal in nature) that the police officer uses to initiate the stop. Drivers routinely violate traffic laws, and these violations can serve as a pretext for some police officers governed by other motives, including the suspicion of drug possession or the need for further investigation, searches or field investigations, to stop the vehicle (Carrick, 2000; Engle et al., 2002; Fridell et al., 2001; Harris, 1997; Harris, 1999; Lundman and Kaufman, 2003; Weitzer and Tuch, 2002). These pretext traffic enforcement practices across the United States have resulted in a disproportionate number of traffic stops of minorities; thus influencing the over-representation and racial disparities of minorities in the criminal justice system (Harris, 1997; Harris, 1999; Haas and Alpert, 1999; Kalogeras and Mauer, 2003; Reiman, 2001). In fact, the phenomenon created by the frequent stop of minorities is referred as "driving while black or brown – DWB".

The U. S. Department of Justice defines racial profiling as "any police-initiated action that relies on the race, ethnicity, or national origin rather than the behavior of the individual". According to Ramirez et al. (2000) and Engle et al. (2002), racial profiling is used by police officers as the sole basis for initiating law enforcement activity, such as stopping, searching, and detaining a person.

Recent studies on racial profiling have revealed that minorities are stopped, searched and sometimes ticketed at rates that exceed those for whites (Harris, 1999; Petrocelli et al., 2003; Smith and Petrocelli, 2001; Steward, 2004). However, traffic stops of black drivers produced no more arrests or drug seizures than stops of white drivers, but the drug courier profile – created as part of the war on drugs phenomena – created a self-fulfilling prophecy resulting in higher arrests, convictions, and imprisonments of blacks (Harris, 1997; Harris, 1999; Kennedy, 1998).

The widespread criticism of racial profiling at the local, state, and national levels reflects public concern that this race-based decision-making process reflects racial prejudice, either overt or covert, by individual police officers and administrators (Engle et al., 2002). This has been the catalyst for legislative mandates directing police agencies to collect data, specifically on traffic

stops, to determine if an agency and/or an individual officer engages in racial profiling (Harris 1997; Harris, 1999; Rudovsky, 2002; Smith and Alpert, 2002; Tanovich, 2002).

As discussed, the core issue of racial profiling is the use of “pretext stops”. The Supreme Court's 1996 decision in *Whren v. United States* allows police officers to use traffic violations as a pretext to stop a car and investigate possible criminal offenses. According to Harris (1997), the Court adopted the “could have” theory, such that any time a police officer observes a traffic violation, he/she has probable cause to stop the vehicle. This ruling broadens police officer power, especially discretion, involving pre-textual traffic stops.

Both anecdotal and quantitative data show that nationwide, police exercise discretionary power primarily against African-Americans and Latinos (Kennedy, 1998; Harris 1999), and as Harris (1997) contends, “[a]fter *Whren*, courts will not ask whether police conducted a traffic stop because officers felt the occupants of the car were involved in some other crime about which they had only a hunch; rather, once a driver commits a traffic infraction, the officers’ ‘real’ purpose will make no difference at all” (Harris, 1997:545).

The issues of pretext traffic stops are moral concepts linked directly to the decision-making process, which are based on personal and professional socialization. Therefore, it becomes important to identify factors that influence decisions that individuals make in response to real-life moral dilemmas (Haviv and Leman, 2002).

Lundman (2004) recognized that both legal and extra-legal factors affect police actions. Lundman and Kaufman (2003) suggest that not much is known about the possible effects of extra-legal factors such as race, ethnicity, (or as we purport, vehicle symbols/cues) on police decisions to proactively initiate traffic stops. In fact, the research on the affects of extra-legal factors has been limited to what police do once an encounter with a citizen has begun, as opposed to the decision by police to make a traffic stop in the first place. However, conclusions by Chermak, Sherman, and Engel et al. (cited in Lundman and Kaufman, 2003) suggested that extra-legal variables play an important role in low-visibility police actions (e.g. decision to write a citation) and that no single extra-legal variable consistently affects police actions.

In contrast, Mastrofski et al. (1995) suggested that police officers' behavior is predicted primarily by legal and situational factors and that the influence of race and other extra-legal factors is diminishing. The present study aims at determining whether police officers use the extra-legal factor of vehicle symbols/cues to engage in pretextual traffic enforcement.

The need for the current research is demonstrated by the lack of prior research on this topic in that earlier research has primarily focused on the identification and analysis of data to determine if the practice of racial profiling by police exists to corroborate minority claims (Harris 1997; Harris, 1999; Meehan and Ponder, 2002; Taylor and Whitney, 2002) and to confirm the existence of racial profiling as a social problem (Ramirez et al., 2000). While most researchers agree that racial profiling is a problem, the extent of profiling is essentially unknown and difficult to measure (Fridell et al., 2001). Racial profiling data has been collected and

measured in various ways using different data analysis strategies. According to Engel and Calnon (2004), nearly all of the publicly available reports and studies reveal disparities in the percentages of minority citizens who are stopped, cited, searched, or arrested as compared to selected benchmarks. In other words, institutional measures of performance (e.g. police agencies measuring racial profiling data in an aggregate form) and the resolution of traffic stop encounters have been examined; however, research has been largely ignored in the area of police officer decision-making as it pertains to traffic stops (Lundman and Kaufman, 2003). And if, as we purport, racial profiling is, for the most part, an individual not an institutional driven police practice then research is needed on individual measures, such as officers' perceptions of drivers based on the types of vehicles driven and the officers' decision to stop motorists based on those perceptions.

This study examines racial profiling while visiting the question of individual police officer behavior relevant to the officer's use of vehicle symbols/cues to determine the race, gender, age, and social status of the driver of a vehicle.

## METHODOLOGY

### Study Site

Arlington, Texas is the 49th largest city in the United States and is located in the Dallas-Fort Worth Metroplex, an urban area with over four million people. In 2004, the city estimated its permanent residential population at over 355,000 (City of Arlington, 2004). According to the 2000 census, 60% of the residents identified themselves as white, 14% black, 18% Hispanic, and 8% as belonging to another ethnicity/race (U.S. Bureau of Census, 2001). The city's population was evenly distributed between males and females, with nearly 72% 18 years of age or older. The median household income was \$48,617, and almost 8% of the population lives below the poverty level.

The Arlington Police Department adheres to the community-oriented policing philosophy and is one of the few agencies in Texas that requires a four-year college degree. The Department has undertaken a proactive approach regarding the issue of racial profiling by providing its commissioned police officers with over 80 hours of cultural awareness, sensitivity, and racial profiling training in recent years. Additionally, the Department was one of the first in the nation and the third in the state of Texas that began voluntarily collecting, analyzing, and reporting traffic stop data before legislative mandates were passed. Structurally, the Department is situated in the city of Arlington in three different areas. The north side of the city is subject to the North Patrol District. Similarly, the east and west sides of the city are subject to the oversight of the East and West Patrol Districts.

According to the Arlington Police Department Equal Employment Opportunity (EEO) report (2004), the Police Department was comprised of 535 sworn officers. Of these, 71% of the officers were white, 12% black, 11% Hispanic, and 6% comprised other races. With regard to gender distribution, females made up 16% of the department's commissioned personnel.



## **Video Collection Process and Procedures**

To determine police officers' perceptions, 20 vehicles operated throughout the city were randomly selected and videotaped on different days and times during the month of October 2003. A driver and videographer, while in a marked police patrol unit, videotaped the vehicles on different roadways deemed as representative of the major areas of the city; further, these areas are known to be populated by a diverse populous representing the ethnic/racial compositions of the city. The roadways included an interstate highway; a divided, limited-access state highway; and five major arteries that serve residential and commercial areas.

The videotaped scenarios were then professionally edited. During this process, the video editor, who was not a member of the research team, selected 10 of the 20 videotaped vehicles based on the clarity and overall quality of the video. During the editing process, the rear license plate of each vehicle was blurred to maintain the privacy of the vehicle owners. Descriptions of the vehicles used in the study are included in Appendix A. A pre-test was conducted with officers who had prior uniformed patrol and/or traffic unit experience but were not currently assigned to these divisions. It should be noted that early in this study, it was determined that officers not assigned to traffic duty would not participate. The feedback from the pre-test group resulted in lengthening the time interval between each scene from five to ten seconds to allow completion of the survey questions relating to that scene.

Participants were selected for the study if, as part of their regular duty, they wore the official Arlington Police Department's blue uniform and insignia, utilized an Arlington Police Department motor vehicle with distinctive official markings, and were assigned to the traffic unit or to one of the four uniformed patrol districts. The principal investigator contacted the officers that met these criteria at their primary briefing stations and orally explained the study to the potential participants. Written explanation of the study was also distributed. The officers were then asked to volunteer to participate in the study. This resulted in a sample of 120 commissioned police officers (34%) out of the 355 officers that met the selection criteria.

Participants viewed the 10 videotaped scenarios individually. Each scenario depicting a moving vehicle was five seconds in length and did not display any illegal driving behavior. Further, each of the scenes was separated by ten-second intervals, which allowed respondents sufficient but not excessive time to complete the survey questions relating to the scenario just viewed. Participants spent approximately six minutes viewing the videotaped scenes and completing the survey questions.

## **Survey Questions**

The survey instrument consisted of 18 questions, 10 of which aimed at capturing participants' responses to the vehicle scenes. The remaining eight questions asked for the participants' demographic information. The demographical questions included race, age, gender,



marital status, number of children, education level, duty assignment, and number of years of police experience.

## FINDINGS

### Demographical Traits

As shown in Table 1, the majority (83%) of respondents was male, between the ages of 26 and 30 (22%), identified themselves as white (74%), was married (71%), and had no children (39%). Most had a bachelor's degree (81%), between two and five years of police experience (26%), and were assigned to the Patrol Division (88%).

**Table 1.**  
**Demographics of Participants**

Variable	Value	n	%
<b>Gender</b>	Male	99	83.2
	Female	20	16.8
<b>Age</b>	21-25	12	10.1
	26-30	26	21.8
	31-35	25	21.0
	36-40	14	11.8
	41-45	20	16.8
	46-50	16	13.4
	Over 50	6	5.0
<b>Race/Ethnicity</b>	White	87	73.7
	Hispanic	17	14.4
	Black	13	11.0
	Asian	1	0.8
<b>Marital Status</b>	Single	27	22.7
	Married	84	70.6
	Divorced	8	6.7
<b>Number of Children</b>	0	46	39.0
	1	24	20.3
	2	29	24.6
	3	10	8.5
	4 or more	9	7.6
<b>Educational Level</b>	High School Grad	3	2.5
	Some College	10	8.4
	Bachelor Degree	96	80.7
	Masters Degree	10	8.4
<b>Police Experience</b>	< 2 years	9	7.6
	2-5 years	31	26.3
	5-10 years	26	22.0

**Table 1.**  
**Demographics of Participants (cont)**

Variable	Value	n	%
Police Experience	10-15 years	15	12.7
	15-20 years	7	5.9
	20-25 years	18	15.3
	25-30 years	10	8.5
	>30 years	2	1.7
Duty Assignment	Patrol	98	87.6
	Traffic Division	14	12.5

### Officers Perceptions of Common Driver Profile

Upon viewing the 10 videotaped scenarios, respondents perceived the driver to be white in nine out of ten scenes (see Table 2). In Scene 1, the majority of respondents perceived the driver to be Hispanic. The high percentage of agreement (71%) could indicate that the type of vehicle observed (Dodge Ram) along with physical indicators (i.e., Ram displayed on rear window) served as symbols/cues associated with the Hispanic culture.

The same rationale is offered in Scene 4, where the majority (73%) of respondents perceived the driver of the vehicle (an Isuzu SUV with no visible markings) to be white. This was the highest percentage of agreement offered for the race variable.

Also shown in Table 2, in seven of the ten scenes, the majority of the respondents perceived the gender of the driver to be male. That is, respondents felt females drove vehicles in Scene 3 (Ford 4-door sedan), Scene 4 (Isuzu SUV), and Scene 7 (Mitsubishi 4-door sedan).

**Table 2.**  
**Most and Least Frequent Responses – Perceived Race and Gender of Driver**

Scene #	Race				Gender			
	Most Frequent	%	Least Frequent		Most Frequent	%	Least Frequent	%
One	Hispanic	71	Black	3	Male	88	Female	5
Two	White	49	Black	3	Male	78	Female	13
Three	White	64	Native American	1	Female	74	Male	16
Four	White	73	Asian	2	Female	46	Male	43
Five	White	63	Asian	2	Male	80	Female	10
Six	White	54	Other	6	Male	83	Female	7
Seven	White	49	Hispanic / Asian	5	Female	63	Male	25
Eight	White	48	Other	4	Male	46	Female	43
Nine	White	68	Hispanic	4	Male	51	Female	38
Ten	White	67	Hispanic	3	Male	52	Female	38

A z-test for proportions was conducted to determine if respondents' perception of the driver's race/ethnicity in each scene was in proportion to the race/ethnicity of city residents. Although the demographics of city residents may not mirror driver demographics in this major suburb, it is the best available measure to attempt such a determination. As shown in Table 3, officers perceived the vehicle in Scene 4 (Nissan SUV) to be driven by a white person at a rate higher than the proportion of white residents of the city. In Scene 7 (Mitsubishi 4-door sedan) and Scene 8 (Cadillac), the respondents perceived that the driver was African American at a higher rate than their population proportion of the city. In Scene 1 (Dodge Ram truck) and Scene 2 (Chevy truck), Hispanics were perceived as the driver of the vehicle at a rate higher than their make-up of the city population. As reflected in Table 2, whites were most frequently perceived as the driver of the vehicle in nine of the ten scenarios; however when examining the data further and using the city population demographics as the referent group, it appears that while whites were perceived as the driver most often in the majority of the scenes, as would be expected given the demographics of the city, in four of the scenes Black and Hispanic drivers were the perceived driver at a rate higher than their presence in the population. This information must be cautiously interpreted, as it is not known if the race/ethnicity of drivers reflects the same race/ethnicity of city residents. Also, police officer respondents were reporting perception, not behavior, and it is not known if officers would conduct a traffic stop based on the perceived vehicle cues.

**Table 3.**  
**Perceived Percent Driver Race/Ethnicity Compared to Population Proportion**

	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Other</b>
2000 Census	60.0%	14.0%	18.0%	8.0%
Scene 1	15.8%*	2.5%*	70.8%**	4.2%
Scene 2	49.2%	3.3%*	34.2%**	5.0%
Scene 3	64.2%	11.7%	4.2%*	12.4%
Scene 4	73.3%**	8.3%	3.3%*	7.5%
Scene 5	62.5%	6.7%	16.7%	6.6%
Scene 6	54.2%	15.8%	16.7%	5.8%
Scene 7	49.2%	26.7%**	5.0%*	10.8%
Scene 8	47.5%	39.2%**	0.0%*	4.2%
Scene 9	68.3%	6.7%	4.2%*	11.6%
Scene 10	66.7%	10.8%	2.5%*	10.9%
* p < 0.05 -- identification at rate lower than population proportion				
** p < 0.05 -- identification at rate higher than population proportion				

The respondents perceived the drivers to be between the ages of 18 and 29 in six of the ten scenes (see Table 4). Further, in nine out of ten scenes, the respondents perceived the drivers to be from a middle-class social status (see Table 4). That is, respondents felt that the driver of the vehicle shown in Scene 5 (Ford F-150) was someone of lower socio-economic status. Other factors (e.g., city demographics, officer's education, little urban blight) could have contributed to this response; however, these extra-legal factors were beyond the scope of this study.

**Table 4.**  
**Most and Least Frequent Responses – Perceived Age and Social Status of Driver**

Scene #	Race				Gender			
	Most Frequent	%	Least Frequent		Most Frequent	%	Least Frequent	%
<b>One</b>	18-29	58	<18/50-59	2	Middle	58	Lower	3
<b>Two</b>	18-29	57	40-49	3	Middle	64	Upper	2
<b>Three</b>	18-29	41	50-59/ 60+	1	Middle	81	Upper	2
<b>Four</b>	18-29	53	<18	3	Middle	85	Lower	3
<b>Five</b>	50-59	28	<18	2	Lower	53	Upper	3
<b>Six</b>	30-39	42	<18	1	Middle	78	Upper	4
<b>Seven</b>	18-29	52	60+	1	Middle	79	Lower	6
<b>Eight</b>	50-59	22	18-39/ 60+	16	Middle	45	Upper	40
<b>Nine</b>	30-39	45	60+	1	Middle	81	Lower	3
<b>Ten</b>	18-29	49	50-59	1	Middle	78	Upper	3

A frequency analysis was performed on each of the four profile components (race, gender, age, social status) for responses that were not the most frequently occurring within each category, but represented a significant frequency among respondents. As shown in Table 5, gender and age were categories that were not overwhelmingly agreed upon by respondents, although majority responses were detected in each case.

Gender was ambiguous in five of ten scenes, while age was similarly ambiguous in seven of ten scenes; with two scenes demonstrating an almost even dispersion among the different age group categories. A review of the data showed that Scene 7 and Scene 8 had the most disagreements among respondents. In Scene 7, three out of four categories showed significant disagreements while Scene 8 demonstrated ambiguity in all four categories.

**Table 5.**  
**Matrix Profile Analysis**

Scene #	Race	Gender	Age	Social Status
One				
Two	X			
Three			X	
Four		X		
Five			X*	X
Six			X*	
Seven	X	X	X	
Eight	X	X	X*	X
Nine		X	X	
Ten		X	X	
X = Denotes significant numbers of responses in categories other than the one that occurred most frequently. X* = Denotes significant numbers of responses in categories other than the one that occurred most frequently, as well as equal dispersion of responses among those categories.				

### Vehicle Profile Patterns of Disagreement

The analysis revealed some general patterns worthy of discussion. Young males with less law enforcement experience had more disagreement in the race and age categories than those with more experience. Male participants had more disagreement in the social status category than females. Male and female respondents had widespread disagreement in the age category. For instance, young females compared to older females had more disagreement in the age category. Of particular interest is that participants from the Traffic Division recorded more responses in the “other” category for race than any other respondent group, possibly suggesting an increased sensitivity or ambiguity to the issue of the identification of race or ethnicity based on perception.

### Scene-Specific Patterns of Disagreement

In Scene 1, no specific perceptual patterns were obvious. But in Scene 2, white males tended to select Hispanic in the race category when the most frequently occurring response was white. In Scene 3, younger females tended to select the 30-39 age response category when the most frequently occurring response for all participants was 20-29. Male respondents over the age of 35 had more disagreement with the gender category in Scene 4. In Scene 5, both male and female officers had similar disagreement with the age category, and males had disagreement with social status. Younger males from the North Patrol, East Patrol, and Traffic Units had more disagreement with their perception of the driver’s race in Scene 6. In Scene 7, young, less experienced male and female participants disagreed with race, and young female officers expressed disagreement with regards to the age category.

In Scene 8, both young male and female respondents tended to select black as the perceived race of the driver despite the fact the most frequently occurring response by all participants was white. In this scene, both male and female respondents disagreed with the most frequently occurring category of gender. It should be noted that age and social status disagreements were the most profound variables among all respondents.

## **DISCUSSION AND CONCLUSION**

Respondents chose a white driver in nine out of ten video scenes despite the fact that the ten video scenes were of different types of vehicles and were taped in different parts of Arlington, where the city's permanent residential population is 60% white. These results could imply a keen awareness of the racial profiling controversy and/or suspicion of the study, which could have caused respondents to mask their true perceptions and select drivers that would not indicate personal bias against minority drivers. On the other hand, it may support Mastrofski et al.'s (1995) position that police officers do not use extra-legal factors when making decisions concerning police actions. More research must be conducted that examines the individual police officer decision-making process to determine if extra-legal factors such as vehicle symbols/cues play a role in enforcement decisions.

This study is the first to use videotaped scenes of vehicles to determine if police officers utilize vehicle symbols/cues to associate members of a racial or ethnic population as driving a certain type of vehicle and then stop the vehicle based on the vehicle symbol/cue (and a minor traffic violation), rather than on the race/ethnicity of the driver. If officers use these vehicle symbols/cues as extra-legal factors to determine which vehicles to stop, officers forego the argument that a particular driver was stopped based on race or ethnicity, but rather the stop was based on a (pretextual) traffic violation.

This study is a first attempt to determine if officers calculate, consciously or not, that there is a high probability that a member of a particular race/ethnic group, which is perceived as more likely to be in possession of contraband and/or involved in criminal behavior, drives a particular type of vehicle. Although the majority of drivers were perceived to be white in all but one scenario, drivers of three other vehicles were perceived to be minority at a higher rate than expected given their presence in the population. This behavior by police officers could be another example of discriminatory behavior becoming subtler. It could also indicate biases and prejudices learned during early childhood socialization and/or socialization of a police officer, which supports the schemas that are formed about particular places and people. If police officers make enforcement decisions based on vehicle symbols/cues, then this study is the first to attempt to identify the issue, which is the first step needed to prevent and eliminate the practice of racial profiling, and may eliminate some of the overrepresentation of minorities in the criminal justice system.

It should be noted that there are limitations to the current study. The first of these pertains to the generalizability of this research; participants were drawn from a single police agency. However, while the results may not be generalizable, the methodology is innovative and could be

used in future studies to yield generalizable findings. Further, prior research has not utilized videotaped vehicles, therefore no guidelines have been established concerning the “ideal” time needed for the respondents to assimilate perceptual responses to each scene. Finally, the demographical “years of law enforcement experience” category overlapped, which violated the mutually inclusive protocol. Even with these limitations, this study represents the first time that videotaped vehicle symbols/cues and individual officer perceptions of those vehicles were examined. This study sought to examine the use of extra-legal factors in police officer decisions that could result in racial profiling.

This study did not examine how the participants made their decision regarding the perceived driver of the vehicle (socialization, background, etc). This area needs further examination, and the academic literature provides a wide range of theories that attempt to explain how individuals code, classify, and execute information (i.e., Schema Theory) (see Armbruster, 1986). In criminology, these theories are growing in popularity, particularly in recent years. Although the authors feel that these theories fall outside the scope of the current study, they acknowledge their importance and encourage others to implement these in related projects aimed at determining individual-based information coding mechanisms.

The practice of racial profiling is inextricably tied not only to race, but also to officers' conceptions of place, of what should typically occur in an area, and the type of individual that belongs in that area (Meehan and Ponder, 2002). These factors should be examined in the future as well as expanding the current study to include a greater number of participants, vehicle types, and the inclusion of geographic areas. Only through further examination of the use and impact of extra-legal factors will we be able to determine if police officers use these factors to make traffic stop decisions and if so, then we can determine the best way to prevent their use. This should, in turn, reduce incidents of racial profiling and the overrepresentation of minorities in the criminal justice system.

The real utility of the findings discussed here are rooted in the context of police training, as well as criminology and criminal justice education. If police officer perceptions of vehicle drivers are indeed based on vehicle symbols/cues, which contribute to racial profiling, then developing training and education programs to decrease biased perceptions might be possible.

Aspects of this study, if replicated with a broader sample, could benefit the legislative process as well. In Texas, for instance, Senate Bill 1074, which addresses mandatory data collection from traffic and pedestrian stops, will soon be modified. The results from this study could be taken into consideration as the bill's modifications are debated.

The results of this study could also lead to the creation of an effective training and assessment tool in police departments and academies. One should consider the possibilities of having the ability, based on the instrumentation used in this study, to measure an officer's perceptions of drivers and vehicle types periodically throughout that officer's career. This would allow for the identification of potential biases officers might have when they enter into policing, and allow trainers to build specific lessons to address these biases.



The need for continued racial profiling research is vital, especially in light of post September 11, 2001 stereotypes of Middle Easterners, Muslims and others who are often regarded as potential terrorists and criminals; a shared experience that other minority groups have long endured. Racial profiling literature should be expanded to focus on individual officer perceptions and behaviors as they relate to pretextual traffic enforcement, as the possibility exists that racial profiling begins with vehicle pre-selection.

## APPENDIX A

The following table shows the vehicles shown in each scene of the study.

<b><u>Table 6.</u></b> <b><u>Vehicle Description</u></b>	
<b>Scene #</b>	<b>Vehicle Description</b>
<b>One</b>	Dodge Ram Pick-up Truck
<b>Two</b>	Chevy Pick-up Truck
<b>Three</b>	Ford 4-door Sedan
<b>Four</b>	Nissan SUV
<b>Five</b>	Ford F-150 Pick-up Truck
<b>Six</b>	GMC 2-Door Pick-up Truck
<b>Seven</b>	Mitsubishi 4-Door Sedan
<b>Eight</b>	Cadillac
<b>Nine</b>	Honda SUV
<b>Ten</b>	Nissan 4-Door Sedan

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### BIOGRAPHICAL SKETCH

**Michael A. Ikner** is presently Assistant Police Chief in the Arlington Police Department and commands the Field Operations Bureau. He obtained a B.S. degree in Criminal Justice from Dallas Baptist University and an M.S. in Criminology and Criminal Justice from the University of Texas at Arlington. Assistant Chief Ikner is a graduate of the FBI National Academy, PERF's Senior Management Institute for Police, LEMIT's Leadership and Command College at Sam Houston State University, ILEA's Command College, and Texas A&M's Bush School of Government for Leader Development for Integrated Emergency Response.

**Janice Ahmad** is an Assistant Professor in the Department of Criminology and Criminal Justice at the University of Texas at Arlington. She is co-author of a police management book and several publications and has presented research at numerous national and regional professional conferences. Dr. Ahmad earned a Ph.D. in Criminal Justice at Sam Houston State University. Her current research and teaching interests include police management issues, women in policing, and crime victims.

**Alejandro del Carmen** is an associate professor of Criminology and Criminal Justice at the University of Texas at Arlington. He is also the director of the Center for Criminal Justice Research and Training. Dr. del Carmen has published 3 books and over 15 academic manuscripts in nationally and internationally recognized journals. He is also editor of ACJS TODAY---the official newsletter of the Academy of Criminal Justice Sciences. Dr. del Carmen is an editorial board member of the Journal of Criminal Justice Education.



## **Why Do Johns Use Pornography?: Predicting Consumption of Pornography by Clients of Street Level Prostitutes**

**Richard Tewksbury**  
*University of Louisville*

**Seana Golder**  
*University of Louisville*

### **ABSTRACT**

*This research attempts to quantify the use of pornography among men known to solicit prostitutes and to identify the characteristics which might predict greater use of pornographic materials among this population. Data for this research were obtained from a study of clients of street prostitutes in Portland, Oregon, San Francisco and Santa Clara, California, and Las Vegas, Nevada (Monto, 1999a). Age, marital status, education level, employment status, race/ethnicity, whether an individual had been sexually touched as a child, number of sex partners, frequency of sex, age of first sex with a prostitute, and number of times having sex with a prostitute were significantly related to frequency of pornography use ( $p \leq .05$ ). Implications for future research are addressed.*

### **INTRODUCTION**

Current estimates indicate that over 80,000 persons are arrested annually on charges of prostitution or commercialized vice (Snyder, Puzzanchera, & Kang, 2003). The vast majority of the arrested are female prostitutes (Investigation, 2002). In contrast, only one in ten arrests for prostitution are of the clients, virtually all of whom are men (Monto, 1999b). However, research also suggests that approximately 16% of American men visit a prostitute at least once in their lifetime, with nearly 1% of all men doing so in a given year (Michael, Gagnon, Laumann, & Kolata, 1994). Given the disparity in statistics, it is not surprising that clients are one of the least understood aspects of the prostitution industry.

Who the men are that patronize prostitutes is largely unknown, as are the common characteristics and other activities of these men. While statistics suggest that “many” men do purchase the services of prostitutes, we know fairly little about the social, sexual, and criminal involvement of these men. While there are theorized implications for the consumption of pornography and a likelihood of engaging in violence against prostitutes, there is little research in this area. Thus, the major focus of this work is the exploration of the potential link between



patronizing prostitutes, consuming pornography, and sexually violent activities. Secondly, this research also seeks to provide greater understanding of the demographic and personal background characteristics, as well as the non-violent sexual activities of men known to solicit prostitutes. As such, this research offers the potential to inform public policy by providing a profile of presumably highly sexual, and as previous research suggests, potentially violent men.

## LITERATURE REVIEW

The research literature on clients of prostitutes is limited. The sparse ethnographic research that is available has suggested that men who patronize prostitutes are not significantly different from men in general (Armstrong, 1978; Holzman & Pines, 1982; Tewksbury & Gagne, 2002). One distinguishing trait of prostitutes' customers, however, is that they have been shown to hold more traditional (i.e., patriarchal) views of women, and perceive an entitlement for power and control (Busch, Bell, Hotaling, & Monto, 2002).

Customers of prostitutes are often regulars, are usually employed, hold at least a high school education, and more often than not are involved in a long term relationship (Atchison, Fraser, & Lowman, 1998; Diana, 1985; McKegany & Barnard, 1996; Sawyer, Rosser, & Schroeder, 1998; Sullivan & Simon, 1998; Campbell, 1998). And while sexual activity is typical to the encounter between prostitute and customer, it is not necessarily the only or primary goal of the customer (McKegany & Barnard, 1996; Sawyer et al., 1998; Winick, 1962).

It is also important to note that violence against female prostitutes by their customers is well documented (Davis, 1993; Farley & Barkan, 1998; Horgard & Finstad, 1992; Miller, 1993; Miller & Schwartz, 1995; Silbert, 1988). However, it appears that a small minority of customers are responsible for perpetrating this violence. One recent study reported a relationship between greater use of pornographic videos and endorsement of violence among men who solicited sex from prostitutes (Monto, 1999b), although the majority (70%) of men patronizing prostitutes only rarely or never consume pornography. Specifically, two pornography use variables (having looked at pornographic magazines and having looked at pornographic video) were significantly related to both an attraction to violent sex and having previously used violence to obtain sex (Busch et al., 2002; Monto, 2000, 2001; Monto & Hotaling, 2001).

To date, the most ambitious and informative work on customers of prostitutes is that of Monto and colleagues (Busch et al., 2002; Monto, 2000, 2001; Monto & Hotaling, 2001). This research focused on providing a broader, more generalizable understanding of the background characteristics, behaviors, and motivations of men arrested for soliciting prostitution. Data were collected from 1,342 men in First Offender programs in California, Oregon, and Nevada. First Offender programs focus on the "demand side of the equation", holding male customers responsible for their actions. These programs offered men the opportunity to voluntarily participate in a deferred adjudication program following an arrest for attempting to hire a female prostitute. Although the demographic characteristics and motives of prostitutes' customers have been documented, as well as their views and values related to gender relations, there has not been significant research on the social backgrounds and corollary sexual (including sexually violent)

behaviors and activities of these men. The present study is a move in this direction. Beginning to address this gap will both help to facilitate our understanding of men who patronize prostitutes, and to better understand the experiences and characteristics that these men bring to their interactions with prostitutes. Given the dearth of available information on male clients of prostitutes, this study, by necessity, is exploratory in nature and presents initial steps in this direction.

## **METHODS**

### **Data and Respondent Characteristics**

This research is based on secondary data, publicly available from the Inter-university Consortium for Political and Social Research (ICPSR - <http://www.icpsr.umich.edu/index.html>). These data were originally collected in a study of clients of street prostitutes in Portland, Oregon, San Francisco and Santa Clara, California, and Las Vegas, Nevada. Data were collected from 1997 to 1999 (Monto, 1999a). The original study employed a convenience sample of 1,342 respondents who were recruited from participants in client intervention programs for men arrested trying to hire street prostitutes in these four cities. Participation in the study was voluntary. Questionnaires were self-administered prior to the start of the intervention program and collected anonymously (Monton and Hotaling, 2001). The response rate for the study was over 80 % (Monto, 1999a, 1999b).

### **Measures**

Five types of measures are described in the following section: demographic characteristics, personal background characteristics, general sexual behavior, sexually aggressive behavior, and frequency of pornography use.

The demographic characteristics that were assessed included age, marital status, race/ethnicity, education level, and employment status. Respondents were requested to list their age in years. Marital status was assessed with three categories: currently married, divorced, widowed, or separated, or never married. Respondents were asked to choose the racial/ethnic category that best described them (white, African American, Hispanic, Asian, or other). Education level was also measured by a categorical variable assessing the participant's highest level of educational achievement: high school diploma or less, some college, or received either a bachelor's or master's degree. Work status was a dichotomous variable reflecting whether a respondent was working full or part time (1) or not (0).

Personal background characteristics were measured by four dichotomous variables (no (0) or yes (1)). Respondents were asked if their parents were divorced, if they had ever been touched sexually as a child, if they had ever been physically hurt as a child, and if they had served in the military.

Respondents' general sexual behavior was measured by six variables assessing: sexual orientation, number of sex partners during the last 12 months, frequency of sex during the last 12 months, age when they first had sex with a prostitute, and number of times they reported having sex with a prostitute during the last 12 months. Sexual orientation was measured on a continuum from straight (1) to gay (5), bisexual, (3) was the midpoint. Respondents were asked to report the number of sex partners they had in the past 12 months on a 9-point scale: 0 (0) to 4 (4), 5-10 partners (5), 11-20 partners (6), 21-100 (7), more than 100 partners (8). Response options for the question asking participants about the frequency of sex during the past 12 months were given on a eight point scale: not at all (1), once or twice (2), about once a month (3), 2 or 3 times a month (4), about once a week (5), 2 or 3 times a week (6), greater than 3 times a week (7), don't know (8). Response options for the question assessing the frequency with which participants reported having sex with a prostitute in the past year were never (1), only one time (2), more than 1 time but less than once per month (3), 1 to 3 times per month (4), once or twice per week (5), 3 to 4 times per wk (6), 5 or more times per week (7).

Three questions were used as proxy measures of sexually aggressive behavior (Seto, Maric, & Barbaree, 2001): threaten[ing] to use physical force to get sex, used physical force to get sex, and the Rape Myth Acceptance Scale. The first two questions asked participants if they had "ever had sexual intercourse with a woman when she didn't want to because you threatened to use physical force (twisting her arm, holding her down, etc.) if she didn't cooperate?" or if they had "used some degree of physical force" to make her have sexual intercourse; both questions used a dichotomous response scale (yes [1]; no [0]). The Rape Myth Acceptance Scale is an eight item scale that reflects the participant's level of endorsement or acceptance of myths about rape. In general rape myths are defined as "prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists" (Burt, 1980; Tewksbury & Adkins, 1992) and serve "to justify or support sexual violence against women and diminish support for rape victims"(Monto, 2001)). Representative items include: "what percentage of women who report a rape would you say are lying because they are angry and want to get back at the man they accuse?" (almost all (1), about  $\frac{3}{4}$  (2), about half (3), about  $\frac{1}{4}$  (4), almost none (5)), and "a woman who goes to the home or apartment of a man on their first date implies that she is willing to have sex." (agree strongly (1) to disagree strongly (4)). Following coding instructions provided by Monto and Hotaling (2001), responses were converted to z scores and then summed to create a total-scale score. The alpha reliability for this sample was .83.

***Frequency of Pornography Use.*** Frequency of pornography use was computed by taking the mean of two questions assessing the frequency with which respondents reported looking at pornographic magazines and watching pornographic videos. Response options for each of these questions ranged from never (0) to several times a day (5). The computed variable reflecting the frequency of pornography use had a possible range of 0 to 5.

## Missing Data

Due to the presence of missing data within the dataset, we took steps to minimize the bias to parameter estimates that can result from the more common methods of handling missing data (e.g., listwise deletion and mean substitution, Graham, Hofer, Donaldson, Mackinnon, &

Schafer, 1997; Graham, Hofer, & Piccinin, 1994). Thus the Mplus statistical analysis program was used for all analyses (Muthen & Muthen, 2000). The Mplus program provides for the handling of missing data through the use of a raw maximum-likelihood procedure to impute values for missing data. Unbiased parameter estimates and reasonable standard errors are obtained using the missing data feature in Mplus (Choi, Golder, Gillmore, & Morrison, 2005; Muthen & Muthen, 2000).<sup>1</sup>

## RESULTS

Analysis begins with presentation of the variables included in the analysis. Table 1 presents the descriptions of the variables, including their means, standard deviation of the mean, and range (where appropriate). Specifics are reported below, according to groupings of variables, including demographics, personal background, general sexual behavior, sexually aggressive behavior and frequency of pornography use.

**Table 1.**  
**Means, standard deviation of the mean, and range of Demographic Characteristics, Personal Background Characteristics, General Sexual Behavior, Sexually Aggressive Behavior, and Frequency of Pornography Use**

	Mean (% for categorical variables)	S.D. of the Mean	Observed Range	Observed N
<b>Demographic Characteristic</b>				
Age	37.853	.311	18-84	1248
Marital status				
Married	42.2%			
Divorced	22.9%			
Never Married	34.9%			
Race/ethnicity				1313
White	57.8%			
African American	5.2%			
Hispanic	20.0%			
Asian	12.7%			
Other	4.3%			

1 According to Choi et al. (2005; p. 31-32), "[Mplus is a statistical analysis package] that use[s] raw maximum-likelihood estimation (RML), allowing for the handling of missing data during the actual statistical analysis (Arbuckle & Wothke, 1999; Muthén&Muthén, 1998).... Maximum-likelihood estimates provide the correct likelihood for the unknown parameters (i.e., missing values) from the marginal distribution of the observed data (Schafer&Graham, 2002). ML estimation requires data to be multivariate normal. Model fit, parameter estimates, and standard errors are conveniently obtained by simply specifying within the programs that there are missing values in the data. Although analyses with RML provide equally unbiased estimates as analyses with EM algorithm, the RML approach is slightly more efficient because it provides reliable estimates of standard errors (Graham et al., 1997)." Readers interested in a full discussion of the benefits of RML and other newer techniques for handling missing data are directed to Choi et al. (2005).

**Table 1.**  
**Means, standard deviation of the mean, and range of Demographic Characteristics, Personal Background Characteristics, General Sexual Behavior, Sexually Aggressive Behavior, and Frequency of Pornography Use**

	<b>Mean (% for categorical variables)</b>	<b>S.D. of the Mean</b>	<b>Observed Range</b>	<b>Observed N</b>
<b>Demographic Characteristic</b>				
Education level	2.77	.033		1329
H.S. Diploma or Less	28.9%			
Some College	36.3%			
Bachelor's or Master's	34.8%			
Employment status	86.9%	.009		1302
<b>Personal Background</b>				
Parents Divorced	34.5%	.013		1275
Touched Sexually as a Child	12.6%	.009		1283
Physically Hurt as a Child	13.2%	.009		1277
Military Service	24.9%	.012		1279
<b>General Sexual Behavior</b>				
Sexual orientation	1.080	.011		1283
Number of sex partners	2.338	.051		1321
Frequency of sex	4.120	.048		1268
Age first sex with prostitute	1.817	.036		1272
# of times sex with prostitute	2.090	.031		1308
<b>Sexually Aggressive Behavior</b>				
Threatened physical force for sex	1.10%	.003		1279
Used physical force for sex	0.80%	.003		1276
Rape Myth Acceptance Scale	-0.18	.110	-15.03-9.47	1139
<b>Frequency of pornography use</b>	1.052	.025	0-5	1316

### Demographic Characteristics

As shown in Table 1, respondents report a wide range of ages, with a mean of 38. The majority of respondents were white (57.8%). In regards to marital status, respondents most frequently reported being married (42.2%), and educationally reported either some college (36.3%) or at least a bachelor's degree (34.8%).

### Personal History

Just over one-third (34.5%) of the respondents reported that their parents were divorced. One in eight (12.6%) reported being touched sexually as a child and 13% reported being

physically hurt as children. Additionally, one-quarter (24.9%) of the respondents reported either currently or in the past having served in the military.

### **General Sexual Behavior**

The vast majority of respondents (90%) identified as exclusively heterosexual. Given the lack of variability in sexual orientation, this variable was excluded from further analysis. Most frequently, respondents reported having one (36.8%) or two (16.4%) sexual partners in the last 12 months. Slightly more than 20% of respondents reported having sex two or three times a month during the past 12 months, although approximately 18% and 17%, respectively, reported having sex either once a week or two or three times a week. Approximately 40% of the respondents indicated that they had not had sex with a prostitute in the past twelve months. Most commonly (48%), men reported that they had either had sex with a prostitute only one time, or more than one time, but less than once per month in the past year.

### **Sexually Aggressive Behavior**

An extremely low frequency of reported use of threats or actual violence for purposes of obtaining sex was reported. Only 14 and 11 respondents, respectively, indicated that they had used either threats of or actual violence to get sex (eight respondents replied they had used both). Consequently, as with sexual orientation, questions assessing whether a respondent had used threats of or actual violence to get sex were excluded from further analysis due to lack of variability. Additionally, there was very little endorsement of rape myths within the sample (see Monto & Hotaling, 2001).

### **Frequency of Pornography Use**

Twenty five percent of the sample reported never using pornography, and approximately 90% of the respondents who did report using pornography claimed to do so less than once a month.

### **Exploratory Analysis**

The analysis was conducted in two steps. In the first step, regression analysis was used to examine the relationship among all the hypothesized predictors (e.g., demographic characteristics, personal background characteristics, general sexual behavior, and the Rape Myth Acceptance Scale), and the dependent variable, frequency of pornography use. Categorical variables were dummy coded. For marital status, individuals who reported being married were treated as the comparison group (group assigned zero's throughout). White was the comparison group for race/ethnicity. The comparison group for education level was having a high school diploma or less. Not working full or part-time was the comparison group for employment status. All the predictors were entered into the equation simultaneously.

Table 2 displays the regression coefficients for the model. Overall, the variables in the model explained 14% of the variance in pornography use. Age, whether an individual had been sexually touched as a child, number of sex partners during the last 12 months, frequency of sex during the last 12 months, age of first sex with a prostitute, and number of times reported having sex with a prostitute during the last 12 months, were significantly related to frequency of pornography use ( $p \leq .05$ ). The variables that failed to make a significant contribution included whether an individual's parents were divorced, whether they had been physically hurt as a child, had served in the military, and the Rape Myth Acceptance Scale.

**Table 2.**  
**Regression Model**

	<b>b</b>	<b>SE</b>	<b>Z Statistic<sup>a</sup></b>	<b>Beta</b>
<b>Variable</b>				
Age	-.011*	.003	-4.247	-.142
Marital status				
Divorced	.055	.062	0.884	.026
Never Married	.144*	.061	2.360	.076
Race/ethnicity				
African American	-.033	.108	-0.303	-.008
Hispanic	.114	.067	-1.692	-.051
Asian	.213*	.076	2.793	.079
Other	-.139	.118	-1.174	-.031
Education level				
Some College	.198*	.060	3.325	.106
Bachelor's or Master's	.249*	.062	3.988	.132
Employment Status	-.176*	.071	-2.461	-.066
Parents Divorced	.037	.052	0.708	.019
Touched Sexually as a Child	.180*	.074	2.442	.066
Physically Hurt as a Child	.044	.073	0.599	.017
Military Service	.091	.058	1.567	.044
Number of sex partners	.035*	.017	2.107	.073
Frequency of sex	.042*	.015	2.741	.081
Age first sex with prostitute	.058*	.020	2.846	.082
# of times sex with prostitute	.113*	.027	4.244	.141
Rape Myth Acceptance Scale	.010	.007	1.374	.040
<sup>a</sup> Significant at $p \leq .05$ with value equal to or greater than 1.96; $R^2 = .140$ .				

Significant test statistics for the regression coefficients for the dummy coded variables are equivalent to a test of difference between the mean of the group identified by the vector and the comparison group (e.g. white, the comparison group, and African American, the group identified by the vector). Examination of the regression coefficients for the dummy coded variables in the model suggest that frequency of pornography use also varied as a function of group membership (i.e., results presented in Table 2 indicate that there were significant findings



for participants that reported never being married, Asian, having some college, and a Bachelor's or Master's degree, respectively).

Given that significant results were found for group membership, as defined by marital status, race/ethnicity, educational level, and employment status, respectively, the second step of the analysis involved further examination of the relationship between group membership and frequency of pornography use. As in the first step of the analysis, a series of regressions were conducted to examine the relationship among the hypothesized predictors and frequency of pornography use - defined by group membership. To have the most parsimonious models possible, variables that failed to yield a significant relationship with frequency of pornography use in the first step of the analysis were excluded from subsequent models. The removal of these variables did not change the pattern of estimated coefficients. Results of these regressions as well as the average frequency of pornography use (as described above, frequency of pornography use was measured on a 0 [never] to 5 [several times a day scale]) for each subgroup are presented in Table 3.

**Table 3.**  
**Relationship among the hypothesized predictors and frequency of pornography use - defined by group membership.**

Variable	Marital status								
	Married (n=560)			Divorced (n=304)			Never Married (n=464)		
Mean Freq. of Porn. Use	.945			1.029			1.195		
	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>
Age	-.004	.003	-.049	-.014*	.005	-.161	-.007	.006	-.061
Touched Sexually	.036	.106	.014	.300*	.146	.114	.334*	.137	.113
# of Sex Partners	.015	.028	.031	.016	.036	.035	.094*	.028	.186
Freq. of Sex	.068*	.023	.132	.023	.034	.045	.021	.027	.040
Age Sex w/Prost.	.065*	.028	.105	.070	.039	.105	.071	.045	.082
# of Times w/Prost.	.115*	.043	.155	.176*	.054	.230	.068	.048	.078

<b>Variable</b>	<b>Education Level</b>								
	<u>HS Diploma or Less</u> (n=384)			<u>Some College</u> (n=482)			<u>Bachelor's or Master's</u> (n=463)		
Mean Freq. of Porn. Use	.833			1.109			1.173		
	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>
Age	-.005	.004	-.073	<b>-.015*</b>	<b>.004</b>	<b>-.190</b>	<b>-.012*</b>	<b>.004</b>	<b>-.138</b>
Touched Sexually	.133	.137	.049	.179	.115	.069	<b>.291*</b>	<b>.125</b>	<b>.108</b>
# of Sex Partners	.055	.028	.116	<b>.058*</b>	<b>.028</b>	<b>.118</b>	.017	.029	.037
Freq. of Sex	<b>.053*</b>	<b>.024</b>	<b>.120</b>	.041	.026	.076	-.014	.028	-.025
Age Sex w/Prost.	<b>.098*</b>	<b>.036</b>	<b>.143</b>	<b>.080*</b>	<b>.037</b>	<b>.109</b>	.007	.033	.010
# of Times w/Prost.	.093	.048	.113	.080	.046	.100	<b>.171*</b>	<b>.046</b>	<b>.225</b>
<b>Variable</b>	<b>Employment Status</b>								
	<u>Not Employed</u> (n=170)			<u>Employed (n=1132)</u>					
Mean Freq. of Porn. Use	1.130			1.039					
	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>			
Age	<b>-.010*</b>	<b>.003</b>	<b>-.113</b>	<b>-.015*</b>	<b>.004</b>	<b>-.245</b>			
Touched Sexually	.136	.079	.051	<b>.647*</b>	<b>.209</b>	<b>.224</b>			
# of Sex Partners	<b>.046*</b>	<b>.018</b>	<b>.095</b>	<b>.117*</b>	<b>.045</b>	<b>.236</b>			
Freq. of Sex	<b>.050*</b>	<b>.017</b>	<b>.096</b>	-.046	.043	-.088			
Age Sex w/Prost.	<b>.079*</b>	<b>.023</b>	<b>.111</b>	.017	.053	.024			
# of Times w/Prost.	<b>.091*</b>	<b>.030</b>	<b>.113</b>	<b>.152*</b>	<b>.068</b>	<b>.188</b>			

\* Significant at  $p \leq .05$  with value equal to or greater than 1.96.

**Table 3.**  
**Relationship among the hypothesized predictors and frequency of pornography use -**  
**defined by group membership.**

Variable	Race/Ethnicity								
	White (n=757)			African American (n=68)			Hispanic (n=264)		
Mean Freq. of Pornography Use	1.082			1.086			.871		
	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>	<u>b</u>	<u>SE</u>	<u>Beta</u>
Age	<b>-.012*</b>	<b>.003</b>	<b>-.147</b>	.000	.010	.003	-.001	.007	-.013
Touched Sexually	.147	.095	.055	.179	.282	.078	<b>.380*</b>	<b>.181</b>	<b>.131</b>
# of Sex Partners	<b>.051*</b>	<b>.022</b>	<b>.110</b>	-.116	.068	-.252	.071	.037	.135
Freq. of Sex	.029	.021	.054	.077	.063	.157	.062	.032	.129
Age Sex w/Prost.	<b>.054*</b>	<b>.025</b>	<b>.082</b>	.003	.086	.004	.037	.060	.040
# of Times w/Prost.	<b>.086*</b>	<b>.035</b>	<b>.113</b>	<b>.256*</b>	<b>.100</b>	<b>.348</b>	.099	.068	.102

Variable	Race/Ethnicity								
	Asian (n=167)			Other (n=57)					
Mean Freq. of Pornography Use	1.264			.858					
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>			
Age	<b>-.024*</b>	<b>.006</b>	<b>-.024*</b>	<b>.006</b>	<b>-.024*</b>	<b>.006</b>			
Touched Sexually	.274	.194	.274	.194	.274	.194			
# of Sex Partners	<b>.106*</b>	<b>.050</b>	<b>.106*</b>	<b>.050</b>	<b>.106*</b>	<b>.050</b>			
Freq. of Sex	-.042	.049	-.042	.049	-.042	.049			
Age Sex w/Prost.	.091	.059	.091	.059	.091	.059			
# of Times w/Prost.	.090	.082	.090	.082	.090	.082			

The first step in the analysis indicated that respondents who reported never being married were more frequent users of pornography than those who reported being married. Examination of the regression coefficients for never married respondents in step 2 indicates that being touched sexually as a child and the number of sex partners in the past 12 months are significantly related to frequency of pornography use among this subgroup of men. Significant differences (in step 1) were also found between respondents who had some college or a bachelor's or master's degree and those with a high school diploma or less. Analysis revealed that age is inversely related to frequency of pornography use for both men with some college and those with a bachelor's or master's degree. In addition to age, number of sex partners and reported age when they first had sex with a prostitute are significantly related to frequency of pornography use among men with

some college. Among men with bachelor's or master's degrees, being touched sexually as a child and the number of times they have been with a prostitute are significant predictors of pornography use.

There were also significant differences in pornography use between respondents based on employment status. With the exception of being touched sexually, all the predictors were significantly related to pornography use for men who reported not being employed full or part-time. For men who were employed, frequency of sex and age they first reported having sex with a prostitute failed to yield a significant relationship with frequency of pornography use.

Finally, in regards to race/ethnicity, the initial regression model indicated that there was a significant difference in frequency of pornography use between white and Asian men, with Asian men having a higher frequency of pornography use than men in any other racial/ethnic group. Examination of the regression coefficients in Table 3 indicates that only age and number of sex partners were significantly related to pornography use among Asian respondents; age was inversely related to pornography use.

## DISCUSSION

Given the dearth of information regarding the male clients of female prostitutes, this study was exploratory. In particular, we sought to explore the potential link between patronizing prostitutes, consuming pornography, and sexually violent activities. Results indicated that sexually aggressive behaviors among this sample were infrequent. Thus, within this sample, no relationship was found between patronizing prostitutes, consuming pornography, and sexual violence.

Somewhat surprisingly, in contrast to prior work and our own predictions, the Rape Myth Acceptance Scale failed to reach significance (i.e., there was no relationship between participants' belief in rape myths and pornography use). A number of methodological issues may have affected this particular finding. As stated above, this sample was generally well educated, with over 70% reporting they had *at least* some college. The respondents, who already fall into a stigmatized category (e.g. arrested johns), may have "seen through" the questions comprising the Rape Myth Acceptance Scale, and responded in what they thought was a more socially acceptable, less stigmatized way. Thus, biased responses may have attenuated any relationship between the Rape Myth Acceptance Scale and frequency of pornography use.

Furthermore, although the Rape Myth Acceptance Scale was comprised of multiple items and measured at the interval level, both the other measures of sexual aggression were single items with dichotomous response options. Examination of the results indicated that there was a relatively low frequency of affirmative responses to these questions and they were subsequently dropped from further analyses. It may be that measures that are comprised of multiple items, that survey a range of sexually threatening and violent behaviors, *and* record responses on a more sensitive scale (i.e. interval level) may be more appropriate tools for assessing engagement in sexually aggressive behavior. Notwithstanding, it is quite possible that among this particular

population that there is relatively little relationship between pornography use and sexual aggression. Further research employing more sensitive measures of sexual aggression is needed to better understand the relationship between sexual aggression and pornography use among male customers of female prostitutes.

Relatedly, there are many different types of pornography. The variables assessing frequency of pornography use in the study from which these data were taken did not specify the content of the pornographic material (e.g., depictions of forced sexual acts or more consensual interactions). It is likely that there is significant variability among the sample in terms of their preference in regards to the content, as well as delivery method (e.g., video, magazine, internet, peep show, etc.) of pornographic material. Future studies incorporating more sensitive measures of pornography use and variety may allow us to identify subgroups of pornography users and differential predictors associated with these subgroups. For example, it may be that more sexually aggressive men prefer pornography that depicts violence (Seto et al., 2001).

In addition to the focus on pornography and violence, we sought to develop a greater understanding of the demographic and personal background characteristics, as well as the non-violent sexual activities among the male clients of street level prostitutes. To this effect, our analysis identified 10 variables that collectively account for 14% of the variance associated with frequency of pornography use among this sample of street prostitutes' clients. The variables that were significant predictors of frequency of pornography use include all five of the tested demographics, one of four personal background traits (whether an individual had been sexually touched as a child), and four of the five assessed general sexual behavior variables (number of sex partners during the last 12 months, frequency of sex during the last 12 months, age of first sex with a prostitute, and number of times reported having sex with a prostitute during the last 12 months). The results indicated that age, the number of times respondents reported having sex with a prostitute during the last 12 months, and educational level were associated with the largest increases in frequency of pornography use. Thus, men who had sex more frequently with prostitutes, who were more educated, and who were younger, were more frequent users of pornography than other men in the sample.

Significant subgroup differences defined by demographic categories were also found to be important correlates of frequency of pornography use. Never married men were more frequent users of pornography than their married counterparts, as were men with higher levels of education. Respondents who reported being unemployed were more frequent consumers of pornography, as were Asian men. It is also important to point out that whether a respondent was touched sexually as a child consistently appears to play a significant role in frequency of pornography use for some groups of men (divorced and never married men, men with college degrees and employed men). Clearly, having been sexually abused as a child plays a role in frequency of pornography consumption; however, further research is needed to fully understand this relationship.

Several limitations of the present work should be acknowledged. Although participation was voluntary and the participation rate was 80%, participants were men arrested for soliciting

female prostitutes and participating in deferred adjudication programs (Monto, 1999a, 1999b). As noted in Busch et al. (2002), “their attitudes may not be representative of male customers as a whole. [Moreover,] the connection between attitudes and behaviors is not direct” (pg. 1109). Although not a universally accepted position, a large body of research supports the reliability and validity of self-report data (e.g. Darke, 1998; Hindeland, Hirschi, & Weis, 1981; Hser, 1993; Lauritsen, 1998; Rouse, Kozel, & Richards, 1985). It is important to note that the study from which these data were drawn relies heavily on respondents’ self-reports of socially undesirable behaviors. Care should be taken in interpreting and generalizing these results as the sample may not be fully representative of the population of clients of street prostitutes. Finally, it should be acknowledged that this study examines correlates of behaviors. The time ordering of activities can not be deduced from the data. Many of the predictors of pornography use could have occurred contemporaneously to or after the use of pornography. Care must therefore be exercised in interpreting findings.

It should be noted that a particular strength of the current study is our handling of missing data. Prior published research utilizing these data has either failed to address this issue or used mean substitution. This suggests that conclusions based on prior analyses may be significantly biased (Choi et al., 2005; Graham et al., 1997; Graham et al., 1994). The current study imputed missing data via a raw maximum-likelihood procedure allowing us to obtain unbiased parameter estimates and reasonable standard errors (Choi et al., 2005; Muthen & Muthen, 2000). Thus, conclusions based on the analyses reported here are done without the threats present in prior studies with this data.

In conclusion, this was an exploratory study that sought to increase our understanding of behavior among an understudied population: male customers of female, street level prostitutes. Results of this research suggest that although pornography use may not be rampant among this population, there are demographic, personal background, and general sexual behavior variables that are predictive of pornography consumption. These results also call into question the veracity of feminist claims regarding connections between pornography consumption, objectification of women, and violence against women. Men who patronize street-level prostitutes are not especially likely to be frequent consumers of pornography.

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### BIOGRAPHICAL SKETCHES

**Richard Tewksbury** is a Professor in the Department of Justice Administration at the University of Louisville. He holds degrees in sociology from The Ohio State University. He is primarily interested in issues of deviant behavior (crime, drug use/abuse, sexuality), men's studies and qualitative methods. He is actively involved in a variety of research and service projects working with correctional departments and institutions, police departments, and social service agencies.

**Seana Golder** is an Assistant Professor in the Kent School of Social Work at the University of Louisville. She received her M.S.W from Louisiana State University and her Ph.D. in Social Welfare from the University of Washington. Her primary research interests are around the issues of women's risk behavior (e.g., substance use, sexual risk, and lawbreaking) and involvement in the criminal justice system.



## **School Performance and Crime: Theoretical and Empirical Links**

**Matthew Petrocelli**

*Southern Illinois University Edwardsville*

**Joseph Petrocelli**

*Passiac County Community College*

### **ABSTRACT**

*Little previous research exists that has examined the relationship between measures of student learning and reported crime. Using state-level data from the National Assessment of Educational Progress (NAEP) administered by the U.S. Department of Education, this paper explores the link between NAEP test scores and crime while controlling for other relevant predictors of criminality. Various theoretical explanations are posited for the strong and inverse relationship observed between test scores and reported crime.*

### **INTRODUCTION**

Violent crime in the United States is higher than in most other western democracies (Besserer, 1998), and at the same time, U.S. students lag behind many of their European counterparts with respect to performance on standardized achievement tests (Matheson, 1996). Over the past 10 years, significant efforts have been made to improve the nation's schools and, as a result, most states have approved state-level testing programs that measure students against minimum standards and link advancement and even high school graduation to performance on standardized tests. Criminologists have long linked commitment to education and school performance to delinquency and other risk-taking activities among youths (Agnew, 1991; Cernkovich and Giordano, 1992; Krohn and Massey, 1980). Similarly, social scientists have demonstrated a moderate correlation between intelligence and delinquency (Gordon, 1987; Hirschi and Hindelang, 1977).

However, despite the theoretical and empirical linkages between school performance and delinquency, few researchers have explored whether academic achievement is correlated with adult criminality. Control theories, which perhaps draw the clearest connections between educational performance, school commitment, and delinquency, have largely ignored the impact of poor academic performance at the elementary or secondary school level on one's likelihood of

engaging in criminal behavior as an adult. Thus, the purpose of this paper is to extend existing control theories, and in particular social bond theory, to predict adult violence at the macro level.

Our paper begins with a review of control theory and the empirical literature that has tested Hirschi's (1969) social bond theory and its derivatives. We then present our hypothesis and discuss the data and methods used in our analysis. Following the results, we discuss the implications of our findings from both theoretical and policy perspectives.

## **THEORETICAL PERSPECTIVE**

### **Control Theory**

Control theorists posit that humans have a natural motivation to deviate. An extension of the philosophical work of Thomas Hobbes, control theories rest on the assumption that we are neither compliant nor conforming by nature but rather "animals...capable of committing criminal acts" (Hirschi, 1969:31). Thus, control theory deviates from the basic question most criminological theories attempt to answer (Why do people commit crime?) and instead attempts to explain rationales for conformity.

Early formulations of control theory - including Reiss (1951) and Nye's (1958) Theories of Internal and External Controls, Reckless' (1961; 1967) Theory of Containment, and Sykes and Matza (1957) and Matza's (1964) Neutralization and Drift Theories - relied heavily on vague, often tautological constructs to explain conformity. Hirschi's Social Bond Theory differed in that it offered clear, testable measures of control: attachment, commitment, involvement and belief. According to Hirschi, these variables constitute the elements of a bond that binds an individual to society, encouraging conformity and discouraging delinquency. As such, "delinquent acts result when an individual's bond to society is weak or broken" (1969:16).

Taken in turn, attachment refers to an individual's closeness to family, friends and schools. Attachment reflects the degree to which one values those relations and cares about how he or she is perceived; close attachment encourages conformity because "we honor those we admire...by adherence to conventional standards" (1969:152). Any kind of attachment promotes conformity, while social isolation defines a break in this element of bond, resulting in delinquency.

Commitment is an investment or stake in conformity. It is the aspiration, pursuit and attainment of higher education, a prestigious and well paying job, and respect in one's community. According to Hirschi, such endeavors ensure conformity because it is highly unlikely that an individual will risk all the conventional rewards he or she has acquired for a delinquent fling. Involvement is closely tied to commitment in that it entails the actual amount of time it takes to pursue conforming activities. Studying, playing sports or working, for example, all require good chunks of a day, thus leaving an individual no time for crime.

Lastly, belief is the recognition and acceptance of a common morality. Conformity to conventional values breaks down when an individual questions the moral validity of social constraints, meaning that the less they believe in the legitimacy of a law, the more likely they are to break that law.

### **TESTS OF SOCIAL BOND THEORY**

Hirschi (1969) found support for most of his hypotheses. Attachment to parents, teachers, and peers was a strong predictor of conformity. Commitment and belief were also inversely related to delinquency. The only anomaly was involvement, in that boys who reported spending more time working, studying and playing were also more likely to engage in delinquency. Additionally, Hirschi reported no significant race or class effect.

Since the publication of *Causes of Delinquency*, Social Bond Theory has become the most empirically tested social control theory (Stitt and Giacopassi; 1992). While the theory has received a respectable amount of support, most studies report low to moderate correlations between attachment, commitment, involvement, belief and incidence of delinquency; high levels of explained variance are rare (Akers, 2000). Major studies have either sought to test the singular effect of an element of the social bond or test for independent and simultaneous effects of a social bond model. In terms of the former, attachment has received the most attention by far. Liska and Reed (1985) explored the relationship between delinquency and parental and school attachment. Questioning the recursive causal assumption originated by Hirschi (i.e. regressing delinquency on social attachment), they estimated a nonrecursive model using OLS crosslag and simultaneous equation methods. Claiming “it is all too clear that the causal structure underlying the relationship between social attachment and delinquency is not as simple as implied” (1985:559), their findings indicated a reciprocal relationship between attachment and delinquency. More specifically, they found that a strong parental attachment had a negative effect on delinquency, but the data also suggested that delinquency affects attachment, in that delinquency had a negative impact on school attachment which, in turn, lowered parental attachment.

Rankin and Wells (1990) used the same data set to study attachment through the impact of indirect control (identification and positive communication with parents) and direct control (supervision, strictness and punishment) on juvenile behavior. They found that both controls lower rates of delinquency, although they were also quick to point out that excessive control (severe punishment and unreasonable strictness) positively impacted delinquency. Comparing a 1964 Seattle study of 374 seventh grade boys and a 1965 California study of 1,588 high school males, Conger (1976) found that positive parental attachment requires positive behaviors on the part of parents, which in turn negatively affects delinquency; other studies have supported that finding (Glueck and Glueck, 1959; McCord and McCord; 1959; Loeber and Stouthamer-Loeber, 1986). Jensen and Brownfield (1983) later challenged that assertion, reporting that parental attachment lowers delinquency regardless of poor parental conduct.

Junger-Tas (1992) performed a longitudinal study with 2,000 juveniles (aged 12-18) that suggested the best predictor of delinquency was not parental attachment, but rather school attachment. Tanioka and Glaser (1991) also reported that school attachment was almost twice as powerful as parental attachment in terms of reducing delinquent acts. Contrary to Hirschi's original findings, other research has indicated that attachment to peers only negates delinquency when those associates are themselves non-delinquent (Linden and Hackler, 1973; Conger, 1976; Elliot et al, 1985; Junger-Tas, 1992).

In terms of commitment, Rosenbaum and Lasley (1990) used self-report measures of approximately 1,500 high school students and found that an optimistic and affirmative attitude toward schooling and the attainment of good grades were positively correlated with lower levels of delinquency. Similarly, Tanioka and Glaser (1991) used educational aspirations and achievement scores to measure school commitment and found less delinquency amongst those ranking high on each. Gottfredson (1986) evaluated a program specifically designed to increase school commitment, and attachment for that matter, through the use of improved staffing, special programs and revised disciplinary procedures. She reported an increase in standardized test scores, attendance, and graduation, although this increase in commitment had no impact on associated delinquency rates.

Few studies have focused on involvement, perhaps because Hirschi's original hypothesis regarding this element of the bond was not supported in his own work. Still, Agnew and Peterson (1989) sought to re-examine the relationship between involvement and delinquency by operationalizing involvement as leisure activities and distinguishing between organized leisure (sports, hobbies, activities with a parent) and unsupervised leisure (spending time with friends). Although organized leisure was inversely related to delinquency and unsupervised leisure was positively correlated with delinquency, overall either type of involvement explained only a small portion of the variance.

Most studies support the notion that the stronger the bond of belief, the less likely one is to engage in delinquency (Costello and Vowell, 1999; Krohn and Massey, 1980; Wiatrowski et al. 1981). In contrast, Matsueda conducted a longitudinal test of that relationship by developing questions relating to the honesty of the respondent versus relatively minor youthful infractions. He reported:

*The results fail to replicate previous research which found support for social control theory's stipulation of the relationship between belief and deviance. Contrary to previous results of cross-sectional studies, the effect of belief on deviance is relatively small and dwarfed by the effect of deviance on belief" (1989:428).*

In other tests of the social bond, Agnew (1991) found that attachment, commitment, involvement and belief were moderately correlated with delinquency, although the intervention of other theoretical variables was apparent. Krohn and Massey (1980) combined commitment and involvement and reported that hybrid, along with belief and attachment were moderately related to less serious delinquent offenses. Akers and Cochrane (1985) found all four elements of the bond related to smoking marijuana. Lasley (1988) suggests that the social bond can also help



explain adult criminality, while Whitehead and Boggs' (1990) study of adult felony probationers negates the impact of control theory variables.

## **DATA AND METHODS**

The purpose of this paper is to extend the extant literature on Social Bond Theory in three distinct ways. First, we build upon the dearth of empirical tests involving commitment by operationalizing the bond element as achievement on the National Assessment of Educational Progress (NAEP) test, which measures educational performance among elementary and secondary students. Second, we advance the literature in terms of linking social bond with adult criminality. To our knowledge, only two such studies have been performed - Lasley (1988) and Whitehead and Boggs (1990). Third, we conceptualize social bond in terms of macro, aggregate measures (NAEP test scores and UCR data) instead of using the individual as the traditional unit of analysis. Specifically, we hypothesize that states with poor performing schools (as measured by NAEP test scores) will show higher levels of adult criminality (as measured by UCR data) than states with better performing schools.

The data for this paper were obtained from the National Center for Education Statistics, the Uniform Crime Reports (UCR), the U.S. Department of Labor, and the U.S. Census Bureau. States are the units of analysis. The dependent variable is the violent crime rate for the year 2000 as reported in the UCR. This rate is a composite of the rates for the crimes of murder (and non-negligent homicide), rape, robbery, and aggravated assault, and is tabulated as the number of these violent offenses reported to the police per 100,000 residents (Crime in the United States, 2000). The UCR violent crime rate is available for a variety of geographic levels, including the state level, which also contains the rate for the District of Columbia.

The independent variable in the analyses that follow is the state-level academic achievement score derived from the NAEP testing program. The NAEP achievement test is administered by the U.S. Department of Education and is the only nationally representative assessment of the knowledge and skills of the nation's elementary and secondary school students. The test is given to students drawn from both public and nonpublic schools and is administered at grades 4, 8, and 12. The test began in 1969 and periodically assesses students in the subjects of reading, mathematics, science, writing, U.S. history, civics, geography, and the arts. Since 1990, NAEP assessments have been conducted at the state level. Participation by states in the state-level assessment is voluntary, and as a result, not all states are represented each year that the NAEP test is administered. Moreover, not all subjects are assessed during each test administration (National Center for Education Statistics, 2002). These data are online and available at the U.S. Department of Education website ([www.ed.gov](http://www.ed.gov)) by searching "NAEP."

When a state chooses to participate in the state-level NAEP testing program, a sample of students and schools is selected to represent the state. The selection of schools is random, and approximately 100 schools and 2,500 students are selected per grade and per subject for assessment. For small states that have fewer than 100 schools per grade, a greater number of students per subject and per grade are selected from the larger schools. In states that have many

small schools with low enrollment, more than 100 schools are selected to yield the approximately 2,500 students that comprise the sample.

The 1990 NAEP testing year was chosen for the independent variable. Specifically, we used the NAEP math test scores, as they were only scores consistently available from all states in our sample. As discussed above, the purpose of this paper is to examine the effects of macro-level educational performance on violent crime. Our research hypothesis is that states with lower NAEP achievement scores will have higher *future* levels of violent crime than states with higher achievement scores. Because levels of violent criminality peak in the late teens and early twenties (Siegel, 2000) we regressed eighth grade NAEP test scores from 1990 on 2000 UCR violent crime rates. Eighth grade students in 1990 would be in their early twenties by the year 2000, which is the latest year for which UCR data are available.

In order to measure the extent to which NAEP test scores predict future violence while holding constant other criminogenic factors, we included several control variables in our analyses that previously have been linked to violent crime (Nettler, 1984). Data for the control variables were obtained from the U.S. Department of Labor and the Census Bureau and are likewise measured at the state level. Initial variables considered for inclusion in the regression models were: (1) the percentage of individuals below the poverty level, (2) the unemployment rate, (3) the percentage of the population that is non-white, (4) the divorce rate, and (5) population density.

## ANALYSIS AND RESULTS

Table 1 below reports descriptive statistics for the variables initially considered for analysis. The *n* of 38 reflects the number of states that participated in the NAEP testing program during 1990 and includes the District of Columbia.

<b>Table 1.</b> <b><u>Descriptive Statistics</u></b> <b>n=38</b>					
<b>Variable</b>	<b>Mean</b>	<b>Median</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
<b>Dependent</b> violent crime rate	452.20	367.25	251.50	81.40	1507.90
<b>Independent</b> NAEP 8 <sup>th</sup> grade math scores	263.00	262.00	10.20	231.00	281.00
<b>Controls</b> unemployment rate	3.90	3.95	0.89	2.20	5.80
percent below poverty	12.25	11.70	3.40	6.50	20.20
pop. density per sq. mile	444.80	120.20	1500.25	5.10	9316.40
percent divorced	9.90	10.00	1.17	7.50	11.60
percent non-white	22.60	19.90	15.60	4.00	75.70

The standard deviation and the minimum and maximum values for the dependent variable indicate the presence of an outlier. The violent crime rate in the District of Columbia (1507.9 per 100,000) is almost twice that of the next highest state. In addition, the District of Columbia is also an outlier for the control variables of population density, poverty, and percent non-white. Because its impact on the zero-order correlations and regression models was so great, we eliminated D.C. from the data set for analysis purposes. Removing an outlier is an acceptable approach for eliminating its effects on the data, particularly when its value for the dependent variable is extreme (Bachman & Paternoster, 1997).

After eliminating the District of Columbia, the zero-order correlation matrix for the variables is reported in Table 2. The relationships between violent crime and the control variables were largely as expected. The non-significant findings with respect to population density and percent divorced were possibly the result of the small *n*. As for the correlation between violent crime and NAEP test scores, the coefficient indicates a moderately strong negative relationship. Significantly, the correlation between violent crime and test scores was greater than for any of the control variables.

**Table 2.**  
**Correlation Matrix**  
**n=37**

Variable	Test scores	Unemployment	Pct. below poverty	Population density	Percent divorced	Percent non-white
Violent crime rate	-.632	.337	.349	.129	.145	.468
Test scores		-.465	-.587	-.075	-.190	-.653
Unemployment			.696	-.089	.201	.236
Pct. below poverty				-.319	.385	.198
Population density					-.458	.170
Percent divorced						-.173

Not unexpectedly, the coefficients also indicate the presence of possible collinearity among several of the control variables. This evaluation was confirmed by the results from the regression analysis. The correlation between the unemployment rate and the percentage below poverty ( $r = .696$ ) indicates a strong relationship between these variables. One way of dealing with multicollinearity is to combine conceptually or theoretically-related variables into a composite measure (Cohen, et al. 2003). Because unemployment and poverty are empirically and theoretically linked, they were summed and collapsed into an indicator labeled “economic deprivation.”

Another potential source of multicollinearity was the correlation between NAEP test scores and the percentage non-white population ( $r = -.653$ ). In Table 3 below, both of these variables were regressed on the 2000 violent crime rate for each state. In conducting this analysis, we performed standard diagnostic tests to check for multicollinearity. Multicollinearity

was within acceptable tolerances in the model. At 3.2, the largest VIF was well below 10 (Bowerman & O'Connell, 1990; Myers, 1990), and the average VIF was under 1.5 (Bowerman & O'Connell, 1990). Moreover, if even collinearity between these variables was problematic, it typically results in a less powerful test that increases the risk of a Type II error (Cohen, 1977). Thus, it would not artificially create a relationship between test scores and violent crime.

**Table 3.**  
**Regression Results for Violent Crime Index**

	<b>B</b>	<b>Standard Error</b>	<b>Beta</b>
NAEP test scores	-9.836	5.077	-.473*
Pop. Density	0.098	0.115	.140
Percent Divorced	19.671	26.265	.128
Economic Deprivation Index	2.191	9.086	.046
Percent non-White	1.969	2.675	.148
*one-tailed test, $p \leq .05$			

As the results from Table 3 indicate, NAEP test scores continue to predict future levels of violent crime at the state level, even after controlling for other variables associated with violence. Again, percent non-white and the computed index of economic deprivation probably fail to reach significance because of the small  $n$  and because of their collinearity with the test score variable.

## DISCUSSION

This study suffers from two major limitations, one methodological and one statistical. In terms of the former, our design calls for comparing test scores from 1990 with crime rates from 2000. Obviously, it is impossible to know if the children who scored poorly on the test in 1990 were actually the ones committing the crimes in 2000. But a review of the data demonstrates that scores within states remained relatively static over time. Thus, it is reasonable to assume that even if different aged groups (either younger or older) were responsible for the crime rate, it is likely they had similar academic credentials to those students measured in 1990. Statistically, the study is limited by its relatively small sample size ( $n=37$ ). Generally speaking,  $n$  should be greater than or equal to  $50 + 8k$ , where  $k$  is number of independent variables (Newton and Rudestam, 1999). But the nature of this study does not lend itself to such a large sample size (only 37 states were usable out of a maximum of 50). While this does not create ideal conditions for OLS regression, the test is generally considered to be robust enough to overcome such shortcomings.

As such, the results from this analysis support the conclusion that states whose eighth grade students perform poorly on basic achievement tests will evidence higher levels of violent crime 10 years later when those students reach their peak crime years. In his early conception of Social Bond Theory, Hirschi (1969) argued that attachment, commitment, involvement, and belief act as forces to constrain delinquent behavior at the individual level. Although the above

analyses do not test social bond theory per se, they suggest that its tenants may be helpful in understanding violence at the macro-level. To Hirschi, dedication to school was one of the principal components of commitment that worked to limit involvement in delinquent activity. Likewise, as this analysis demonstrates, a commitment by a state to the educational achievement of its youth may well reduce the level of violent crime that occurs years later when those youths reach adulthood. Thus, consistent with a macro-level application of social bond theory, failure of state school systems to take educational achievement seriously could lead to diminished pro-social bonds and may yield higher levels of violent crime in the future.

There is much to suggest that school systems may not be wholly responsible for low test scores or subsequent adult criminality. For example, Moffitt et al. (1996) theorizes that neuropsychological impairments in childhood can result in poor school performance, delinquency, employment problems and crime in adulthood. However, substantial evidence also exists that schools can be successful and produce high-achieving students despite having a high percentage of poor or minority students from at-risk backgrounds with presumably higher than average rates of neuropsychological disorders (Dicembre, 2002). The clear implication of our findings is that state school systems must do a better job at educating children or they will reap higher levels of violent crime as underachieving students become adults with low levels of social commitment.

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### BIOGRAPHICAL SKETCHES

**Matthew Petrocelli** is an Assistant Professor of Criminal Justice Studies at Southern Illinois University, Edwardsville. His academic credentials include a B.S. from the United States Military Academy at West Point, an M.C.J. from the Graduate School of Public Affairs at the University of Colorado, Denver and a Ph.D. from the School of Justice Studies at Arizona State University. A former Army officer, his primary research interests center on law enforcement and the police subculture. Recent publications have appeared in *Police Quarterly* and the *Journal of Criminal Justice*. He is the co-author of the forthcoming book, *The Anatomy of a Motor Vehicle Stop: Essentials of Safe Traffic Enforcement*.

**Joseph Petrocelli** is a Detective with the Passaic County (NJ) Sheriff's Department. He has been with the Sheriff's Department for the last 15 years after spending three years as a New Jersey State Trooper. He is currently serving as the Training Coordinator for the Patrol Division. Detective Petrocelli has been decorated for lifesaving, bravery, pro-active patrol and his efforts at the World Trade Center immediately after the attacks on 9/11. He has earned a Bachelors degree from Rutgers University, a Masters Degree in Education Administration and Supervision from Seton Hall University and a Masters Degree in Criminal Justice from Rutgers University. He is an Adjunct Professor of Criminal Justice at Passaic County Community College (NJ) and Caldwell College (NJ) and is the co-author of the forthcoming book, *The Anatomy of a Motor Vehicle Stop: Essentials of Safe Traffic Enforcement*.



## **False Advertising, Suggestive Persuasion, and Automobile Safety: Assessing Advertising Practices in the Automobile Industry**

**Ronald Burns**

*Texas Christian University*

**Jeff Ferrell**

*Texas Christian University*

**Erin Orrick**

*Pacific Institute for Research and Evaluation*

### **ABSTRACT**

*The present study compares the safety-related content of automobile advertising with government-sponsored crash test evaluations. It examines all major automakers and their respective divisions and observes the claims made regarding specific vehicle models in relation to their individual crash test scores. This comparison facilitates analysis regarding the relationship between automakers' stated or implied concern for safety in their advertising, and their actual concerns for safety as evidenced in crash tests. The findings shed further light on the relative accuracy or inaccuracy of automobile advertising, and call into question automakers' demonstrated concern for automobile safety in their advertising.*

### **INTRODUCTION**

Commercial advertising is designed to influence consumer purchasing practices, and influential persuasion is often necessary for the survival of for-profit entities. Accordingly, corporate resources are devoted to developing commercial messages that target particular demographic groups. Such messages encourage consumers to, at the very least, consider a particular product or service, and they in addition often promote a more general perception regarding a particular product or service.

The messages located within commercial advertising may be subtle or overt. For instance, an automobile manufacturer speaking to the safety of its autos may highlight the fact that their vehicle scored highest in government crash tests (overt advertising). More subtly, an automaker may highlight a vehicle's safety by simply listing the safety features included with the

vehicle. Automakers may choose to avoid mentioning safety, instead focusing on performance by highlighting the rapid acceleration and high speeds attainable by a particular vehicle.

Each advertisement sends a message. Sometimes the message is clear, other times the reader is left to identify or locate the message. The message can be accurate, or the message may be misleading. While laws regarding false advertising are designed to protect consumers, the craftiness and skillful work of those in advertising can send messages that may not necessarily be false, though they are arguably misleading.

A 2002 article by the Federal Trade Commission (FTC) found that:

*The use of false or misleading claims in weight-loss advertising is rampant. Nearly 40% of the ads in our sample made at least one representation that almost certainly is false, and 55% of the ads made at least one representation that is very likely to be false or, at the very least, lacks adequate substantiation (Cleland, Gross, Koss, Daynard, & Muoio, 2002).*

These findings suggest that a substantial portion of weight-loss companies are engaged in white collar crime. However, one may question the severity of such harms. In other words, one may question the significance of consumers not losing weight, particularly in light of recent concerns for terrorism, war, and unrest in the Middle East. However, the same FTC report also cited findings suggesting that in 2000 consumers spent approximately \$35 billion on supposed weight-loss products, while 2000 sales for the eight largest weight loss companies totaled \$788 million. Aside from the financial aspects associated with these crimes, one must also consider the continued health risks associated with obesity suffered by consumers who believed they were addressing their ailment.

The present study compares the safety-related content of automobile advertising with government-sponsored crash test evaluations. It expands Burns' (1999a) work on corporate deviance, primarily through examining all major automakers and their respective divisions and observing the claims made regarding specific vehicle models in relation to their individual crash test scores. This comparison facilitates analysis regarding the relationship between automakers' stated or implied concern for safety in their advertising, and their actual concerns for safety as evidenced in crash tests. The findings shed further light on the relative accuracy or inaccuracy of automobile advertising, and call into question automakers' demonstrated concern for automobile safety in their advertising.

More broadly, the present study suggests further insights into a key disjunction regarding crime, violence, and social justice in contemporary society. On the one hand, the automobile directly causes some 40,000 deaths a year in the United States alone--some of these deaths attributable to automotive design flaws and failed safety features, others simply to the overwhelming use of the automobile as primary mode of personal transportation. On the other hand, this accumulating death toll remains largely 'unconstructed' as a social problem (Ferrell, 2003; Jenkins, 1999), spawning little in the way of moral panic or public outrage. The present study suggests that this disjunction between pervasive automotive danger and public perceptions

of it may reflect the success of automotive advertising and other forms of public persuasion - that is, the triumph of the image over everyday experience.

Giliberti (1999:56) notes that "As manufacturers compete in a more crowded marketplace, they need to distinguish their products from those produced by other companies." This statement is perhaps most obvious with regard to the automobile industry. Depending on consumer interest, automaker advertising may emphasize a vehicle's off-road capability, safety, horsepower, fuel economy, and/or luxury and comfort. The present work focuses on automaker concern for safety in advertising.

## BACKGROUND

In his work on advertising and liability, Frank Giliberti (Giliberti, 1999) cites the case of Nancy Denny and her husband who sued the Ford Motor Company when the Ford Bronco II they were driving in rolled over after she hit the brakes to avoid a deer. The Dennys offered evidence suggesting the vehicle's (1) low stability index (resulting from the vehicle's high center of gravity), (2) relatively narrow track width, (3) shorter wheel base, and (4) suspension system contributed to the vehicle's instability. Ford argued that such a design was necessary for the vehicle's off-road capabilities, and suggested the vehicle was not defective. The company argued that the vehicle was designed for off-road use and not designed as a conventional passenger vehicle. In fact, a Ford engineer stated he would not recommend the vehicle for conventional passenger use. In response, the Dennys provided a Ford marketing manual which stated that the vehicles were "suitable to contemporary life styles" and "fashionable" in some suburban areas. The manual further stated that the driver's ability to switch from two-wheel- to four-wheel drive while in motion would "be particularly appealing to women who may be concerned about driving in snow and ice with their children" (Giliberti, 1999:53-57).

Aside from Volvo's continued focus on safety, few, if any automakers stressed safety in their advertising prior to the 1990s. Indeed, safety issues appeared in automobile advertising, although not at the level noted in the 1990s (Lahey, 1997), particularly later in the decade. To some extent, automaker advertising content with regard to safety has been influenced by consumer demands. Recent consumer concern for automobile safety is well documented. Lieb and Wiseman (2001: 26), for instance, noted that "In recent years, automobile safety issues have received considerable attention from politicians, regulators, automobile manufacturers, consumers, and the media, as we have collectively sought ways to reduce highway deaths and injuries." Lieb and Wiseman found that by a 4:1 margin (64 percent versus 16 percent) respondents would be willing to pay an extra \$600 for the sticker price of a car for antilock brakes. By over a 2:1 margin (54 percent versus 21 percent) respondents would pay an extra \$200 for side airbags.

Other research found that most automobile consumers rated driver/passenger side airbags (82.3%) and antilock brakes (82%) as "important" or "very important" in their next vehicle purchasing decision ("Vehicle safety and electronics..." 1996). Some groups noted increased consumer concern for safety during the 1990s (e.g., J.D. Powers and Associates, 1993;

Transportation Research Board, 1996), while others offered reasons for the increased focus on safety. For example, Director of Public Relations for General Motors of Canada, Stew Low, noted that during the 1990s "Consumers became more aware of safety as an issue, whether it was personal safety or safety on the road or the whole change in the tide of opinion on drinking and driving." Low adds that, "All these things started to bring automotive safety to the forefront of consumers' minds. They started asking for new technologies and were willing to pay the price in the cost of the vehicle for those features" (Lahey, 1997: 20). Lahey (1997: 20) cites the "larger number of young families and older car buyers with safety concerns, improved safety technology, and the growing need to find ways to differentiate models from their competitors" as reasons for automakers embracing safety as a primary marketing tool.

### **The Shift to Safety and Consumer Product Impact**

Automakers seemingly emphasized automobile safety in the 1990s, arguably in response to consumer concern for safer vehicles. Lahey (1997) notes that until the mid-1990s, safety features were secondary concerns in automobile advertising, with such information available only in the owner's manuals and brochures. Writing about automaker safety practices in the latter part of the 1990s, Lahey (1997:21) notes that "While BMW is advertising its improvements in dealing with side-impact collisions, Saab is promoting a system that will protect against whiplash in rear collisions. Chrysler is talking more about its antilock brake systems, and Ford is positioning its Windstar as 'the only minivan to earn five stars -- the highest possible U.S. government front-end crash test rating for both driver and front passenger.'" Ford's focus upon safety with its Windstar stems primarily from the notable concern for safety among particular demographic groups and the impressive crash test scores earned by the vehicle (Lahey, 1997).

Consumer preference surveys are an accepted practice in today's highly competitive corporate world. Through encouraging consumers to complete surveys regarding their preferences, habits, dislikes, etc., by offering coupons, free samples, and sometimes cash, businesses hope to better understand consumer practices and often shape their product and/or their product promotions to meet consumer demand. Product shaping can be accomplished through the actual (generally physical) reconstruction of the product (e.g., building a safer car by including every available safety feature and conducting internal, stringent tests) and letting the product's quality or reputation speak for itself. Product shaping can also be accomplished through self-promotion (e.g., emphasizing particular aspects of the product in commercial advertising), which generally involves the skillful work of marketing professionals.

In discussing his company's redirected focus away from image-shaping toward product development, Mercedes-Benz of North America President and Chief Executive Krampe noted, "Take the issue of safety. I think we can claim that we are one of the pioneers in safety, but for a long time we didn't bother to mention it in our advertising," adding, "we will come back to the basics and talk about what our products can offer" (Serafin, 1992:9). Lahey (1997:20) suggests that "marketers change with time and consumer sensibilities."



## Safety Image

Corporate image shaping, public relations damage control, and product promotion can simultaneously occur in one advertising campaign. For instance, following much negative publicity after numerous deaths to drivers of Ford Explorers equipped with particular Firestone tires, Ford made a concerted effort to protect the company and product name. The company ran a newspaper advertising campaign featuring a message from Ford President Jac Nasser stating, "Our goal is your safety and your trust" (Connelly, 2000:1). Ford, however, is not the only automaker portraying a concern for automobile safety, and evidence suggests that it does not take over one hundred deaths (as attributed to the Ford Explorer/Firestone tire situation) to persuade automakers to alter their advertising focus. Several automakers recently started promoting the safety provided by their vehicles. This shift comes at a time when consumer concern for automobile safety ranks quite high on the list of consumer automobile preferences.

Automaker attempts to construct or reconstruct corporate or product images can be understood in the context of several interpretations of social constructionism. Berger and Luckman (1966) are credited with introducing the social construction theory in their interpretation of social problems. Several researchers expanded upon their work, including Blumer who suggested that social problems were subjectively defined rather than objectively recognized. He further argued that researchers examine "the process by which a society comes to recognize its social problems" (1971:300).

Several have further interpreted social constructionism, including Gamson et al. (1992) who note that people use media-generated images of the world to construct meanings about social and political issues. The authors note that these images are reproductions and mental images of something not real or existent, and that image production in America is a profit generating enterprise dependent on commercial advertising. Rafter (1990) offers a general, operational definition of constructionism that aptly suits the purposes of the present research, in arguing that constructionism is an approach designed to assess the processes by which social information is produced, disseminated, verified, and disconfirmed. In addition to measuring the extent to which automakers support their claims of safety (and the possibility that some may be engaging in white collar deviance using false advertising), the present work contributes to the constructionist literature which often examines the means by which social problems originate and attract societal attention (e.g., Adler & Adler, 2000; Best, 1995; Potter & Kappeler, 1998).

## Previous Research

Earlier research examined the safety-related corporate image constructed by GM, and compared that image against several GM safety-related empirical evaluations (Burns, 1999a). Burns (1999a) suggested that GM may be guilty of deviance upon finding that the automaker's advertisements portrayed a notable concern for safety, yet their safety-related evaluations were generally below average when measured against comparison groups. Burns (1999a) suggested that further research in this area should include trend studies to examine each automaker's



performance over an extended period of time, and should examine each brand of automobile (e.g., not simply GM, but all GM divisions).

The present research expands upon Burns' earlier work through comparing the crash test scores and safety-related image put forth by automakers that placed an advertisement in any of three particular media outlets during 1999. While slightly different from Burns' work in that different magazines are analyzed and slightly different data sets are used (for reasons explained below), the present work adds to the literature in this area by assessing image construction among a variety of automakers, automobile manufacturing divisions, and individual automobile models. This work, perhaps more importantly, sheds further light on the nature and extent of corporate deviance.

## METHODS

As stated, the present research assesses automakers' safety-related images, and compares those images with actual (empirical) safety-related performances. The safety-related images were measured through collecting all automobile advertisements found in 1999 editions of *Sports Illustrated*, *The Atlantic Monthly*, and *Glamour* magazines, while the safety-related performance data were collected from the National Highway Traffic Safety Administration (NHTSA). This approach is based on the earlier work in this area (Burns, 1999a).

Data on automaker images were collected through content analyses of all automobile advertisements found in the popular consumer magazines *Sports Illustrated*, *The Atlantic Monthly*, and *Glamour*. These outlets were chosen primarily based on their widespread readership and their varying audiences. *Sports Illustrated*, a weekly publication, primarily targets a sports-oriented male audience, while *Glamour*, a monthly publication, is a fashion magazine targeted toward females. *The Atlantic Monthly*, also a monthly publication, claims to cover the arts and literature, politics, society, and digital culture. These outlets were selected based on their dissimilarities, with intentions of identifying a wide array of automobile advertisements during 1999, and examining the safety-related constructed content found in each.

Content analysis was used to analyze the articles primarily due to its ability to locate underlying messages and structures in the advertisements, and its ability to use "statistical techniques to make inferences about what is found in the media" (Berger, 1990:91). Data collection involved tabulating: (1) references to the terms "safe" and "safety" (all references to "safe" and "safety" were used in reference to protection; in other words, the terms were used within what the present researchers agreed was an appropriate context); (2) references to safety features; and, (3) pictures displaying safety. Agreement was consistently reached between the authors regarding whether or not a picture was safety-related and whether the terms "safe" and "safety" were used in the proper context.

One must use caution in comparing the results from the present study with results from Burns' (1999a) earlier work, primarily due to slight alterations. Two notable differences between the studies are the magazines used to assess images of safety (Burns used *Newsweek* and *Motor*

*Trend*), and the recognized safety features. Burns included traction control as a safety feature, although we feel traction control, as it is sometimes presented in advertisements, could be considered a safety feature as well as an encouragement to drive recklessly. For instance, an ad for a Ford Mustang GT, which promoted “All-Speed Traction Control and Steamroller Z-rated 245s,” featured the following message:

*Jake claims his old '64 Mustang GT was so powerful that if he'd jumped on the accelerator hard enough, he could've sheared the rear lugs off. Maybe so. Maybe no. But, in his 1999 Mustang GT, all 260 horses are harnessed to a 3.27:1 rear axle that pours every ounce of power and torque directly into the pavement. Same rebel spirit, but now with advanced firepower. So Jake, if you're feeling froggy, go ahead and jump.*

To a limited degree, Burns also addressed the safety-related content (often provided in subscript font) surrounding the GM trademark, though the present research does not include such information. It was felt that this information should be excluded primarily due to its limited role within the advertisements. Simply, the information is generally provided in small font and is arguably insignificant with regard to the advertising message.

The empirical safety data used in this study were taken from 1999 crash test evaluations conducted by NHTSA, which annually conducts crash tests to assess the crashworthiness of various automobiles. Unfortunately, not every vehicle is tested each year. Thus, the present analysis is restricted to the vehicles tested during 1999. Fortunately, the NHTSA annually evaluates many automobiles, offering results for 102 vehicles manufactured in 1999.

The NHTSA uses a star-system to demonstrate a vehicle's performance during a head-on simulated crash. Five stars (the highest ranking) indicates occupants face a less than 10% chance of life-threatening injury if involved in a similar accident. Four stars suggests a 10-20% chance of life-threatening injury; three stars a 20-35% chance of life-threatening injury; two stars a 35-45% chance of life threatening injury, and one star (the lowest ranking) indicates a greater than 45% chance of life-threatening injury. Stars are allocated based upon assessed injuries to individuals sitting in the driver's-side and front passenger's-side of a vehicle.

Although the NHTSA is currently evaluating an increasing number of vehicles and simulating various types of crashes (e.g., side-impact crashes), the present research is concerned only with assessments of damage to drivers and front passengers resulting from head-on collisions. There was not enough information in 1999 from other evaluations (e.g., side-impact crashes) to include in our assessment of automobile safety. An average of the number of stars received by each vehicle (stars based on evaluations of damage to the driver's side and passenger's side) was taken to determine each vehicle's overall safety performance score. If, for instance, a vehicle earned four stars for its performance in relation to the driver's side and two stars for the passenger's side, a score of three is recorded. Vehicles with only one score were excluded from the present study.

## FINDINGS

The present study compares each automaker's constructed image with crash test evaluation scores. These findings are further analyzed according to each automaker's divisions, and by individual vehicles. Several findings regarding magazine advertising practices are offered prior to addressing safety and advertising issues.

### The Outlets

A total of 561 advertisements were found in 74 editions of the three magazines used for data collection: *The Atlantic Monthly* (12 issues containing a total of 84 automobile ads), *Glamour* (12 issues containing 45 ads), and *Sports Illustrated* (50 issues containing a total of 432 ads) during 1999. These ads covered a total of 711.3 pages, or 1.27 pages per ad. Seventeen safety-related *pictures* were found in these ads (about .03 pictures per ad), 76 uses of the terms "safe" or "safety" were noted (about .14 uses per ad), and 228 safety *features* were noted (about .41 features per ad). Combined, 321 safety references were noted within the 561 ads, or about .57 safety references per ad.

The content of the photographs found within the ads ranged from images of crash test results to a depiction of a vehicle with incredibly powerful headlights. Antilock brakes (mentioned 103 times, or 45% of all safety feature mentions) was the most-often referenced safety feature among all ads, followed by airbags (61, 26.8%), crash test information (17, 7.5%), headlights (11, 4.8%), seat belts (10, 4.4%), child safety seats (8; 3.5%), crumple zones (6, 2.6%), tire monitors (4, 1.8%), windshield wipers (3, 1.3%), crash avoidance systems (3, 1.3%), headrests (1, .4%), and anti-submarining seats (1, .4%).

Many similarities were found among the ads placed in *Sports Illustrated* and *Glamour*. The overall average number of safety references per ad for these outlets was similar (.65 for *Sports Illustrated*; .58 for *Glamour*), while similarities were noted with regard to the average number of: (1) pictures per page (.04 and .02, respectively), (2) use of the terms "safe" or "safety" per ad (.16 and .11, respectively), and (3) features mentioned per ad (.45 and .44, respectively). The ads found within these outlets generally contain more safety-related information than the ads found within *The Atlantic Monthly*. For instance, the overall average number of safety references for *The Atlantic Monthly* was .19, while the average for the three outlets was .57. *The Atlantic Monthly* contained no safety-related pictures, and ads found within the magazine were less likely than the ads in the other outlets to mention the terms "safe" or "safety", and mention safety features. Table 1 depicts these findings.

**Table 1.**  
**References to Safety by Magazine**

Magazine	# of Ads	Size (in pages)	Avg. Size of Ad	# of Pictures (per page)	Use of "Safe" or "Safety" (per pg)	# of Features Mentioned (per pg)	Total Safety References (per ad)
The Atlantic Monthly	84	116.3	1.38	0	4 (.05)	12 (.14)	16 (.19)
Glamour	45	52.5	1.17	1 (.02)	5 (.11)	20 (.44)	26 (.58)
Sports Illustrated	432	542.5	1.26	16 (.04)	67 (.16)	196 (.45)	279 (.65)
<b>Totals (per ad)</b>	<b>561</b>	<b>711.3</b>	<b>1.27</b>	<b>17 (.03)</b>	<b>76 (.14)</b>	<b>228 (.41)</b>	<b>321 (.57)</b>

### The Automakers

Tables 2 and 4 depict safety references for automakers that placed at least *ten* total advertisements in the three magazines used in the study. Tables 3 and 5 include only those automakers and divisions which had at least *three* vehicles crash tested by the NHTSA. These minimum requirements were established to assist in attaining representativeness among the automakers. It was felt, for instance, that analyses of too few articles would not provide an accurate assessment of each automaker's concern for safety, while analyzing only a few crash test scores would not provide adequate representation. Because not all vehicles are tested each year, it was felt that limiting the analyses to automakers having three or more vehicles tested would assist with representativeness, yet not exclude too many automakers.

Eight automakers fit the criteria of having 10 or more advertisements placed in the three magazines used in this study, while seven corporations met the criteria of having three vehicles crash tested. Six automakers met the criteria for both data sets and will thus be included for the initial analysis (Suzuki and Isuzu each had more than 10 advertisements, yet less than three crash test results; Mazda had more than three crash test results, yet only two ads).

On average, automakers referenced safety .58 times per ad (see Table 2 for the findings regarding automaker safety references). Ford followed only GM in references to safety in its advertising with .68 mentions per ad and generally backed up their claims of safety with strong crash test results (Ford vehicles averaged 4.25 stars; the average for all vehicles with three or more crash test evaluations was 3.91; see Table 3 for NHTSA crash test scores by automaker). Interestingly, Toyota included very few safety references in its advertising (.21 per ad) and Honda never mentioned safety in its ten ads, yet Toyota had the highest average crash test score (4.30) and Honda's scores were above the average (4.13).

In contrast, GM (.74 mentions per ad) mentioned safety more than all other automakers while Nissan (.64 per ad) had a higher than average rate of reference to safety, yet their crash test scores were among the lowest (3.76 and 3.60, respectively). This finding supports Burns' earlier work which also suggested that GM promoted a concern for safety that was in fact unsubstantiated. Results for DaimlerChrysler were similar to GM and Nissan, although DaimlerChrysler mentioned safety in its advertisements at a rate equal to the overall rate for all

automakers (.58 per ad). DaimlerChrysler's crash test scores, however, were equal to Nissan's lowest score for all automakers in the study (3.60).

**Table 2.**  
**References to Safety by Automaker**  
(minimum 10 ads)

Automaker	# of Ads	Size (in pgs)	Avg. Size of Ad	# of Pictures (per ad)	Use of "Safe" or "Safety" (per ad)	# of Features Mentioned (per ad)	Total Safety References (per ad)
General Motors	166	206	1.24	5 (.03)	26 (.16)	92 (.55)	123 (.74)
Ford	129	162	1.26	9 (.07)	14 (.11)	65 (.50)	88 (.68)
Nissan	11	24	2.18	0	0	7 (.64)	7 (.64)
DaimlerChrysler	122	163	1.34	3 (.02)	33 (.27)	35 (.29)	71 (.58)
Isuzu	12	13	1.08	0	0	4 (.33)	4 (.33)
Toyota	70	82	1.17	0	0	15 (.21)	15 (.21)
Honda	10	14	1.40	0	0	0	0
Suzuki	12	12	1.00	0	0	0	0
<b>Totals (per ad)</b>	<b>532</b>	<b>676</b>	<b>1.27</b>	<b>17 (.03)</b>	<b>73 (.14)</b>	<b>218 (.41)</b>	<b>308 (.58)</b>

**Table 3.**  
**NHTSA Crash Test Score, by Automaker**  
(minimum of three scores)

Maker	Number of Vehicles	Average Score
Toyota	10	4.30
Ford	16	4.25
Mazda	3	4.17
Honda	8	4.13
GM	36	3.76
DaimlerChrysler	15	3.60
Nissan	5	3.60
<b>Total</b>	<b>93</b>	<b>3.91</b>

## The Divisions

The automaker divisions referenced safety an average of .60 times per ad. Buick, by far, had the largest average safety mentions, referencing safety 1.7 times per ad. Buick, however, had a below-average mean crash test score, earning a 3.67 average (the average crash test score for the vehicles included in the analysis was 3.89). Chevrolet also had an above average rate of references to safety (1.04 per ad) yet its vehicles also earned below average crash test scores (3.81). Advertisements for Ford (which, like Toyota, is considered an automaker and an automaker division, simply because these corporations are comprised of various divisions, yet they too produce vehicles) vehicles mentioned safety, on average, more than other divisions

(1.07 times per ad) and Ford's high crash test scores (4.27) suggest that Ford vehicles support the emphasis on safety.

Several automaker divisions had below average rates of references to safety yet above average crash test scores. Toyota (.24 safety references per ad; 4.33 average crash test score), Mercury (.43, 4.25), and Pontiac (.52, 3.92) each, on average, were less likely than many divisions to mention safety in their ads, yet their crash test scores suggest their vehicles are among the safest. Dodge (.39 safety references per ad; 3.64 average crash test score), Jeep (.16, 3.33), GMC (0, 3.5), and Oldsmobile (0, 3.50) were, on average, less likely than other divisions to reference safety, and each earned crash test scores below the average. Tables 4 and 5 depict these findings (note: Crash test results are provided for Plymouth, although only two advertisements were found. Advertising information is provided for Chrysler, Saturn, Jaguar, and Lincoln, although less than three vehicles from each of these divisions were crash tested during 1999).

**Table 4.**  
**References to Safety by Automaker Division**  
(minimum 10 ads)

Division	# of Ads	Size (in pgs)	Avg. Size of Ad	# of Pictures (per ad)	Use of "Safe" or "Safety" (per ad)	# of Features Mentioned (per ad)	Total Safety References (per ad)
Buick	14	22	1.57	0	8 (.57)	16 (1.14)	24 (1.71)
Ford	71	89	1.25	9 (.13)	12 (.17)	55 (0.77)	76 (1.07)
Chevrolet	71	77	1.08	4 (.06)	15 (.21)	55 (0.77)	74 (1.04)
Chrysler	29	42	1.45	0	18 (.62)	2 (0.07)	20 (0.69)
Pontiac	29	36	1.24	0	0	15 (0.52)	15 (0.52)
Mercury	14	14	1.00	0	0	6 (0.43)	6 (0.43)
Dodge	65	80	1.23	0	2 (.03)	23 (0.35)	25 (0.39)
Saturn	20	34	1.70	1 (.05)	3 (.15)	3 (0.15)	7 (0.35)
Toyota	63	72	1.14	0	0	15 (0.24)	15 (0.24)
Jaguar	12	16	1.33	0	0	2 (0.17)	2 (0.17)
Jeep	19	24	1.26	0	1 (.05)	2 (0.11)	3 (0.16)
GMC	14	17	1.21	0	0	0	0
Lincoln	18	21	1.14	0	0	0	0
Oldsmobile	10	11	1.10	0	0	0	0
<b>Totals (per ad)</b>	<b>449</b>	<b>555</b>	<b>1.24</b>	<b>14 (.03)</b>	<b>59 (.13)</b>	<b>194 (0.43)</b>	<b>267 (0.60)</b>

**Table 5.**  
**NHTSA Crash Test Score, by Automaker Division**  
**(minimum of three scores)**

<b>Maker</b>	<b># of Vehicles</b>	<b>Average Score</b>
Toyota	9	4.33
Ford	11	4.27
Mercury	4	4.25
Pontiac	6	3.92
Chevrolet	13	3.81
Plymouth	3	3.67
Buick	3	3.67
Dodge	7	3.64
GMC	5	3.50
Oldsmobile	6	3.50
Jeep	3	3.33
<b>Total</b>	<b>70</b>	<b>3.89</b>

### **The Vehicles**

The final analysis involves examining the safety-related content found in the advertisements of those vehicles with the highest and lowest crash test scores. Ten vehicles earned three stars or less in the NHTSA crash tests, while 11 vehicles earned perfect scores (5 stars). This final analysis examines the accuracy of safety claims made by automakers concerning particular vehicles. Six of the 10 vehicles (60%) earning the lowest crash test scores had placed advertisements in the magazines used in the present study. Four of the 11 vehicles (36.4%) earning the highest score had ads.

Three of the four (75%) vehicles earning five stars referenced safety in their advertisements, on average, to a notably higher degree than other vehicles. Interestingly, all three vehicles were manufactured by Ford, with the Ford Taurus maintaining a very strong emphasis on safety in its ads (4.57 references per ad; the average for all vehicles was .57). The Honda Odyssey, while earning a perfect crash test rating, did not refer to safety in its ads.

Two of the six (33%) vehicles earning the lowest crash test scores referenced safety in their advertising, on average, to a greater degree than other vehicles. The Chevrolet S-10 (1.33 references per ad) and the Ford Escort (1 mention per ad) had notably low crash test scores, yet above average references to safety in their ads. Three other low scoring vehicles did not reference safety in their ads (Dodge Durango, Jeep Cherokee, and Oldsmobile Intrigue), while another (Jeep Grand Cherokee) referenced safety, on average, to a lesser degree (.38) than other vehicles. Table 6 depicts these findings.



**Table 6.**  
**Vehicle Crash Test Scores as Related to Safety References Per Ad**

Automaker	Division	Vehicle	Crash Test Score	Total Safety References Per Ad (# of ads)
<b>Lowest Crash Test Scores</b>				
GM	Chevrolet	S-10	2.5	1.33 (6)
DaimlerChrysler	Dodge	Durango	3	0 (6)
DaimlerChrysler	Jeep	Cherokee	3	0 (4)
DaimlerChrysler	Jeep	Grand Cherokee	3	0.38 (8)
GM	Oldsmobile	Intrigue	3	0 (4)
Ford		Escort	3	1 (6)
<b>Highest Crash Test Scores</b>				
Ford	Mercury	Grand Marquis	5	1 (3)
Ford	Mercury	Sable	5	1 (3)
Honda		Odyssey	5	0 (1)
Ford		Taurus	5	4.57 (7)
Ford	Mercury	Sable	5	1 (3)
<b>Average for These and All Vehicles</b>			<b>4.11</b>	<b>0.57</b>

## DISCUSSION

Misleading consumers is not beyond the scope of behavior found within the automobile industry. For example, the Chrysler Corporation was accused of selling as new vehicles that had been previously driven on a regular basis by Chrysler employees (some vehicles had been in accidents) (Donlan, 1989). More recently, DaimlerChrysler agreed to pay \$325,000 to the California Department of Motor vehicles, which accused Chrysler of "selling faulty vehicles that had been returned while under warranty through closed auctions to dealers" (Bloomberg News, 2002:10C). Similarly, Clinard and Yeager (1980) note that in 1977, over 87,000 Oldsmobiles sold by GM dealers had Chevrolet engines, an action that clearly violated the U.S. Criminal Code. GM argued that switching engines and other parts to and from models of varying prices was common practice in the auto industry.

Results from the present study lead to several issues concerning the advertising practices of automobile manufacturers. First, gender appears to play a limited role in automobile safety advertising, as automakers do not seem to stress safety issues to females more than they do to males, or vice versa. For instance, safety references were noted, on average, with the same frequency in *Sports Illustrated* (a magazine targeted toward males) as they were in *Glamour* (an outlet targeted toward females). There was, however, a notable lack of safety references found in ads placed in *The Atlantic Monthly*. Concrete explanations for this finding are beyond the capability of the present data, although it is reasonable to assume that differences in the readership of *Sports Illustrated*, *Glamour*, and *The Atlantic Monthly* account for some of the

differences. As noted by Bishop (2000:378), "Ads are carefully constructed so that the ways they are viewed by different sorts of people create particular impacts."

The present study can, however, identify those automakers who may be misleading the public (either intentionally or unintentionally), those who support what they advertise, and those who may wish to consider revisiting their advertising practices. Nissan and GM (specifically the Buick and Chevrolet divisions) were identified as the automakers which notably promoted safety in their advertisements, yet their vehicles failed to support their claims of safety. The finding that GM may be misleading consumers via advertising supports historical findings identifying the automaker's involvement in unethical, sometimes illegal behavior. Such behavior was documented by authors/researchers, such as Edwin Sutherland (1949), whose groundbreaking work on white collar crime found that GM had the third largest number of violations among the corporations he studied from 1890-1945, and Ralph Nader who exposed flaws in GM's faulty Corvair in the 1960s (Nader, 1965). The latter incident prompted GM to conduct a secret probe of Nader in attempt to uncover discrediting information on his past.

At the vehicle-level, the Chevy S-10 and Ford Escort both followed suit, with above average references to safety in their advertisements; yet both vehicles were among those with the lowest crash test scores. Such practices lead one to consider whether these corporations are guilty of false advertising, unethical practices, and/or corporate misbehavior.

In his discussion of crimes against consumers, Friedrichs (2004:78) argues that "Altogether, U.S. consumers have been misled over the years into buying billions of dollars worth of products and services that fail to live up to advertisers' claims, and that in some instances actively harm consumers." One could attribute a portion of these losses to the vague and arguably ineffective laws surrounding false advertising. Bounded by the basic rules that (1) advertising must be truthful and non-deceptive, (2) advertisers must have evidence to back up their claims; and (3) advertisements cannot be unfair (Federal Trade Commission, 2002), corporations are generally free to make a wide array of unsubstantiated claims through means that do not clearly fall under one of these three broad, highly subjective criteria. One could argue that the seemingly ineffective false advertising laws that permit corporations to bend, or even overstep the rules, result from the influences of powerful corporations in the construction, passage, and revision of white collar crime legislation (e.g., Friedrichs, 2004; Quinney, 1974). Influential automobile lobbyists certainly have an impact on automobile legislation, and it would be foolish to believe their interest does not extend to automobile advertising (e.g., Burns, 1999b).

Rosoff, Pontell and Tillman (2002) argue that theoretically, corporate America's advertising is designed to bridge the gap between a corporation's need to inform and the public's need to know. However, they argue that advertising does little to effectively educate consumers, noting that "...advertising has become -- or perhaps has always been -- more a tool for manipulation than education" (Rosoff et al., 2002: 56). Automakers that stress safety yet fail to support their claims are not necessarily in violation of the law. Corporations often use vague or abstract terms to transmit their message, generally engaging in what could be considered

“suggestive persuasion.” Automakers may not make declarative statements regarding the safety of their products; however, they may mention safety features, or even depict images of safety.

Suggestive persuasion is not necessarily illegal. In fact, Bishop (2000) argues that image advertisements (i.e., those ads that “create a symbolic image of an idealized person-type and invite the potential consumers of the product to identify themselves in some way with that image” [p.372]) “are not false or misleading, and that whether or not they advocate false values is a matter for subjective reflection” (p. 371). He adds that consumers use their autonomy to make choices, for instance, whether or not to view and/or adopt the image. In discussing the ethical concerns in image advertising, Bishop adds, however, that “since most of the products that use image ads are low in price and depend on repeat purchases, this does not seem an important ethical issue” (p. 375). The high cost and infrequent purchasing of automobiles (in addition to the physically harmful and lethal dangers associated with automobiles) suggests ethical concerns do apply to automobile advertising.

Unsubstantiated image construction may not always be ethical and may sometimes be deadly. The repercussions of using a brand of deodorant advertised as offering all-day protection, when in fact it does not, may be unpleasantly odiferous—but they are small when compared to purchasing a car thought to be safe when indeed it is not. Suggestive automotive persuasion generally does not include bold, declarative statements, instead opting for more subtle forms of promoting an image, theme, or concept. And yet if advertisers’ methods are not direct, their consequences may well be.

Ford and its divisions were found to promote safety in their advertising and support those claims with strong crash test evaluations (with the exception of the Ford Escort which stressed safety yet had poor crash test scores, although three other Ford vehicles had the highest crash test scores and a notable concern for safety in their advertising). Ford does not appear to be misleading the public; instead it demonstrates what appears to be a “truth in advertising” approach with regard to safety claims. Ford and its divisions are the only automakers that stressed safety and supported those claims.

Several automakers and divisions (i.e., Honda, Toyota, Pontiac, and Mercury) earned above average crash test scores, yet failed to stress their accomplishments in their advertising. While no ethical or moral concerns arise from this practice, one must consider the marketing strategies of these corporations. If safety is a significant concern for many in society, one must wonder why marketing departments, which are generally provided substantial resources to promote their products, do not capitalize on above average crash test evaluations.

Several divisions do not appear concerned with safety in their advertising or in crash testing. For instance, Dodge, Jeep, GMC and Oldsmobile were below average with regard to safety references in their ads and earned below-average crash test scores. These groups are not guilty of suggestive persuasion in that they do not stress safety in their advertising (in fact, GMC and Oldsmobile do not refer to safety in their combined 24 ads).

## CONCLUSION

It should be noted that crash tests are but one measure of a vehicle's safety. In fact, they only speak to occupant safety in the course of a head-on collision occurring at a specific rate of speed. These and other limitations lead some to question the reliability of NHTSA crash tests and other automotive safety evaluations (e.g., Burns, 1999c), although recently much progress has been made in this area. Future research should consider additional measures of automobile safety, including driver death and injury rates, as well as off-set crash test results offered by the Insurance Institute for Highway Safety (IIHS), and results from other forms of crash testing offered by the NHTSA. The crash test results included in the present study, however, are certainly credible and, we might hope, considered by consumers in their purchasing decisions.

Fox (1984) notes the limited repercussions of false advertising, arguing that regulatory sanctioning generally amounts to modification or discontinuation of the misleading claim. However, recent incidents involving corporate offenses suggest that those promoting false advertisements may be faced with more severe consequences. Cigarette manufacturer Philip Morris recently was ordered to pay \$150 million in punitive damages after a jury determined that the company had falsely advertised that low-tar cigarettes were healthier than regular cigarettes (Fort Worth Star-Telegram, 2002:16A). Philip Morris obviously went beyond suggestive persuasion to include a declarative statement that their product was healthier, when indeed it was not.

Corporations do not necessarily construct images through blatantly false claims, but through skilled, legal marketing practices that could be recognized as misleading or unethical. Constructing an image of safety around a product that provides a substandard level of safety could encourage the uninformed to make harmful decisions. The question we currently face concerns what constitutes false advertising and what should be the repercussions of misleading the public. The issue of suggestive persuasion should also be addressed, as some might argue that because persuasion is not bound by false advertising laws, unlimited references (or objects of persuasion) can legally be offered, which could ultimately have more impact on a consumer than a declarative statement. Suggestive persuasion could have a greater influence on consumers than blatantly false statements offered by advertisers, yet such practices are well within our laws.

An extensive body of literature argues that powerful groups in society influence the creation, passage, and revision of legislation to their benefit. To be sure, the automobile industry certainly fits under the category "powerful group." Accordingly, it can be stated with comfort that the automobile industry, particularly via lobbyist practices, has influenced automobile legislation in its favor (e.g., Burns, 1999b). However, recent societal and government concern for white collar crime may offer a glimpse of hope that automobile legislation, as it applies to advertising practices and related behaviors, will not be unfairly influenced by the power of a private corporation. The recent call for greater corporate accountability could possibly extend to corporate acts that are legal, although not necessarily ethical or moral (e.g., promoting unsubstantiated images via suggestive persuasion).

One could make the argument that despite the impact of advertising on the general public (whether the advertising is accurate or inaccurate, persuasive or factual), consumers are ultimately responsible for their purchasing decisions. Following this logic, consumers would need ready access to credible sources of information to offset the effects of pervasive corporate advertising. The Internet provides consumers access to a wealth of comparative information from which they can make informed decisions. Local libraries generally maintain issues of *Consumer Reports*, an outlet absent any overt advertising agenda, and other resources from which consumers can find information to make informed decisions. It is important that consumers not succumb to the power of advertising by letting suggestive persuasion, or more concrete forms of false advertising, influence their purchasing decisions, particularly when the decision concerns products as potentially dangerous as automobiles.

It is proposed that researchers consider developing resources to be used by consumers in making purchasing decisions. For instance, a handbook of credible sources (*Consumer Reports*, government reports, and other sources not maintaining directed interests in particular products) should be developed for use by the public. The guidebook could contain Web sites, journal titles/articles, a list of government and non-profit agencies with an interest in the area, and various other resources which consumers could use to make better decisions. In making automobile decisions, for instance, consumers would be directed to the crash test results and past and present recall notices as found on the NHTSA Web site, information found on the IIHS site, and information from AAA, among other resources. A guidebook of this nature could be developed for all products which involve a significant degree of potential danger.

Automakers and dealerships should take responsibility to inform consumers of the quality and safety of their products. Crash test results and findings from various other safety-related evaluations, for instance, should be placed on the window sticker of all new and used vehicles for sale. Information concerning recalls should also be included, as should information concerning the automobile's history (e.g., if the vehicle has required bodywork, if it has been in a major accident, etc.).

Taking an optimistic view of the issue, as the public gains greater access to and familiarity with useful information on automotive products, perhaps automakers will feel the pressure to devote additional resources toward product development instead of product advertising. Over time, informed consumers in sufficient numbers might force automotive corporations to make automotive safety the primary dimension in purchasing decisions. If so, automakers could respond by increasingly reallocating some of the resources used to promote the image of safety toward developing automobiles that are safer.

A more pessimistic view, though, suggests that even the best intended of informational campaigns will wither under the ongoing onslaught of slickly produced automotive advertising. If so, we can expect the continuation of two disjunctions, one specific to this study, the other of more general consequence to crime and justice. If advertising continues to trump information—and if, in a world of endlessly circulating corporate persuasion, the image of product safety continues to trump the safety of the product itself—we would see little motivation for

automakers to resolve the disjunction between the safety of their products and the alleged safety that they advertise. Indeed, and ironically, if consumers remain more influenced by the image of the automobile than by its actuality, automakers may conclude that their resources are better spent on promoting the image than on improving the product.

This disjunction not only influences automotive purchases, it shapes broader perceptions of the automobile's place in society, and of general automotive safety (Ferrell, 2003; Lauer, 2005). In this sense, an ongoing disjunction between advertised images of automotive safety and automotive dangers perpetuates the public's inability to perceive the scope of everyday automotive violence, much less the layers of corporate deviance that underlie it. Convinced of the automobile's safety, and of the auto industry's commitment to such safety, the public may well notice a freeway accident or comment on a fatal collision—but it is unlikely to perceive such violence in its totality, and to construct it as a pervasive social problem. Instead, the design limitations built into each vehicle, and the violence inherent in the widespread use of the automobile as personal transportation, will be attributed to bad driving or bad fortune, and the public will remain ready to believe the next advertisement assuring the automobile's ultimate safety.

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### BIOGRAPHICAL SKETCHES

**Ronald Burns** is an Associate Professor of Criminal Justice at Texas Christian University and Director of the Criminal Justice Program. He recently co-authored *Environmental Crime: A Sourcebook* (LFB Scholarly, 2004), and has published manuscripts primarily in the areas of policing, media construction of crime, and white collar crime. His most recent publications focus on examining law enforcement responses to Internet fraud, the accessibility of environmental crime data, and media depictions of road rage.

**Erin Orrick** is a recent graduate of the University of Maryland with a Master of Arts in Criminology and Criminal Justice. She also earned her Bachelor of Science in Criminal Justice degree from Texas Christian University. She is currently working as a Research Associate with the Pacific Institute for Research and Evaluation, a non-profit research firm, working toward building effective State alcohol, tobacco and other drug prevention systems. Her current research interests include drugs and crime, sentencing, and crime trends.

**Jeff Ferrell** earned his PhD in Sociology from the University of Texas at Austin, and is currently a Professor of Criminal Justice at Texas Christian University. He is the author of *Crimes of Style* (Garland, 1993; Northeastern University Press, 1996), *Tearing Down the Streets* (Palgrave/Macmillan/St. Martin's, 2001/2002), and *Empire of Scrounge* (New York University Press, 2005), and lead co-editor of four books: *Cultural Criminology* (Northeastern University Press, 1995), *Ethnography at the Edge* (Northeastern University Press, 1998), *Making Trouble* (Aldine de Gruyter, 1999), and *Cultural Criminology Unleashed* (Cavendish/Glasshouse, 2004). He is the founding and current editor of the New York University Press book series *Alternative Criminology*, and one of the founding and current editors of the journal *Crime, Media, Culture: An International Journal* (Sage, London). In 1998 he received the Critical Criminologist of the Year Award from the American Society of Criminology.



## **The Rehabilitation Dilemma in Texas County Jails**

**Mark Kellar**

*University of Houston, Downtown*

### **ABSTRACT**

*Inmate rehabilitation and treatment programs are relatively scarce in county jails. A general questionnaire distributed to Texas county sheriffs or their jail administrators indicated that larger jails were more likely to have both inmate education and substance abuse treatment programs than smaller jails. Few institutions reported comprehensive or sophisticated programming and many reported none at all. These findings were consistent with conclusions drawn by other researchers. We concluded that administrative restraints linked to the fundamental purpose of local detention, the unique history and political characteristics of the office of county sheriff in Southern states, and the crime control model of justice contributed to the absence of rehabilitation offerings.*

### **INTRODUCTION**

Those of us who regularly attend criminal justice conferences, workshops and conventions are exposed to dozens of evaluations and reviews of various correctional education and rehabilitation programs. To be sure, hundreds of prison administrators, counselors, teachers and other workers strive tirelessly to help inmates achieve rehabilitative results. Professional journals, newsletters and trade publications are filled with examples of these programs to the extent that one might logically conclude that America's incarcerated population is subjected to a universal dose of treatment-oriented corrections programs. While we acknowledge the quality of scores of individual programs, and we certainly commend the many fine men and women who are involved with prisoner rehabilitation, we also find an overall lack of inmate treatment programs, especially in local detention facilities.

An in-depth inquiry reveals that: 1) most inmate rehabilitation programs are conducted in conjunction with state-level prison or parole and probation efforts (Norman, 2003), and 2) they provide opportunities for only a select minority of the total incarcerated population (*Corrections Digest*, 2001). According to a Bureau of Justice Statistics Report in *Corrections Digest* (2001), only 40% of the nation's jails and prisons offer drug rehabilitation programs. Of the more than three million persons incarcerated, only 173,000 actually receive drug treatment despite the fact that some estimate the number of inmates that have drug abuse problems is as high as 75%. The

2000 Report of the Arrestee Drug Abuse Monitoring Program (US Department of Justice, 2003:23) found that between 27% and 47% of all arrestees may be at risk for drug dependence. State prisons fare somewhat better when it comes to the delivery of inmate education programs, but trends indicated a five per cent drop in the rate of inmates participating in prison education programs between 1991 and 1997 (Correctional Law Reporter, 2004). This occurs as numerous studies tout the advantages and results achieved by education programs in a prison setting (Chappell, 2004; Gordon and Weldon, 2003; Higgins, 2002).

It has long been established that county jails provide rehabilitation opportunities to only a small fraction of their inmates. Norman (2003) discusses the lack of attention paid to correctional education and Wilson (2000) points to the lack of drug treatment programs in county jails. This paper is presented in an effort to examine the underlying reasons for the lack of such program availability in local detention agencies. But before addressing the question of why programs in this category seem underrepresented, findings from a recent Texas jail study are reviewed.

### **The Texas County Jail Study**

A survey of county sheriffs and their local jail administrators in the State of Texas (Kellar, Jaris and Manboah-Roxin, 2001) was conducted in an effort to develop a descriptive “snapshot” of policy issues and operational strategies. Approximately 60% of those queried responded to the survey. One topic yielded interesting results when we addressed managers’ general attitudes toward rehabilitation and the implementation of such programs in local detention facilities. When asked to respond to the statement “Jail should be used to rehabilitate inmates,” more than one half (55.8%) of the 137 respondents noted agreement (57 marked “somewhat agree” while only 20 marked “strongly agree”). However, almost one in four respondents, a total of 33 or 24%, disagreed with the statement (19 marked “somewhat disagree” and 14 marked “strongly disagree”). The remaining 27 (19.6%) chose “neither agree nor disagree.” This suggests that while county sheriffs and their representatives generally support inmate rehabilitation, the support was lukewarm at best, while a sizeable minority of administrators voiced an opposition to inmate rehabilitation (pp. 28-31). This finding is consistent with research by Applegate, Davis, Otto, Surette and McCarthy (2003), who found that community justice leaders in Orange County, Florida, were somewhat ambivalent toward defining goals but were generally supportive of rehabilitation at the local jail level.

Next, we attempted to determine the number and types of treatment programs available in Texas jails (Kellar et al. 2001:65-68). Only 62 of 142 respondents (44%) reported any inmate education programs in their institutions. The remaining 80 (56%) replied that they had no organized inmate education programs. As one might expect, the larger jails were more likely to offer educational programs than the smaller jails.

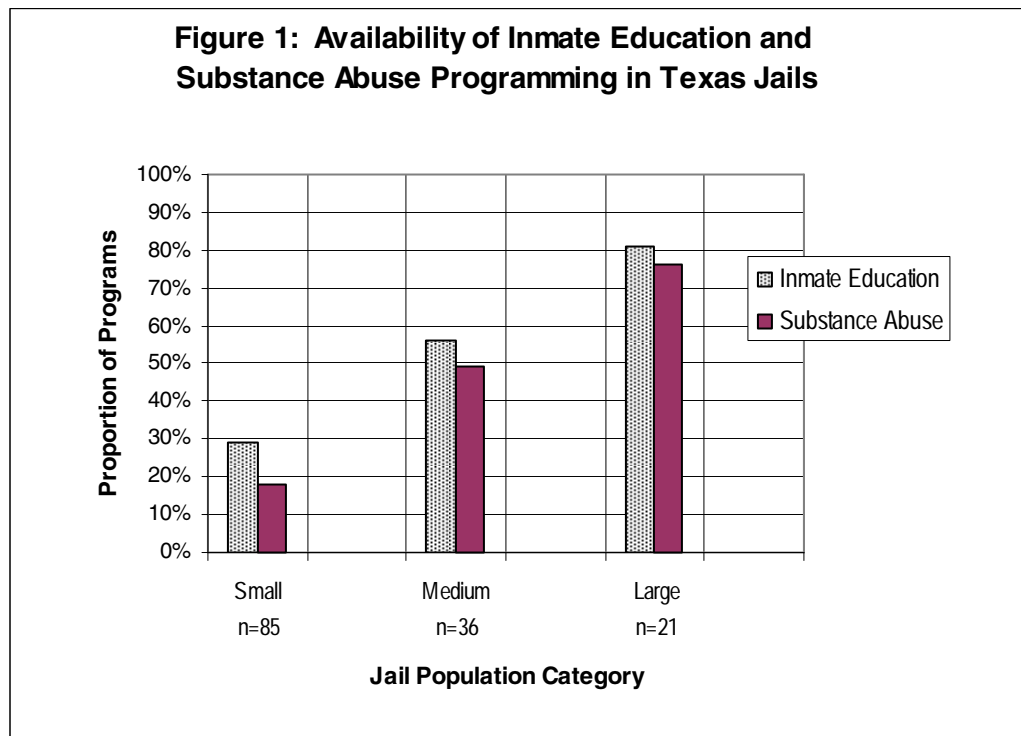
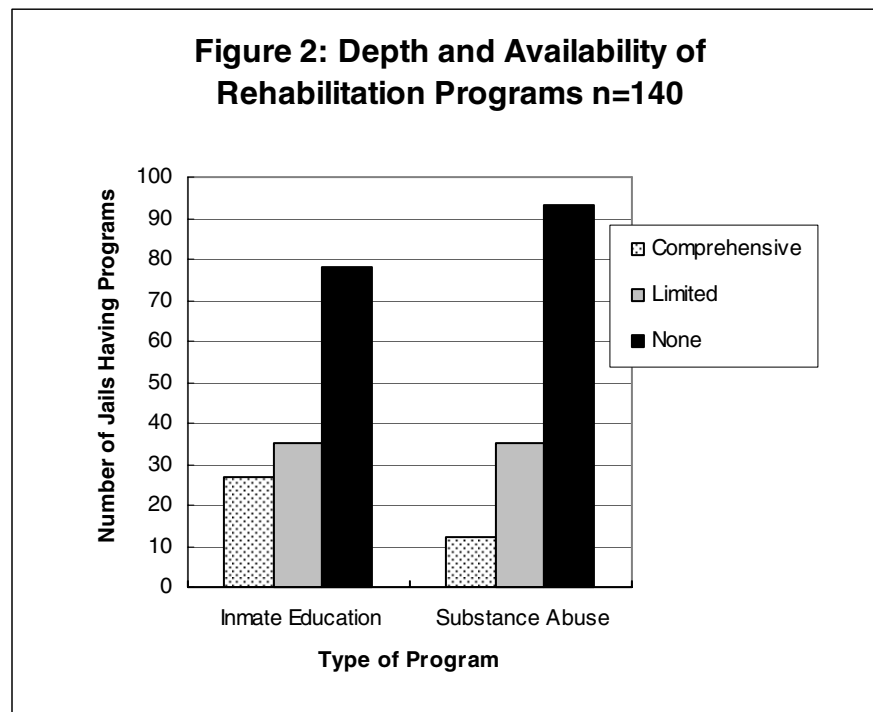


Figure 1 illustrates the proportional breakdown of educational and substance abuse programs by size of institution. The small jail category had an average daily inmate population of from 1 to 49 inmates, the medium of from 50 to 249, and the large of 250 or more. Note that 71% of the small jails had *no* inmate education programs, whereas only 19% of the jails with more than 250 inmates reported no education programs. Those inmates held in larger jails had a greater likelihood of participating in education offerings than those housed in smaller jails.

Another related issue is substance abuse treatment (Kellar et al., 2001:60-61). When asked if the agency conducted organized substance abuse programs, only one in three of all jail administrators (47 of 138) reported any programs. The number of responses to this question was slightly less than that recorded for the inmate education questions. The study also indicated that size of the jail had a positive relationship with the availability of substance abuse prevention programs for inmates. Only 18% of small jails reported any type of substance abuse programming; but 76% of large jails reported substance abuse programs. Inmates in large jails were more likely to receive substance abuse programming than inmates in smaller jails.

Figure 2 illustrates the depth of rehabilitation programming as reported by jail managers. Of the 62 who reported education programs, more than one half (35) described the programs as somewhat sporadic and delivered by part-time volunteers. Twenty-seven programs were funded and staffed by coordinated efforts with local community college or school districts. Only seven administrators reported vocational training or life-skill training programs. The most common educational program was basic literacy or high school (GED) equivalency training. Those who did report substance abuse programs frequently listed part-time volunteer efforts such as

Alcoholic Anonymous or Narcotics Anonymous as the extent of substance abuse programming. While these approaches have established excellent track records in providing service, the exclusive use of volunteer efforts is often subject to periods of instability and inconsistent program delivery. Only two jurisdictions responded that they offered programs such as “therapeutic community approaches” and only three jurisdictions reported the use of “drug courts.” Seven other jurisdictions provided some form of extensive programming.



These findings are consistent with literature reviews that indicate a shortage of educational and substance abuse programs in jails. Wilson (2000) estimated a national average of 42% of local jails having some sort of substance abuse program. Although his national average is slightly higher than our findings in Texas, his figures included detoxification as one type of treatment program while the subject study did not. Other researchers have also concluded that substance abuse programming is inadequate in local jails (May, Peters and Kearns, 1990:32, 33; Mays, Fields and Thompson, 1990), even though a growing body of literature indicates that some programs are extremely effective (McCollister, 1990; Tunis, Austin, Morris, Hardyman, and Bolyard, 1996; Lipton, 1995).

## CONCLUSIONS

While the survey results indicated a large portion of jail managers, at least those in Texas, tacitly support rehabilitative efforts, they were less than enthusiastic about large scale program implementation. The question then becomes why so few rehabilitation programs are available for inmates housed in local jails, and why so much of that programming is sporadic at best. At least three factors seem to contribute to this phenomenon: the practical imperative of the

administrative nature of local detention agencies, the political imperative of the county sheriff as a law enforcement agent, and the philosophical imperative of the prevailing crime control doctrine.

### **1. Administrative and Procedural Restraints Placed on Local Jails**

County jails represent a kind of systemic hub for the justice system wherein the major components - the police, the courts, and corrections - interface to form a dynamic processing structure. Approximately three-fourths of local detention systems across the nation (Kerle and Ford, 1982) and virtually all of those in Texas (State of Texas Revised Civil Statutes Article 5115, 1925; State of Texas Revised Civil Statutes Title 81, Article 5115.1, 1975) and other Southern states are administered by elected county sheriffs. The county jail almost defies structural definition because it incorporates all three justice components. Jails may be considered the final phase of the policing function because the arresting officer places the accused into the custody of the sheriff's office and initiates formal criminal charges. Many sheriffs consider policing as their primary responsibility.

On the other hand, the local jail may also be viewed as an adjunct to the judicial system. The jail maintains care and custody of the accused while the judicial process unfolds. Those who fail to post bond may be held in jail for extended times as the court proceeds in the complicated adjudication process.

A third dimension of county jails involves a corrections function. The sheriff is charged with providing a full correctional system for those convicted of misdemeanor crimes and sentenced to serve time in the county jail. These seemingly contradictory functions mandate a highly complicated processing system that often functions adversely to the interests of goals such as inmate rehabilitation or treatment. Further, since the local jail is usually established as a part of the county government system, individual agencies reflect unique rather than standardized organizational practices. Policies and procedures vary drastically from jurisdiction to jurisdiction.

The jail inmate population is constantly changing as a function of the ongoing processing required by the institution. This reality impacts every phase of operations, including the ability to provide rehabilitation programs. Consider the concept of the average daily population (ADP). The average daily population (ADP) is a baseline figure used extensively in prison research. The ADP, as calculated for a jail, has a completely different meaning than that calculated for a state prison. On average, a jail's turnover is about 12 to 15 times that of a prison. A prison with an ADP of 1000 will serve about 1500 prisoners on an annual basis, while a jail with an ADP of 1000 will serve approximately 8000 individuals annually (O'Toole, 1999).

Increased prisoner turnover in the jail environment creates a formidable obstacle for those who would develop and implement rehabilitation programs, because one cannot be sure which inmates will remain in the system from day to day. For example, a court may reduce the bond requirement for a particular inmate, thus increasing the likelihood of his or her immediate release



from jail. Often, criminal charges are negotiated away through plea bargaining, and the inmate may be transported to another facility or placed on probation with almost no notice of status change given to the jail authorities. It is therefore extremely difficult to plan organized activities when prisoner availability is in constant flux.

One popular misconception holds that local jails house a less dangerous class of inmate than their state prison counterparts. This is simply not true. Typically, a large jail will simultaneously house prisoners from hot check writers to serial killers. Practically all convicted prison inmates spend some time in a county jail before sentencing. Unlike state prisons, the local jail must accommodate all types of offenders in a single facility or, at best, in a limited choice of a few facilities. In addition to those charged with both misdemeanor and felony offenses and those sentenced to serve time in the jail, the local institution will house inmates awaiting parole or probation revocation hearings, those awaiting transfer to other jurisdictions, those bench-warranted to appear in various courts, and even civil detainees (Austin, 1998:4).

This diverse inmate population creates special administrative challenges for the jail manager, which may adversely affect the implementation of rehabilitation efforts. Proper segregation of inmates by risk category in housing, programs, and other endeavors is imperative (Austin, 1998:5). Because of the wide range of prisoner types being held and the short time-span and limited resources allotted to determine individual classification, the jail staff must take a conservative approach to inmate assignment. Since the jail manager does not have the luxury of extended time to develop comprehensive assessment procedures (psychological testing, educational placement, in-depth medical screening, and the like), the individual inmate must be assumed as a higher rather than lower risk for the purpose of classification if any information is lacking. It is better to err on the side of caution than to put the institution at risk. For this reason, many inmates who might be eligible for programs in a prison setting are classed as ineligible in the jail setting.

Furthermore, it is difficult to structure classes and other groups when regular attendance cannot be assumed. Most rehabilitation efforts in local jails are forced by necessity to rely on “open enrollment” classes. While this approach may sound egalitarian in theory, it presents practical problems for the instructor, counselor or facilitator, because the make-up of the inmate group constantly changes (Kellar, 1999). Note that technology may have produced a solution, or at least a reasonable alternative, to this dilemma. Both educational and therapeutic programming may be presented through self-paced, computerized learning methodologies. Closed-circuit television systems, distance learning technologies, and modular approaches to individual achievement can be structured to provide viable rehabilitation in the jail environment. Such strategies require extensive planning, some costs, hard work, and a firm commitment from policy-makers, but they can be successful.

One must also take into consideration the fact that the county sheriff’s office has been conscripted through time to perform a myriad of required duties that are mandated by various state laws (Moore, 1997:50). The sheriff is required to present prisoners to the courts as directed by the courts, to transport convicted inmates to the state department of corrections, and to serve

warrants as directed by the courts. In the area of corrections, the sheriff is required to provide those basic rights to inmates as promulgated through current case law. All of these requirements carry a high priority mandate, whereas the delivery of treatment programs normally does not. Therefore, if tasks compete for priority or for the allocation of limited resources, (which is always the situation in county government environments) rehabilitation programs will predictably be relegated to a second class status.

## **2. The Sheriff's Political Imperative**

To fully appreciate the political realities of county jails, one must first understand the nature of the office of county sheriff and the fact that it is not particularly conducive to inmate rehabilitation. Recent movements toward a "county police" model, wherein the jail is administered by an appointed corrections professional, while somewhat popular in certain regions, have failed to replace the traditional "county sheriff" model as the primary custodian of the local jail in Southern states (Moore, 1997). For practical purposes, the county sheriff remains the primary administrator of the local detention facility.

The sheriff represents a unique and almost mythical political figure. Historically, the first *gaols* were established by Henry II in the year 1166 (Kerle, 2004) and the local *Reeve* of the *Shire* (*shire-reeve* or *sheriff*) was assigned administrative responsibility for detention along with a general responsibility to provide for the enforcement of the King's law (Kerle, 2004). As government grew and became more embedded in the culture, the local sheriff's responsibility to provide both detention and law enforcement was fused into both the English and American justice systems. During the early 19<sup>th</sup> Century, as Jacksonian Democracy swept the American political scene, county sheriffs, along with a host of other local officials, became popularly elected through at-large ballots within the county. The process of election, and the title of being the chief law enforcement agent in the county, gave local sheriffs charter membership in the "court house crowd" or "county seat gang." The county sheriff became one of the most powerful local politicians in 19<sup>th</sup> Century America (Moore, 1997). Although Southern sheriffs no longer have the unrestricted political power that they enjoyed in the past, a vestige of political prestige is still evident in the office. The sheriff is often seen as the local political force in determining law enforcement policy.

Sheriffs generally consider their law enforcement role as a priority concern and often address their detention function as a secondary responsibility. Sheriffs are typically elected because of their position on law enforcement issues rather than on corrections issues. They therefore tend to emphasize law enforcement, often at the expense of corrections. While some sheriffs may attempt to develop a level of expertise in the corrections field, many remain completely uninformed or delegate their correctional responsibilities to a subordinate.

County sheriffs routinely manage the local jail and concurrently perform a variety of law enforcement tasks. Though some have criticized sheriffs for neglecting jails in favor of law enforcement functions (Mays and Winfree, 2002 p. 91), even those observers most sympathetic

to county sheriffs must admit that jail issues often do not receive the same priority given law enforcement issues. In systems where the jail staff is comprised of licensed law enforcement officers, assignment to jail duty is usually considered less glamorous, boring, or even demeaning (Peak, 2001). Our study revealed that most Texas jails employ corrections officers, rather than certified peace officers, to perform inmate management functions, although a sizeable minority (21%) are staffed by peace officers (Kellar et al., 2001:38,39). We also found that almost half of the reporting managers used certified peace officers as supervisors so that corrections officers often report to peace officers (39). This structure lends itself to the probability of assigning marginal officers or supervisors to the jail division as punishment for incompetence or disciplinary sanction. Such practices will inevitably lower morale and reduce professionalism in the jail.

The jail function of the sheriff's office has little political "sex appeal". Zupan (2001, p.48) attributes Huey Long with the adage, "There ain't no votes in prison." Powerful organized lobbies and influential interest groups rarely advocate increased focus on jail activities. Note that negative jail issues may attract public attention, but positive activities go largely unnoticed. If an institution is subjected to high profile inmate civil rights litigation, staff brutality complaints by inmates, or a high rate of escapes, the sheriff may well be held accountable.

For many sheriffs, this produces a kind of "prevent defense strategy" wherein emphasis is placed on reducing the probability of riots, brutality, escapes, lawsuits, and violence, rather than on developing positive approaches such as rehabilitation or innovative managerial pursuits. This approach seems to indicate a political perception that while jail issues usually do not help an incumbent sheriff, extremely negative jail press can certainly adversely affect an office holder. The sheriff is elected from a community of constituents who do not hesitate to make their political wishes known. In turn, the sheriff has a civic obligation to comply with the wishes of the people.

Most citizens support an active, anti-crime enforcement administration with little regard to jail policy. This is not to suggest that voters are against sound jail policy in general or rehabilitation programs in particular. In fact, some researchers (Applegate, Cullen and Fisher, 1997; Cullen, Scott, Skovron and Evans, 1990) report that the public actually supports a number of rehabilitative efforts. But in most instances, they, like the sheriffs and administrators mentioned above, are merely complacent. As Richard Seiter (2002:17) notes, "although the principle interest of the public is to be protected, once they believe their safety concerns are met through incarceration of offenders, they support rehabilitative programs..."

The public has little interest in the conditions of the local jail. Most citizens are perfectly content to ignore the local jail, and this attitude often finds its way to the county sheriff. In other words, the sheriff is under no perceived political obligation to maintain a quality jail operation as long as the jail does not get out of control. It appears that Long's political assessment is as valid today as it was in the 1930s. Therefore, the county sheriff enters office with a commitment to actively pursue enforcement objectives, especially crime control, but with no specific corresponding obligation to provide quality detention services. We may therefore conclude that

the voting public does not automatically connect inmate rehabilitation with a reduction in crime. While a sheriff may be dedicated to general professionalism and may see the jail as a legitimate component of his responsibility, there is rarely a political mandate to persuade policy initiatives in the area of jail management or increased rehabilitation programs.

Jail policy is especially sensitive to what local administrators perceive as politically acceptable practices. Note that to some extent, state prison systems are insulated from this political sensitivity, because prison administrators are appointed rather than directly elected. To be sure, prison policy reflects public sentiment; but the manager is not directly responsible to citizens through the ballot box, as is the case with the county sheriff.

### **3. The Commitment to Crime Control**

How did public perception of crime control develop, and how did the assumption that rehabilitation may not be a legitimate component of that control come about? Herbert Packer presented his classic paradigm of criminal justice philosophy in the book *The Limits of the Criminal Sanction* (1968). According to Packer, the primary principles of the crime control model were to repress, or at least control, criminal activity throughout the justice process. This view stood in stark contrast to the rival due process model that defined the justice system as a vehicle to assure that individual rights are maintained. As a general rule, those who espouse the crime control approach advocate more police, more jails and longer sentences. In contrast, proponents of the due process model emphasize a limitation on police powers, an expansion of community sanctions, and the development of amenities for those incarcerated.

Packer's models were never meant to be mutually exclusive. One who advocates the due process model does not necessarily believe that the police should be stripped of *all* arrests powers; rather he or she believes that the powers should be subject to reasonable restraint. Likewise, one who espouses the crime control model does not or should not believe that the Bill of Rights should be abolished, but that it should be interpreted within a fairly narrow range. Reasonable people can use the paradigm to assess the relative merits of public policy within a reasonably defined set of standards. At the time of the writing, Packer noted an emerging judicial trend which emphasized the due process model by redefining the traditional powers of law enforcement. Landmark U.S. Supreme Court cases, such as *Gideon v Wainwright* and *Mapp v Ohio*, were fresh in the public forum and sent strong signals to the crime control camp that the proverbial pendulum was swinging toward the due process camp. To that extent, Packer presented a brilliant tool that prophesized a justice dichotomy in the latter quarter of the 20<sup>th</sup> Century.

Unfortunately, the debate between due process and crime control quickly entered the political arena during the 1970s and degenerated to a street fight centered on public justice policy. Instead of academic insight and thoughtful analysis as the basis for a given position, rhetoric and demagoguery became the rallying points for both camps (Walker, 1998). It was during this emotion-driven phase of modern penal development that rehabilitation seems to have been defined in the public arena as a component of the more liberal due process end of the

continuum. Although rehabilitation may theoretically and logically be construed as an attempt to change and thereby control criminal behavior (the crime control model), public attitudes seem to have associated inmate treatment with an underlying trend to increase those amenities extended to prisoners (the due process model). For example, many inmate education programs were initiated to provide minimum intellectual and coping skills necessary for one to compete in modern society and thereby avoid a criminal lifestyle. But the rhetoric of the times focused on programs that provided convicted felons the opportunity to receive a free, publicly supported higher education that was not available for the average non-criminal citizen.

Scholars have traditionally noted fundamental conflicts concerning the basic purposes of incarceration (Diiulio, Smith and Saiger, 1995; White, 1991). While many authorities list various series of universally accepted goals of corrections, they may be summarized as either punishment or crime control. Incapacitation, deterrence, isolation, rehabilitation, restitution, and re-entry into mainstream society are all designed to reduce or control crime, either present or future, and can be classed as special instances of crime control. If successful, an inmate treatment program will reduce an individual's propensity toward criminal behavior and theoretically result in a reduction of future crime.

However, some crime control advocates fail to recognize or endorse the essential principle that well-structured rehabilitation programs can be, and frequently are, tough on inmates with self-discipline being the ultimate programmatic goal. If one is able to substantially change maladaptive behavioral patterns, the result will inevitably be an increase in socially acceptable behavior, accompanied by a corresponding decrease in criminal activity. Therefore, well-structured rehabilitative efforts are indeed consistent with the crime control orientation, but they are not normally associated with the public perception of tough on crime.

Punitive correctional practice is not synonymous with Packer's concept of the crime control model; but, unfortunately, some would have us believe that all correctional efforts should be based on a philosophy of punishment. Any reasonable person would have to conclude that corrections should contain some elements of both punishment and crime control. The problem with assigning relative priority to one or more of these alternative missions is that they sometimes represent conflicting issues. The local administrator is asked, not whether rehabilitation should be a part of the jail system, but how much rehabilitation and what types of rehabilitation should be a part of the jail system. The underlying assumption is that some forms of rehabilitation enjoy some amount of success in changing the client's behavior from criminal activity. But do they?

Robert Martinson's (1974) famous "What Works? Questions and Answers about Prison Reform" article set off a fierce debate when he affirmed that *no* prison rehabilitation programs were effective. Rather than reporting the article as the conclusion of a small group of reputable scholars subject to opposition by many justice academics, the popular media ran with the story as a statement of absolute fact.

The political world rarely makes an effort to clarify or to carefully examine complicated social phenomena. In most instances, reports such as Martinson's are of little interest to the general public and go virtually unnoticed. But in this case, the public was captivated by the sound bite composed of an extension of the report's title; "What works? Nothing works!" Suddenly the crime control camp could lock on to a valid academic position, which fueled a political firestorm. Given the massive resources that had been authorized for medical model era prison programs, the public suddenly demanded increased accountability from corrections managers. Treatment programs that were defined as an extension of the crime control model were seen as irrelevant because they were perceived as ineffective across the board.

In fact, Martinson's work actually suggested that many programs were not properly applied to target groups, and that appropriate follow-up designs were not always incorporated. Further, a number of scholars, and eventually Martinson himself, (Lipton, Martinson and Wilkes, 1975; McShane and Williams, 1989; Walker, 1997) raised serious questions concerning the process of program evaluation. Some (Logan and Gaes, 1993) held that Martinson's original conclusion was essentially correct with a few exceptions.

Others, led by Daniel Glaser (1994), argued that many rehabilitation efforts do indeed work. Regardless of the insights that may or may not have been formed by "What Works", Martinson's article produced immense political fallout in opposition to the due process model of criminal justice. Let me emphasize that the popularity of the crime control model during the 1970s was certainly not the exclusive result of Martinson's article. Indeed, crime control thinking flourished as a result of numerous failures and controversies from various aspects of the due process orientation.

Riots at Attica and New Mexico, controversial court decisions, an alarming increase in violent crime rates, burgeoning prison populations, the transition of organized crime, and public reactions to a long history of permissive social programs (to name a few), all contributed to a complex political climate. But for our purposes, it seems fair to declare that Martinson's argument temporarily removed the impetus for rehabilitation efforts from the public policy crime control table. From a political perspective, to advocate any form of rehabilitation was to deny the efficacy of legitimate crime control. This position was most notable in conservative Southern states and county sheriffs rallied to support a tough on crime, no non-sense, punitive standard which automatically rejected the "mollycoddling" of prisoners through any form of rehabilitation.

During the next two decades the crime control school gained a distinct political advantage throughout the nation. The fear of increasing crime rose to the top of the political agenda for both liberals and conservatives. More prisons were built, tougher and longer sentences were enacted, discretionary judicial authority was curtailed through sentencing guidelines, and parole restriction was adopted. When the debate over crime control became a political issue as opposed to an academic discussion, the positions of elected county sheriffs as crime control advocates were cemented for generations. Even those who understood the value of



sound treatment and rehabilitative alternatives were forced to embrace a tough on crime or “lock ‘em up and throw away the key” position.

Politically conservative groups generally show less support for spending on those programs that they associate with other negative public policy initiatives (Timberlake, Rasinski and Lock, 2001). Therefore, drug rehabilitation has less support than drug enforcement because rehabilitation is often linked with the welfare state or a soft on crime policy. A local sheriff may risk alienation of a large voting block when he or she advocates increased spending on treatment programs.

Political attitudes are not subject to dramatic or instant fundamental change. Once rehabilitation was presumed anti-crime control, the likelihood of local sheriffs embracing rehabilitation was further reduced. Nowhere can the rejection of rehabilitation in favor of punishment for inmates be illustrated more dramatically for political purposes than in the case of Maricopa County (Phoenix), Arizona Sheriff Joe Arpaio. As a law and order advocate, Sheriff Joe built an enormous public favorability rating of some 85% by espousing programs which brazenly inflicted punishment on county jail inmates. *Harpers Magazine* journalist Barry Graham (2001) reported that Arpaio instituted measures to house inmates in Korean War Era tents; fed them green bologna and charged them for it, banned coffee, cigarettes, and pornography from prisoner consumption, and forced inmates to wear pink underwear. Incredibly, Sheriff Joe, in a pensive moment, confided to Graham that he sincerely wished to develop a series of educational and drug treatment programs for Maricopa County inmates (Graham, 2001). This may indicate that Arpaio might possibly have used his status as a supreme crime control advocate for political expedience.

### **Future Implications**

Our evidence (Kellar et al. 2001:61-68) indicates that Texas jail managers are not particularly concerned about the status of rehabilitation programs, either educational or drug abuse prevention. We must reiterate the fact that each of the conclusions detailed above works against the widespread establishment of rehabilitative efforts. The public perceives the primary purpose of local jails as detaining prisoners, rather than rehabilitating them. Most voters believe that county sheriffs are elected to provide a law enforcement service to the community, not to rehabilitate, and certainly not to “mollycoddle” those accused of crime. The popular crime control model of justice emphasizes the punitive and not the treatment-oriented aspect of incarceration. With these realities in mind, administrators may marginally support the concept of inmate rehabilitation, but they do not enthusiastically support the expansion of rehabilitation in a real sense. Given the current political climate and the general apathy toward jail policy, it is doubtful that any major policy shift will be generated in the near future. As long as the public equates rehabilitation with prisoner amenities (Wittenberg; 1996), no large scale policy change seems on the political horizon, even though some public opinion surveys suggest that rehabilitation is not particularly unpopular (Cullen et al.1990; Applegate et al. 1997).



Although they are relatively few in number, some jails, especially larger institutions, have developed excellent and even exemplary rehabilitation programs. Kerle (2004:165-183) reminds the reader that jail rehabilitation programs have increased dramatically during the past decade. He describes a number of detailed cases throughout the country to strengthen the point. Seiter (1998) echoes this sentiment as it relates to prisons and labels a current trend toward the development of treatment modalities as the responsibility model. For future reference, such a movement may well be in its embryonic stage; however, based on present fact, one must reasonably conclude that for each innovative inmate rehabilitation program established, several dozen jails remain without any offerings. This is especially true in smaller jails. For the foreseeable future, we must conclude that rehabilitation will probably remain a secondary priority in local jails.

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### BIOGRAPHICAL SKETCH

**Mark Kellar**, Ph. D., is an Assistant Professor of Criminal Justice at the University of Houston, Downtown. Prior to entering academia he served for 20 years as a jail administrator with the Harris County, Texas Sheriff's Department. He now teaches full time and is the author of numerous articles and editorials with emphasis on the study of local jails. Mark can be reached at (713) 221-8495 or email: [kellarm@uhd.edu](mailto:kellarm@uhd.edu).