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Police Detention Decisions for Minority Juveniles: Are they Color Blind?

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This study sought to investigate disproportionate minority representation in the juvenile justice system in a Southwestern state using a policy-capturing approach. Each of forty-seven police officer volunteers was given a booklet containing eighty-eight profiles of juvenile offenders. The profiles were constructed using nine demographic and offense variables or cues. The officers examined the profiles and decided whether or not to detain each juvenile. Regression analysis indicated a high degree of consistency of use of cues in the decisions and showed five officers in three departments used race in their detention decisions. The individual importance weights officers gave the cues also indicated that ten officers used race in their decisions. Study suggests officers could be trained to use only certain variables in decisions to detain thus avoiding the use of race and other irrelevant variables.

Many researchers, lay persons, and in particular, the federal government feel that the juvenile justice system has more than its fair share of minority juveniles. Thus in 1988, the Coalition for Juvenile Justice (Cited in Hsia & Hamparian, 1998) brought disproportionate minority confinement to national discourse through its annual report to Congress. Subsequently, Congress in 1988 amended its Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974 (Pub. L. 93-415, 42 U.S.C. 5601 et seq.) to require that states address disproportionate minority confinement (DMC) in their state plans (Hsia & Hamparian (1998).

According to Hsia and Hamparian, in 1992, further amendment of the JJDP Act elevated DMC to a core requirement tying future funding eligibility to state compliance with the provisions of the Act. The Act stipulates that states should make deliberate efforts to reduce the proportion of minority juveniles confined or detained in secure correctional facilities, detention facilities, jails, and lockups if the proportion exceeded the proportion of such groups in the general population (Hsia, 2004). According to Hsia, the JJDP Act defines minority populations as African Americans, American Indians, Asians, Pacific Islanders, and Hispanics.

Minority juveniles constitute a larger percentage of the populations of correctional facilities, detention facilities, jails, and lockups than their percentage in the general population would suggest. For instance, in 1993, a 16-state study to determine the likelihood of juveniles being incarcerated in a corrections facility before the age of 18 found that African American youth had the highest prevalence rate of all strata of the population in 15 of the 16 states that were involved in the studies (DeComo's 1993 study as cited in Hsia & Hamparian, 1998). In those studies, it was estimated that one in seven African American males would be incarcerated before the age of 18 compared with approximately one in 125 White males. More recently, in its 2003 report on the state of juvenile probation activity in Texas, the Texas Juvenile Probation Commission (TJPC) stated that 26.1 percent of the juveniles committed to the Texas Youth Commission's (TYC) residential facilities, were White compared to 31.3 percent African American and 42.0 percent Hispanic (TJPC, 2005). Those percentages contrast with the racial distribution of the state's juvenile population of 36 percent White, 23 percent African American and 44 percent Hispanic. Similarly, the 2003 Office of Juvenile Justice and Delinquency Prevention (OJJDP) census of juveniles in residential placement showed that Whites represented 38.64 percent, while African Americans represented 38.01 percent, and Hispanics represented 19.06 percent nationally (Sikmund, Sladky, & Kang, 2005). This contrasts with national population averages of 75 percent White, 12.3 percent African American, and 9 percent Hispanic (National Center for Health Statistics, 2005; US Census Bureau, 2000).

Back in 1992 the amendment of the JJDP Act on DMC stipulated that states

embark on a 5-phase ongoing program to reduce minority contact with the juvenile justice system. These five phases include, identifying the extent to which DMC exists, assessing the reasons for DMC if it exists, developing an intervention plan to address these identified reasons, evaluating the effectiveness of strategies to address DMC, and monitoring DMC trends over time (Pope, Lovell, & Hsia, 2002).

The present study was designed to investigate the second phase dealing with reasons for the existence of DMC. Studies have found that DMC exists in significant decision points of juvenile justice processing, including arrests, detention, prosecution, adjudication, transfer to adult court, and commitment to secure facilities (Bishop & Frazier, 1996; Florida Department of Juvenile Justice, 1998; Hsia & Hamparian, 1998; Menon & Jordan, 1997; Leiber, 1993; Pope, et al., 2002). Arrests of minorities have been a sore point in the juvenile justice system in terms of impacting overrepresentation of minorities. For instance, the Texas Juvenile Probation Commission reported that arrests accounted for 3.34 times the combined number of referrals received from social agencies, parents, schools, Texas Youth Commission (TYC) and others in 2003 (TJPC, 2005). Furthermore, according to TJPC, minority referrals, including arrests accounted for 68 percent of all referrals in 2003. In a study of overrepresentation of minorities in three rural counties in Texas, Rodney and Tachia (2004) found that police arrests constituted a major route of entry into the juvenile justice system for all races contributing as much as 75 percent of the African American, 92.1 percent of the Hispanic, and 79 percent of the White juveniles in the system. Nationally, arrests of juveniles accounted for 15.8 percent of 2004 arrestees, adults being 84.2 percent (FBI, 2006). Thus an investigation of

arrests of juveniles could provide some insight into the causes of DMC.

This study responds to the call (Pope, et al., 2002) that the policies of the police should be studied and that the reasons for DMC be studied (Mukoro, 2005). Consequently, the detention policies of police officers were modeled. A prime question asked was "to what extent do police officers consider race in determining whether or not to detain a juvenile offender pending further investigation into an alleged offense committed by the juvenile?" In addition, since there is disproportionate representation of minority compared with Whites, the question of racial bias arises. Thus, a further question was whether or not there were racial differences in detention decisions of police officers whereby the officers' race determined their likelihood of detaining a juvenile. Furthermore, we also wondered whether or not the gender of the officer making the decisions affected the decisions they made; and finally, we sought to know if the experiences of the officers made a difference such that more experienced officers were less likely to detain juveniles than less experienced officers.

In this study we modeled the decision policies of police officers using the linear averaging model which has proven to be quite robust for such research (Dawes & Corrigan, 1974; Goldberg, 1970). We employed Hursch, Hammond and Hursch's (1964) adaptation of Brunswik's (1956) lens model for the study of human judgment, to capture the policies of the police officers. This approach contrasts with a clinical approach which has been found to be less effective in modeling human decision processes (Meehl, 1954).

Method

This study used a policy capturing

approach based on the lens model (Brunswik, 1952, 1956) as modified for the study of human judgment by Hursch, Hammond, and Hursch (1964) to investigate the decision policies of police officers. Brunswik (1956) posited that both the subject and the environment should be representative of the population to which generalization is sought in an experiment. Representativeness means that cues should be given validities similar to those in the natural environment (Bjorkman, 2001). In the present study, variables used in the decisions of the police officers and the profiles used to present the variables were attempts at ensuring representativeness.

In the original lens model (See Fig. 1) the terminal focal variable is an organism's perception and the processes leading to it are mediated by a set of proximal variables which are attributes of the distal environmental variable or the initial focal variable. The lines between the cues and the initial focal variable are the ecological validities of the cues while the lines between the cues and the terminal focal variable represent the cue utilization of the organism. Brunswik likened this set up to a set of rays diverging from a light source and converging at another point after passing through a convex lens. In the lens model used in social judgment, the terminal focal variable is human judgment and the initial focal variable is an unknown criterion which is estimated by the judgments. If actual criterion values were available (see, e.g., Ikomi & Guion, 2000), the correlation between the criterion and the judgments represent the accuracy of the judgments or the achievement in lens model parlance. If there is no criterion of true judgments, then the accuracy of the judgments cannot be ascertained but one may use multiple regression to model the judgments as a function of the cues. In the present study, the latter was the case. In policy capturing

research the basic question is how are the judges using the information available to make the decisions required of them? Usually the analysis is idiographic and so it is necessary to have each judge conduct enough decisions over a period of time to generate enough data to be analyzed. Hence a number of vignettes constructed from the information available (variables or cues) requiring individual decisions are given each judge to evaluate.

Participants

The participants were 10 police officers each from the seven largest counties in a southwestern state. However, two counties declined to participate and of those that participated, one had only seven officers participating bringing the total to 47. The first 10 officers who volunteered to participate in the study from each of the five police departments, regardless of their race/ethnicity or gender were selected for the study. The seven counties were chosen because referrals in 2002 when compared with juvenile population figures for 2002 evidenced disproportionate minority contact (TJPC, 2005). The participants were 33 male and 12 female police officers made up of 20 White male, five Black male, eight Hispanic male, five White female, three Black female, and four Hispanic female officers. The officers ranged in age from 26 years to 52 years with a mean age of 39.25 years ($SD = 6.41$). Their professional experiences ranged from 1.42 years to 29.0 years with a mean of 14.22 years ($SD = 7.49$).

Instrument

Profiles of juvenile offenders were constructed and placed in booklets that were given to each of the police officers (see Appendix A for a sample profile). The

number of profiles constructed was based on a ratio of 10 to 1, that is, a minimum of ten profiles were constructed per cue (Ikomi, 1989). Police officers based their decisions on the cues. The cues in the profiles were selected on the basis of the literature and discussions with colleagues. The profiles were also made to reflect the racial distribution of referrals to the juvenile justice system in the state (TJPC, 2005) — 44 percent Hispanic, 32 percent White, 23 percent Black, and one percent Asian, American Indian, and Pacific Islander. Similarly, the proportion of male to female profiles was made to reflect the proportion of male to female referrals in the state as of 2003 which was 72 percent male referrals and 28 percent female referrals (TJPC, 2005). In addition, the number of profiles reflected the percentage of juveniles who have offended in the past who lived with mother, father, both parents, or step parents (Ikomi, Rodney, & McCoy, 2007). Included in the profiles booklet was a cue importance weights form (CIWF) requesting judges to rate the importance they attached to each of the cues used in their judgment, and a judge's experience questionnaire (JEQ) (see Appendix B for a sample CIWF and JEQ).

Procedure

General Instructions in the booklets provided guidance to the officers. Police officers reviewed each profile and determined, using the cues given, whether or not they would detain the juvenile pending further investigation. They were asked to do only 10 profiles every other day to avoid fatigue in the process because of the large number of profiles to be judged (Ikomi, 1989) and because police officers rarely make as many as 100 such decisions on a daily basis. Officers were given twenty days to complete their booklets and return

them to the Chiefs for onward transmission to the researchers. They were also required to fill out the CIW form and the JEQ.

Results

Linear regression analysis (Pedhazur, 1982) was used to model the judgments of the police officers using the cues as predictors and the decisions as dependents. This is because the typical lens model equation is based on linear regression and is compensatory (Hursch, Hammond, & Hursch, 1964; Tucker, 1964). The substantive research question was the extent to which officers used race in their decision to detain juvenile offenders. To answer this question it was necessary to look at the entire sample of officers in the study. Among the significant beta weights derived from the idiographic regression equations we could find only five for race from officers in three departments (see Figs 2 and 3).

The officers and their departments were: officers 16, 19, and 20 in department #2, officer 21 in department #3, and officer 48 in department #5 (see Table 2). On the other hand, an examination of the cue importance weights assigned to race showed that ten officers from four departments (i.e., 80% of the departments, or 21.28% of the officers, in this study) assigned non zero weights to race (see Figs 4 and 5). These officers and their departments were: officers 1, 3, and 6 in department #1, officers 12, 14, and 16 in department #2, officers 33, and 40 in department #4, and officers 41 and 47 in department #5 (see Table 2).

To answer the question regarding whether or not the race, gender, or professional experience of the officers had an influence on their detention decisions, another regression analysis was carried out with the detention decisions as dependents

but with race, gender, and professional experience as the predictor variables. The analysis indicated no relationship between race, gender, or professional experience and detention decisions.

Police Department #1. Individual officers' policies were determined using the cues to predict their detention decisions. Seven officers took part in the first police department. Regression analysis suggested that the cues explained an average 74% of the variance in officers' decisions to detain a juvenile in this department. The adjusted R squared varied from .58 to .86 for the seven police officers from this department, indicating that the cues did capture a significant variance in their decisions to detain. Multiple R values for these officers ranged from .83 to .93 ($M = .87$, $SD = .05$) (Table 3). In this department, for five of the officers, only two cues, "evidence" and "offense seriousness" contributed statistically significantly ($p < .05$) to the variance in the decisions. For the remaining two officers, three cues, detention history, evidence, and offense seriousness, contributed significantly for one officer and just one cue (offense seriousness) for the remaining officer in this department (See Table 2).

An examination of the cue importance weights used by these officers showed that all officers reported using more cues in arriving at their decisions than was apparent in the statistically significant beta weights. For instance, although officers 1, 3, and 6 in this department had only one, two, and three significant cues, respectively, they indicated that all cues were important in their decisions. Of the remaining four officers, three had only two significant statistical weights each, but gave non zero importance weights to at least three cues. The last officer, #5, had three significant beta weights, but gave high importance weights to five cues. Although race did not

have a significant beta weight in any of the officers' decisions, three officers gave non zero importance weights to race (Fig 1).

Police Department #2. Nine officers in the second department had adjusted R squared values of .73 to .91 which was an indication that the model captured a significant variance in their decisions. However, one of the officers in this department had a very low R squared value (.083) indicating that the model did not capture the decisions of the officer adequately. This judge (13) was therefore eliminated from further consideration in the analysis. For the rest of the officers, multiple R values ranged from .87 to .96 ($M = .91$, $SD = .03$) indicating consistency in the decisions the officers made (Table 1). A look at the beta weights shows that these judges again reported using more cues than is evidenced by their beta weights. In this department however, we see that there were more significant beta weights per judge than in the first department. For instance, one judge had four significant beta weights while four judges had three significant beta weights compared with only one judge in the first department who had three significant beta weights. An examination of the cues that were significant in this department shows that all the cues significant in the first department were also significant in this department along with three other cues, "persons lived with", "race" and "victim-suspect relationship" that were not significant in the first department.

When the use of cue importance weights is considered, we find that one officer, 19 reported using only one cue, offense seriousness, but had three significant beta weights. Officer 20 gave substantial importance weights to four cues— age, detention history, evidence, and offense seriousness while only three carried significant beta weights, evidence, race, and offense seriousness. Age and detention

history did not even attain significant beta weights. The other officers in this department had significant beta weights that were fewer than the cues that they said they considered important. For instance, officer 11 had three significant beta weights, detention history, evidence and offense seriousness while the officer gave non zero importance weights to seven cues indicating that the seven were important in various degrees to the decision to detain.

Police Department #3. The mean adjusted R squared for this department was .76 ($SD = .09$) with a range of .62 to .88 which again is an indication that the model fairly well accounted for the variance in the decisions of the officers in the department. The multiple R was moderately large, with a mean of .88 ($SD = .04$) and a range of .82 to .94 indicating that the judges were quite consistent in their decisions (Table 1). Here again, there was a similar number of significant beta weights. There was an officer with four significant beta weights and three officers with three significant beta weights while the remaining officers had two. As for the nature of the significant beta weights, they were mostly the same as in the two preceding departments with the exception that the officer who had four significant beta weights had "gender" as one of the significant cues whereas in the first two departments, gender was not a significant cue in the decisions of any of the officers. Here however, for only one officer was race significant. Victim-suspect relationship was significant for three officers while detention history was significant for two officers. The bedrock of the decisions however, seemed to be the cues "evidence" and "offense seriousness" which were significant in the decisions of eight of the ten officers in this department.

Aside from officer 26 who had two significant beta weights that corresponded to the same cues that they said were

important in their decisions to detain, and officer 30 who had the same number rated for importance as the number of significant cues, all other officers used more cues than was apparent from their statistical model. Although officer 30 had four significant beta weights, "age", "victim-suspect relationship", "evidence", and "offense seriousness" the officer's importance weights were for "victim-suspect relationship", "detention history", "evidence", and "offense seriousness".

Police Department #4. With this department as with the second department above, we had one officer whose multiple R was too low (.62) to assume that the model adequately accounted for the variance in the decisions the officer made. Thus this officer's data were removed from further inclusion in the analysis. Consequently, the mean multiple R for the remaining nine officers was .89 (SD = .04) with a range of .81 to .93 (Table 1). The mean adjusted R squared for this department was .76 (SD = .07) with a range of .62 to .84.

In this department officers had multiple significant beta weights with two officers having four significant beta weights each, and four officers having three significant beta weights. The remaining three officers had only two significant beta weights each. Here too the officers had the same significant cues as the previous departments. In addition, "parent/guardian employment status" which had not been significant in any department so far, was significant. There were no cases of officers whose significant beta weights included race. However, two officers gave non zero importance weights to race.

Examination of the importance weights assigned showed the following: detention history (70), persons lived with (40), Evidence (90), offense seriousness (100), Age (80), gender (30), victim-suspect relationship (60), race (20), and

parent/guardian employment status (50). Officer 36 gave importance weights to only two cues, evidence and offense seriousness and those were the only two cues that had significant beta weights. All the remaining officers in this department had significant betas that were fewer than cues they gave importance weights (see Tables 2 and 3).

Police Department #5. In this department, one officer's data was also eliminated from further consideration in the results because of low R squared value. The mean adjusted R squared was .78 (SD = .09) with a range of .62-.86 while the mean multiple R was .90 (SD = .04) with a range of .81 to .93 indicating a high degree of consistency in their use of the cues (Table 1). In this department there were only two officers with as many as three significant beta weights. One of them had a significant beta weight for "race" along with significant beta weights for evidence and offense seriousness. The other had a significant beta weight for "parent/guardian employment status" along with "evidence" and "offense seriousness". Five had only two significant beta weights each and these beta weights were for "evidence" and "offense seriousness" except for one officer whose beta weights were for "persons lived with" and "offense seriousness". Two officers had only one significant beta weight each and they were for "offense seriousness".

The cue importance weights analysis for this department showed a similar pattern to previous departments. Officer 42 had only one significant beta which seems to be reflected in the distribution of importance points the officer gave the cues. The one cue with a significant beta, offense seriousness, had the highest number of points at 75. The other cues had relatively much fewer points, with both "victim-suspect relationship" and "evidence" having five points each, while

“detention history” had 10 points. Most of the other officers had fewer significant betas than cues rated as important in the decisions. For instance officer 41 had only one significant beta weight but rated all cues as if they were very important in the decisions (see Tables 2 and 3).

Discussion and Conclusion

The goal of this study was to determine the policies that police officers use when they detain juveniles with a view to ensuring a fairer and more representative detention that is devoid of overrepresentation of one racial group or the other in the juvenile justice system. Specifically, we sought to determine the extent of the use of race as a factor in determining whether or not a juvenile offender should be detained. In policy capturing studies the beta weights of the cues when significant, are used as measures of the statistical importance weights the judges placed on the cues. In this study, we found that statistically obtained beta weights for race were significant in five cases of the 47 cases examined in this study. That is, 10.64% of the officers had significant beta weights for race. Thus a significant percentage of the officers considered race in making their detention decisions. We should point out that in policy capturing studies the multiple R is a measure of consistency in the use of cues for decisions (Boon & Sulsky, 1997). In this study, the multiple R values were large enough ($> .80$) to show that the officers were quite consistent in their use of the cues. There were only three cases (6.38%) where the multiple Rs were so small that they had to be discarded and not considered further in the analysis. In addition, R squared values obtained for each of the 44 remaining individuals indicated that the model explained a large proportion of the variance in the decisions

of the officers. This is an endorsement of the relevance of the cues used in this study to the decision task.

The use of cue importance weights showed that ten officers in four departments assigned more than zero importance to race in their decisions to detain. This is a significant finding in view of the fact that regression analysis indicated only five significant beta weights for race in the study.

The results also indicate that different combinations of cues were significant in the policies obtained from different departments. That seems to suggest that officers in those departments have different interdepartmental policies concerning what to consider when confronted with a decision to detain a juvenile. For instance in the first department, detention history was used in addition to evidence and offense seriousness while in the second department, persons lived with, victim suspect relationship, race and detention history were used in addition to evidence and offense seriousness. In the third police department, we find that gender, detention history, and victim-suspect relationship were used in addition to evidence and offense seriousness while in the fourth department detention history, persons lived with, victim-suspect relationship, and parent/guardian employment status were used in addition to evidence and offense seriousness.

Finally, in the fifth police department, parent/guardian employment status, detention history, race, and persons lived with were used along with evidence and offense seriousness. The existence of the use of different combinations of cues by officers in different departments to decide on detention is an indication that officers can be trained to use specified combinations of cues.

Thus, a benefit of this study is that one could train police officers to use only certain variables in their detention decisions and avoid the use of race. A major benefit derives from the knowledge gleaned from the decision processes of the officers which indicate the manner in which they used the variables. This knowledge could be used to find solutions to the problem of disproportionate minority contact to which the police contribute through their referrals to the juvenile justice system. A related benefit is the ability the regression analysis gives the researcher to model the judgments of the officers in a way that elicits the weights that they placed on each variable they used for their decisions. The researcher could show the officers the weights they gave the variables and indicate how best to weight the variables in the future. This approach has been used in airlines, manufacturing, and other domains where supervisors have been taught to better rate their subordinates. Another advantage of studying the decision processes of police officers is that it has shed some light into one of the areas that contributes in no small measure to disproportionate minority contact in the state. If the results of this study are replicated, they would suggest that police decisions are indeed partly responsible for disproportionate minority contact.

The lack of a significant relationship between race, gender, and professional experience with detention decisions was important because it eliminates the idea that some police officers base their detention decisions on their race, detaining mostly those who do not look like them.

One limitation was that the juveniles were mere paper profiles of the juveniles rather than actual human juveniles on whom such decisions are routinely taken during the course of a police officer's day. The officers examined the profiles as if they were

examining the juveniles themselves. However, this is not as realistic as having the juveniles themselves. This negative aspect is however overshadowed by the convenience of presenting the profiles to the police officers for completion at their convenience. A second limitation is that the decision task might not be the type of task that police officers normally perform (Ikomi & Guion, 2000; Mertz & Doherty, 1974). Normally, a judge or magistrate would make these kinds of detention decisions. However, we believe that using this approach has enabled us to study models of the kinds of decisions that the police officers make in their arrests of juveniles. Another limitation was the non random selection of officers for the study. Those who participated were volunteers and we know that volunteers have various biases that make them unsuitable for generalizations (Rosenthal & Rosnow, 1975). Besides, we could not determine the differences, if any, between the volunteers and those who did not as we had no data on them.

A final limitation was the use of self-report data in this study. However the collection of the cue importance weights enabled us to obtain another insight into the decision process that was different from the regression approach. It is instructive that there was only one overlap in the findings regarding the use of race. Officer 16 was the only one whose beta weight for race was significant and at the same time gave non zero importance weight to race.

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Table 1. Multiple Rs, Adjusted R Squared, and Statistically significant Cues for all 47 police officers.

Judge	R	Adjusted R ²	Significant Cues	Beta	<i>t</i>	<i>p</i>
1	.835	.664	Offense seriousness	.846	13.279	.000
2	.894	.777	Evidence	.107	2.029	.046
			Offense seriousness	.845	16.29	.000
3	.899	.787	Evidence	.257	4.965	.000
			Offense seriousness	.819	16.083	.000
4	.787	.577	Evidence	.433	5.935	.000
			Offense seriousness	.592	8.27	.000
5	.934	.857	Victim-suspect rel	-.145	-3.207	.002
			Detention history	.100	2.416	.018
			Offense seriousness	.897	21.58	.000
6	.898	.785	Evidence	.792	15.216	.000
			Offense seriousness	.333	6.524	.000
7	.861	.713	Evidence	.24	4.025	.000
			Offense seriousness	.796	13.515	.000
11	.909	.806	Detention history	.118	2.418	.017
			Evidence	.53	10.683	.000
			Offense seriousness	.655	13.496	.000
12	.886	.758	Evidence	.621	10.924	.000
			Offense seriousness	.573	10.318	.000
13	.419	.083	Offense seriousness	.268	2.547	.013
14	.874	.732	Evidence	.365	6.286	.000
			Offense seriousness	.751	13.213	.000
15	.946	.883	Person lived with	-.094	-2.516	.014
			Evidence	.179	4.70	.000
16	.925	.840	Person lived with	-.093	-2.10	.040
			Evidence	.426	9.385	.000
			Race	.095	2.148	.035
			Offense seriousness	.756	17.03	.000
17	.911	.810	Detention history	.109	2.234	.028
			Evidence	.150	3.023	.003
			Offense seriousness	.872	18.064	.000
18	.911	.811	Evidence	.337	6.889	.000
			Offense seriousness	.811	16.891	.000
19	.878	.744	Victim-Suspect Rel	.090	2.890	.005
			Race	.123	2.214	.030
			Offense seriousness	.870	15.496	.000
20	.957	.906	Evidence	.924	26.608	.000
			Race	-.070	-2.039	.045
			Offense seriousness	.190	5.570	.000
21	.864	.718	Evidence	.614	10.297	.000
			Race	-.155	-2.686	.009

Judge	R	Adjusted R ²	Significant Cues	Beta	t	p
21			Offense seriousness	.541	9.260	.000
22	.888	.764	Detention history	.152	2.85	.006
			Offense seriousness	.852	15.932	.000
23	.891	.771	Detention history	.129	2.461	.016
			Evidence	.163	3.043	.003
			Offense seriousness	.833	15.792	.000
24	.819	.634	Victim-suspect Rel	-.187	-2.604	.011
			Gender	.179	2.340	.022
			Evidence	.271	4.001	.000
			Offense seriousness	.683	10.304	.000
25	.913	.815	Evidence	.260	5.363	.000
			Offense seriousness	.833	17.663	.000
26	.913	.870	Evidence	.258	5.353	.000
			Offense seriousness	.834	17.638	.000
27	.915	.819	Victim-suspect Rel	-.633	-12.265	.000
			Offense seriousness	.587	12.514	.000
28	.870	.728	Evidence	.430	7.231	.000
			Offense seriousness	.683	11.637	.000
29	.944	.879	Evidence	-.125	-3.214	.002
			Offense seriousness	.954	24.979	.000
30	.815	.626	Victim-suspect Rel	-.371	-5.070	.000
			Evidence	.174	2.515	.014
			Offense seriousness	.633	9.316	.000
31	.624	.321	Evidence	.576	6.231	.000
32	.915	.819	Detention history	.097	2.091	.040
			Evidence	.150	3.071	.003
			Offense seriousness	.863	18.390	.000
33	.897	.783	Victim-suspect Rel	-.220	-3.948	.000
			Detention history	.118	2.323	.023
			Evidence	.130	2.483	.015
			Offense seriousness	.813	15.879	.000
34	.860	.711	Evidence	.365	6.065	.000
			Offense seriousness	.742	12.562	.000
35	.872	.734	Evidence	.204	3.526	.001
			Parent/guardian Empl	-.133	-2.097	.039
			Offense seriousness	.810	14.275	.000
36	.814	.623	Evidence	.472	6.768	.000
			Offense seriousness	.634	9.254	.000
37	.919	.826	Evidence	.310	6.632	.000
			Offense seriousness	.832	18.140	.000
38	.928	.844	Detention history	.097	2.208	.030
			Evidence	.532	11.840	.000
			Offense seriousness	.716	16.360	.000
39	.865	.720	Detention history	.116	1.983	.051
			Evidence	.677	11.244	.000

Judge	R	Adjusted R ²	Significant Cues	Beta	<i>t</i>	<i>p</i>
39			Offense seriousness	.427	7.259	.000
40	.904	.797	Detention history	.143	2.902	.039
			Persons lived with	-.101	-2.010	.048
			Evidence	.290	5.748	.000
			Offense seriousness	.795	16.041	.000
41	.926	.842	Offense seriousness	.935	21.462	.000
42	.896	.780	Offense seriousness	.909	17.649	.000
43	.814	.624	Evidence	.656	9.422	.000
			Parent/Guardian Empl	.180	2.565	.012
			Offense seriousness	.360	5.28	.000
44	.929	.846	Evidence	.133	2.999	.004
			Offense seriousness	.890	20.923	.000
45	.932	.853	Evidence	.355	8.097	.000
			Offense seriousness	.842	19.706	.000
46	.439	.096	Detention history	.264	2.436	.017
47	.849	.689	Evidence	.158	2.527	.013
			Offense seriousness	.790	12.889	.000
48	.934	.858	Evidence	.204	4.700	.000
			Race	-.133	-3.186	.002
			Offense seriousness	.907	21.535	.000
49	.858	.706	Persons lived with	.127	2.091	.040
			Offense seriousness	.808	13.501	.000
50	.927	.843	Evidence	.219	4.868	.000
			Offense seriousness	.872	19.869	.000

Table 2. Cue Importance Weight Distribution for all Officers/Judges

Judge #	Importance Weights assigned Cues
1	Age 60, Gender 50, Victim-suspect relationship 70, Detention history 80, Persons lived with 40, Evidence 90, Race 20, offense seriousness 100.
2	Age 70, Gender 40, Victim-suspect Relationship 50, Detention history 90, Persons lived with 30, Evidence 80, Parent/Guardian employment status 20, Offense seriousness 100.
3	Gender 50, Victim-suspect relationship 70, Detention history 60, Persons lived with 40, Evidence 90, Race 20, Parent/Guardian Employment status 30, Offense seriousness 100.
4	Victim-suspect relationship 80, Evidence 100, Offense seriousness 90.
5	Age 20, Victim-suspect relationship 80, Detention history 50, Persons lived with 40, Evidence 40, Offense seriousness 100
6	Age 60, Gender 30, Victim-suspect relationship 90, Detention history 70, Persons lived with 50, Evidence 100, Race 20, Parent/guardian Employment status 40, Offense seriousness 80.
7	Gender 60, Victim-suspect relationship 80, Detention history 70, Evidence 90, Offense seriousness 100.
11	Age 40, Gender 50, Victim-suspect relationship 70, Detention history 80, Persons lived with 60, Evidence 90, Offense seriousness 100.
12	Age 60, Gender 30, Victim-suspect relationship 70, Detention history 80, Persons lived with 50, Evidence 90, Race 20, Parent/Guardian employment status 40, Offense seriousness 100.
13	Offense seriousness 100
14	Age 30, Gender 40, Victim-suspect relationship 70, Detention history 80, Persons lived with 60, Evidence 100, Race 50, Parent/Guardian employment status 20, Offense seriousness 90.
15	Detention history 80, Evidence 60, Persons lived with 70, Parent/guardian employment status 20, Offense seriousness 90.
16	Age 20, Gender 20, Victim-suspect relationship 20, Detention history 20, Persons lived with 20, Race 20, Parent/guardian employment status 20, Evidence 20, Offense seriousness 20.
17	Age 30, Gender 10, Victim-suspect relationship 60, Detention history 90, Persons lived with 10, Evidence 70, Offense seriousness 100.
18	Age 60, Victim-suspect relationship 70, Detention history 80, Evidence 90, Offense seriousness 100.
19	Offense seriousness 100.
20	Age 50, Detention history 85, Evidence 100, Offense seriousness 90.
21	Age 20, Victim-suspect relationship 30, Detention history 50, Persons lived with 20, Evidence 100, Offense seriousness 100.
22	Age 60, Gender 50, Victim-suspect relationship 70, Detention history 80, Persons lived with 40, Evidence 90, Parent/guardian Employment status 30, Offense seriousness 100.
23	Age 75, Victim-suspect relationship 90, Detention history 90, Persons lived with 50, Evidence 90, Parent/guardian Employment status 45, Offense seriousness 100.

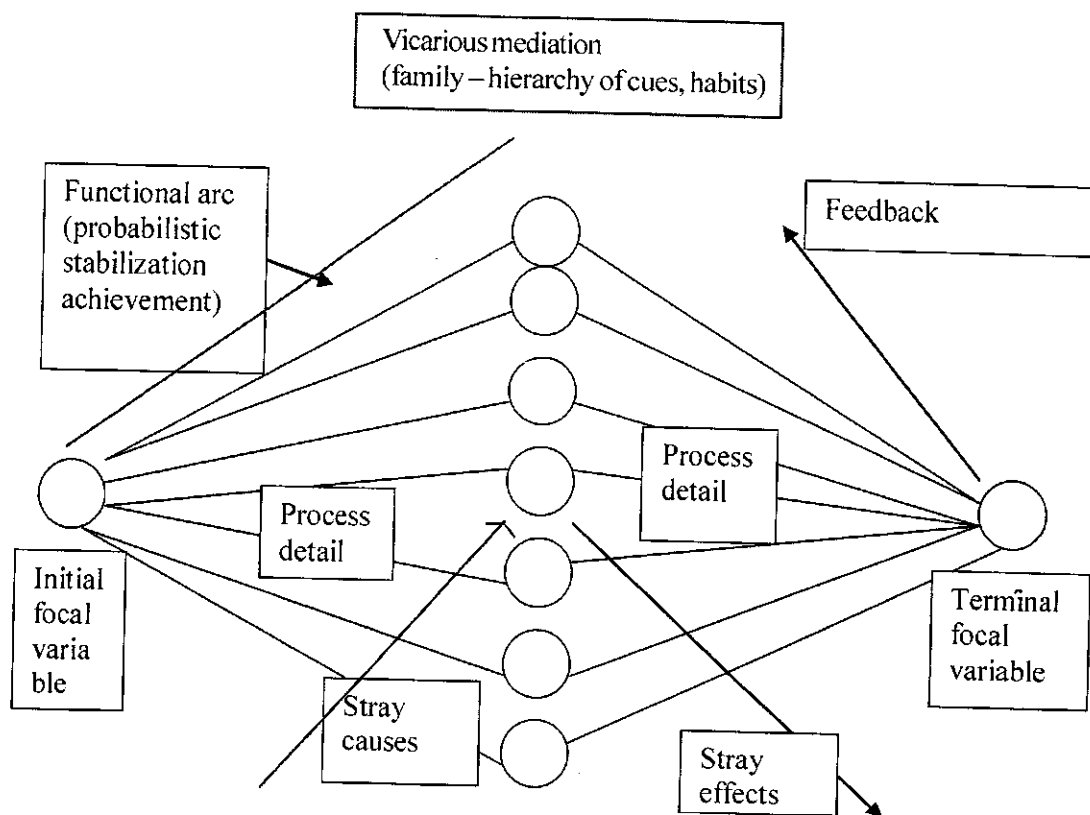
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- 24 Age 30, Victim-suspect relationship 100, Detention history 50, Persons lived with 30, Evidence 30, Offense seriousness 100.
- 25 Age 60, Gender 50, Victim-suspect relationship 90, Detention history 70, Persons lived with 20, Evidence 80, Parent/guardian Employment status 30, Offense seriousness 100.
- 26 Evidence 30, Offense seriousness 70.
- 27 Victim-suspect relationship 100, Detention history 75, Evidence 75, Offense seriousness 100.
- 28 Age 10, Victim-suspect relationship 80, Detention history 50, Evidence 90, Offense seriousness 100.
- 29 Age 50, Gender 20, Victim-suspect relationship 10, Detention history 90, Persons lived with 10, Evidence 90, Parent/guardian Employment status 60, Offense seriousness 100.
- 30 Victim-suspect relationship 80, Detention history 80, Evidence 100, Offense seriousness 90.
- 31 Evidence 100, Offense seriousness 10.
- 32 Age 10, Victim-suspect relationship 30, Detention history 40, Evidence 60, Offense seriousness 90.
- 33 Age 8, Gender 10, Victim-suspect relationship 30, Detention history 10, Persons lived with 1, Evidence 20, Race 1, Parent/guardian Employment status 1, Offense seriousness 20.
- 34 Victim-suspect relationship 80, Detention history 70, Evidence 100, Offense seriousness 90.
- 35 Victim-suspect relationship 20, Detention history 20, Persons lived with 10, Evidence 100, Offense seriousness 100.
- 36 Evidence 100, Offense seriousness 100.
- 37 Age 10, Victim-suspect relationship 10, Detention history 10, Persons lived with 10, Evidence 100, Parent/guardian Employment status 5, Offense seriousness 90.
- 38 Age 85, Gender 70, Victim-suspect relationship 80, Detention history 90, Persons lived with 80, Evidence 100, Parent/guardian Employment status 50, Offense seriousness 100.
- 39 Age 60, Gender 50, Victim-suspect relationship 70, Detention history 80, Persons lived with 40, Evidence 100, Parent/guardian Employment status 30, Offense seriousness 90.
- 40 Age 80, Gender 30, Victim-suspect relationship 60, Detention history 70, Persons lived with 40, Evidence 90, Race 20, Parent/guardian Employment status 50, Offense seriousness 100.
- 41 Age 90, Gender 50, Victim-suspect relationship 80, Detention history 50, Persons lived with 40, Evidence 70, Race 50, Parent/guardian Employment status 40, Offense seriousness 100.
- 42 Victim-suspect relationship 5, Detention history 10, Evidence 5, Offense Seriousness 75.
- 43 Age 10, Gender 10, Victim-suspect relationship 20, Detention history 30, Persons lived with 10, Evidence 90, Offense seriousness 90.
- 44 Age 50, Victim-suspect relationship 25, Persons lived with 25, Evidence 50, Parent/guardian Employment status 10, Offense seriousness 100.
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- 45 Victim-suspect relationship 70, Detention history 70, Evidence 100, Offense seriousness 100.
 - 46 No data.
 - 47 Age 50, Gender 70, Victim-suspect relationship 90, Detention history 70, Persons lived with 60, Evidence 80, Race 30, Parent/guardian Employment status 20, Offense seriousness 100.
 - 48 Detention history 50, Evidence 100, Offense seriousness 99.
 - 49 Evidence 100, Offense seriousness 100.
 - 50 Age 70, Gender 50, Victim-suspect relationship 80, Detention history 80, Persons lived with 40, Evidence 90, Offense seriousness 100.

Table 3. Mean and standard deviation of Multiple R for all five departments.

Department	Mean	Std deviation	Min	Max
1	.87	.049	.787	.934
2	.91	.029	.874	.957
3	.88	.042	.815	.944
4	.89	.036	.814	.928
5	.90	.044	.814	.934

Figure 1



Brunswik's original lens model. From Brunswik, 1952, p.20 (From Hogge, J. H. (2001). Application of the lens model to the evaluation of professional performance. In K. R. Hammond & T. R. Stewart (Eds.), *The essential Brunswik: Beginnings, explications, applications* (Fig. 29.1). New York: Oxford University Press.

Fig. 1. Police Depts. with significant beta weight for race.

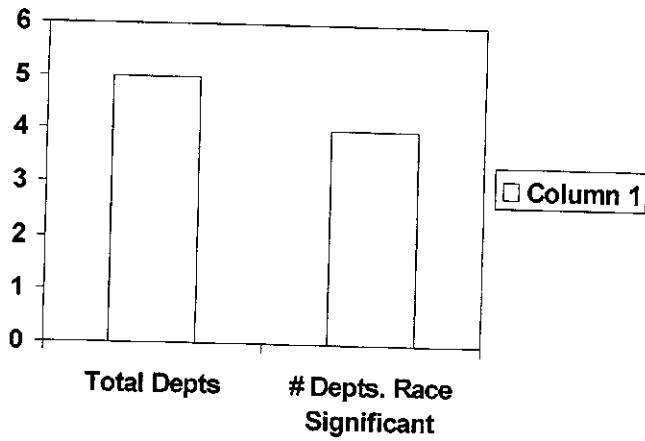


Fig 2. Proportion of Officers with Significant Beta Weights for Race

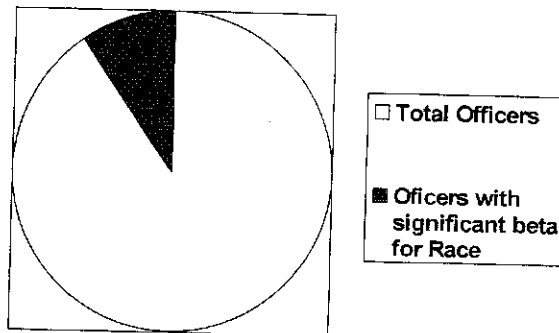


Fig 3. Police Depts. with Non Zero Importance Weights for Race

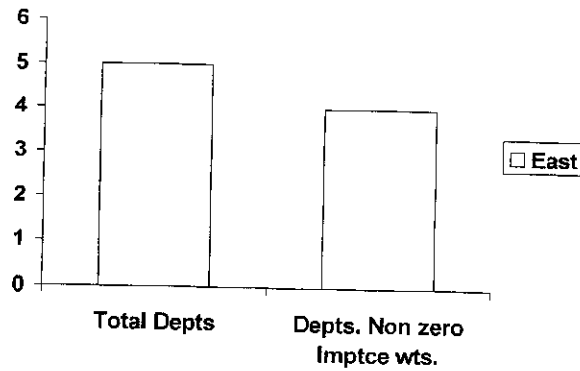
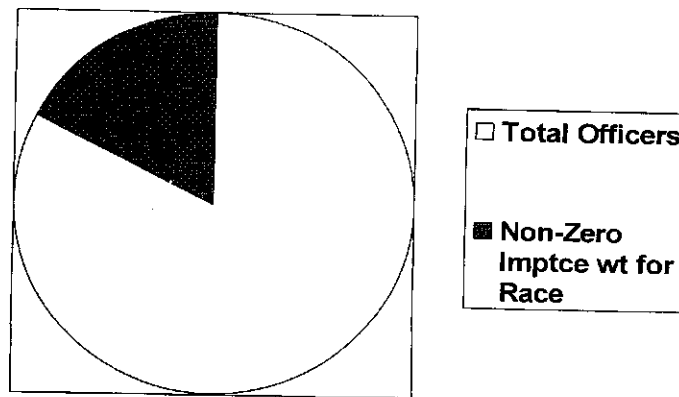


Fig. 4. Proportion of Officers with non-zero Importance weights for Race



Appendix B.

Cue Importance Weights Form

Please, take your time to rate the cues you just utilized in your decisions on the juveniles by grading each of the cues on a scale of 0 to 100. For example, if age was the most important cue in your decision to detain, then give 100. If the next most important cue was offense seriousness, then give say, 90 to offense seriousness, and so on. Be sure to assign a grade to all of the cues.

Please, grade the cues on importance below.

Cue	Importance Weight (minimum 0, maximum 100 each)
Age	
Gender	
Victim-Suspect Relationship	
Detention History	
Persons-Lived with	
Evidence	
Race	
Parent/Guardian Employment status	
Seriousness of the Offense	

August 24, 2006

Call for Police Officer Volunteers for Decision Study

The Texas Juvenile Crime Prevention Center is mandated by the Texas State Legislature (HB 1550) to conduct research pertaining to juvenile crime and delinquency. We are currently conducting a number of studies on the detention of juveniles in the State to find solutions to some of the problems connected with this area of operation in the juvenile justice system. One of our studies involves understanding the relationship among a number of variables affecting officers' decisions to detain a particular juvenile. The results of the study will be used, in part, to make recommendations to the State in regard to training needs.

In particular, we need ten officers to volunteer to participate in the study. We need each officer to review 100 hypothetical profiles of juveniles and make a decision on whether or not to detain each profiled juvenile. We also need each officer to complete a "Cue Importance" rating form and a "Judge's Experience" questionnaire. Each officer's responses to the profiles, ratings, and experience information will be kept anonymous and all data will be held in strict confidence. The overall results of the study and the reports to the State will be given to you, the officers completing the materials, and your department. We will also share with you any new training materials or decision-making tools that may be developed based on what we learn from this work.

We are fully aware that you are extremely busy with your official duties, but we do hope you will be able to help us with our work. If you would like to volunteer to participate in the study, please, pick up a booklet from the chief no later than September 15, 2006 and when done, return it to him. Please, note that September 15 is not the deadline for you to return the material, just the time you must have picked it up from the Chief. Each volunteer should leave their name and contact information when picking up the material.

Thanks in advance for volunteering.

Sincerely,

Philip A. Ikomi, Ph.D.
Research Scientist

General Instructions

We are studying juvenile offenders and their characteristics. Each page that follows is a description of a juvenile offender who has committed a criminal offense. Relying on your own experience, you are to determine whether or not the juvenile should be detained at the police facilities or left to return to his/her parents or guardians.

The case on each page represents a unique, individual person. As you make your decision about that person, consider *only* the information on that page; please do not look ahead to other cases to come or back to those you've already decided. Make and record your decision for each one before moving on, and don't go back to compare your judgments. Your judgments will be treated with strict confidentiality. You will not be identified with your responses. Your participation is strictly voluntary. You may decide not to continue with the study at any time and no questions will be asked.

Don't try to do a lot of these all at one time; you don't make judgments about several dozen juveniles in any one day, so you shouldn't try to make that many judgments at one sitting about the cases represented here. Please, follow a schedule of considering 10 cases every other day. As a reminder, every 10th case has a red "stop" mark. All judgments should be recorded and the booklet returned to your Chief no later than

Month/Day/Year

Fill out the Cue Importance Weights form and the Judge's Experience Questionnaire at the end of the profiles to complete the study.

A copy of the completed study will be sent to you on request.

Thanks for your participation!

Philip A. Ikomi, Ph.D.
Research Scientist

Informed Consent Document

Thank you for agreeing to participate in our research endeavor. We are interested in studying human judgment and decision processes. You will be evaluating 100 brief hypothetical profiles of alleged juvenile offenders and determining whether or not you would detain the juvenile pending further investigation. You will also be asked to fill out a cue importance weight form and a judge's experience questionnaire. You will have as many as twenty days to complete the evaluation.

There are no foreseeable risks or discomforts in this task. Your involvement is strictly voluntary and you may decide to discontinue your participation in the study at any time and for any reason. Your information will be strictly confidential and will not be directly linked to the responses that you make. However, your responses will be aggregated along with those of others to generate the overall results of the study. Your participation will help us determine some useful information on human judgment processes that could be of value in judgment and decision making.

If you would like further information about this study or have questions pertaining to your rights as a research participant, please, contact Dr. Philip A. Ikomi, Research Scientist, Dr. Bonnie J. Walker, Director of Research, Texas Juvenile Crime Prevention Center, or Mrs. Marcia Shelton, Chief Compliance Officer, Prairie View A & M University, Prairie View, TX 77446, Phone (936)857-4938, Fax (936)857-4941 or e-mail paikomi@pvamu.edu, bjwalker@pvamu.edu or mshelton@pvamu.edu

Participant's Informed Consent

I have been briefed about the study, I fully understand what is required of me, and understand that my information will be held in confidence. As a result, I give my informed consent to take part in the study by signing my signature below.

Name of Participant: _____

Signature of Participant: _____ Date _____

Name of Witness: _____

Signature of Witness: _____ Date _____

Author Notes: This study was funded by the Texas Juvenile Crime Prevention Center, College of Juvenile Justice and Psychology, Prairie View A & M University, Prairie View, Texas. We hereby acknowledge the assistance received from the five police Departments that participated in this study. Requests should be directed to Philip A. Ikomi, Texas JCPC, P. O. Box 159, Mail Stop 2600, Prairie View, TX 77446 or Email: <paikomi@pvamu.edu>

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