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# Quantitative and Qualitative Assessment of Interrogation Expectations

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EXPECTATIONS

QUANTITATIVE & QUALITATIVE ASSESSMENT OF INTERROGATION  
EXPECTATIONS

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A Thesis

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**Abstract**

*Interrogation expectations (IE) is a construct that suggests expectations of custodial interrogations affect suspects' Miranda waiver decisions while under interrogation. Prior research has examined IE quantitatively but there has been no prior research examining IE qualitatively. This current research conducted both a quantitative and qualitative analysis of IE using a sample of 335 participants from the United States. This research took the form of an online survey using Prolific ([www.prolific.co](http://www.prolific.co)) to recruit participants, Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)) to record data, and SPSS and Nvivo to analyze quantitative qualitative data. It was hypothesized that substantial individual variation in IE will be found in the sample, and variations are associated with demographic variables (specifically race/ethnicity, age and arrest history). Qualitative data were assessed in order to shed further light on the relationship of IE to the Miranda waiver decision and other relevant findings. Substantial individual variability in IE was found among the sample and, only age and years lived in the U.S were found to be significant predictors of IE.*

Keywords: Interrogation Expectations, Miranda Rights, Miranda waiver, confessions, interrogations

Miranda rights comprehension, the Miranda waiver decision, and false confessions are all well-researched topics in the field of forensic psychology (Rogers, et al., 2010; Smalarz et al., 2016; Johnson et al., 2015; Kassin & Gudjonsson, 2004). Interrogation Expectations research was developed by Johnson et al., (2015), and suggests that expectations of custodial interrogations affect Miranda waiver decisions. Custodial interrogations is a longstanding procedure used by law enforcement to obtain both true and false confessions, and are the second most convincing form of criminal evidence after DNA (Appleby & Kassin, 2016). The US

Supreme Court declared that Miranda warnings should be presented to suspects in custody and can only be waived “knowingly”, “voluntarily” and “intelligently” (*Miranda v. Arizona*, 1966). However, research (Leo, 1996a; Kassin, 2005) suggests that there is an ongoing conflict regarding how laws were written and how they are practiced, and that a high percentage (80%) of criminal suspects under custodial interrogation actually surrender their right to counsel and their right to remain silent. Faulty comprehension of Miranda rights (Grisso, 1980, 1981, 1998) and the “innocence effect” (Kassin, 2005; Kennard and Kassin, 2009) are two paradigms explaining the high rates of Miranda waiver decisions. The concept of IE has emerged within the past few years as another potential variable affecting the Miranda waiver decisions. Past quantitative research on IE has examined demographic and cognitive variables affecting IE scores (Johnson et al, 2015; King et al., 2015; King, 2017) but to date there has been no qualitative investigation of IE and the Miranda waiver decision. Researchers therefore aim to consider quantitative and qualitative data to further assess factors/variables affecting IE scores. Using a broader, more representative sample of the U.S., the quantitative assessment in this study therefore extends research on IE and contribute to the existing literature. Prior to presenting the specific methodology employed, the history of criminal interrogations within the United States, early research on Miranda comprehension, and results from prior IE research will be presented.

### **History of Interrogations**

As presented in Table 1 (Appendix A), Leo (2008) identified four different eras in the history of interrogations in the United States. The first era is called “Third-Degree Tactics” (legal until 1936); a euphemism for abusive treatment including intimidation, refusal of access to counsel, inflicting physical pain and harm, and illegal detention. A Report on Lawlessness in Law Enforcement was published by The Wickersham Commission in 1931 (Leo, 2008; National

Commission on Law Observance & Enforcement, 1931). This report described the widespread use of the "third degree" tactics i.e., the willful infliction of pain and suffering on criminal suspects and other types of police brutality. The landmark case of this era was the U.S. Supreme Court ruling in *Brown v. Mississippi* (1936) where the use of third-degree interrogation techniques was ruled unconstitutional. In this case, three Black sharecroppers were accused of murdering a White planter. The accused underwent severe abuse and torture by the investigating detectives. One suspect was tied to the trunk of a tree and whipped. The investigating officer stated that he would continue the whippings until the suspect confessed. After being whipped for hours with belt buckles, the other two defendants subsequently also confessed to the alleged crime. The Supreme Court unanimously decided that these confessions were coerced and therefore cannot be admitted at trial due to the violation of the Fifth and Fourteenth Amendments of the US Constitution.

The commencement of the next era; the "Era of Psychological Interrogation" was a result of the US Supreme Court's barring of physical coercion in *Brown v. Mississippi* (1936). The use of the polygraph and deceptive interrogation methods represented the era of psychological interrogation as substitutes for the third-degree methods. This era was characterized by law enforcement's development of interrogation tactics based on psychological manipulation, deception, and persuasion. Leo (2008) argues that the era of psychological interrogation is still evident today. As cited in King (2017), an illustrative case is *Haley v. Ohio* (1944). A fourteen-year-old Black teen was accused of murder and was therefore interrogated for five consecutive hours overnight. Haley then "confessed" to the crime and signed a confession written by law enforcement. This "confession" was admitted as evidence in his trial and he was subsequently convicted. The US Supreme Court recognized that although Haley was notified of his rights

before interrogation, his due process rights were violated due to the coercive nature of the overnight interrogation.

During this era, the Reid technique (Inbau & Reid, 1962) emerged as the leading method of interrogation used by law enforcement in the United States (Kozinski, 2017). Lengthy interrogations, assuming the suspect's guilt, and minimizing the severity of the crime and consequences are all techniques listed in this manual. These techniques explicitly recommend trickery and deceit as necessary measures when trying to gain criminal confessions (Inbau & Reid, 1962; Inbau et al., 2011).

The monumental mark of the era of psychological interrogation was the *Miranda v. Arizona* (1966) ruling. On March 13<sup>th</sup> 1963, Ernesto Miranda was arrested for the alleged rape of an eighteen-year-old woman based on limited evidence. Miranda signed a confession to the rape after two hours of interrogation by police officers. However, Miranda was not told of his right to counsel, he was not advised of his right to remain silent, nor was he advised that his statements during interrogation would be used against him. Miranda was subsequently sentenced to 20-30 years in prison. In 1966, the US Supreme Court ruled that prior to interrogation, suspects should be provided certain "warnings". These warnings include the right to remain silent, the right to have an attorney present during interrogation, access to free legal counsel, and knowledge that an individual's statement can be used against him/her in a court of law. Further, these warnings can only be waived knowingly, intelligently, and voluntarily (*Miranda v. Arizona*, 1966). The *Miranda* ruling was specifically critical of the Inbau & Reid (1962) *Criminal Interrogation and Confession*. Specifically, the *Miranda* ruling referred to the incommunicado atmosphere of interrogation and noted that this setting can be intimidating and can intrude on the privilege against self-incrimination. The Court concluded with the following:

“The current practice of incommunicado interrogation is at odds with one of our Nation’s most cherished principles – that the individual may not be compelled to incriminate himself. Unless adequate protective devices are employed to dispel the compulsion inherent in custodial surroundings, no statement obtained from the defendant can truly be the product of his free choice” (*Miranda*, 1966 pp. 457–458).

The Era of Innocence is the third period described by Leo (2008). This era began in the early 1990s and is based on the release of innocent persons due to DNA exoneration. The Innocence Project (2020) notes 375 individuals exonerated through DNA testing with 29% of cases involving false confessions. One such example is the case of Byron Halsey (Innocence Project, 2020; Johnson & Drucker, 2009). In 1985 in Plainfield, New Jersey Byron Halsey came home to his and his girlfriend’s apartment to find her two children missing. The bodies of a seven-year-old girl and an eight-year-old boy were later found in the basement. Along with the gruesome death of the boy (nails were driven into his skull) and girl (death by strangulation) both children had been sexually assaulted. Halsey was then interrogated for over 30 hours to which he subsequently signed a drafted confession. He was convicted and sentenced to two life sentences plus 20 years. Since 1993, Halsey was denied access to DNA testing in his case. Finally, in July 2002, New Jersey’s law granting post-conviction access to DNA testing took effect. Evidence from the crime scene was tested for DNA and the results established Halsey’s innocence and implicated the perpetrator (his neighbor, Cliff Hall) who testified for the prosecution in Halsey’s trial. Halsey spent 19 years in prison for crimes he did not commit. This new wave of DNA exonerations has influenced research on interrogation practices and false confessions and has called for mandatory recordings of interrogations (Johnson & Drucker, 2009).

The fourth era as described by Leo (2008), involves “Videotaping of Interrogations” and is aimed at preventing false confessions via coercion. In a field experiment, Kassin et al., (2014) found that the use of police coercive tactics is reduced when police are informed there will be a recording of the interrogation. Video recording of interrogations will also provide judges and juries an accurate and objective account of everything that transpired during the interrogation. However, this era is still emerging as today only 26 states mandate electronic recording of custodial interrogations (Innocence Project, 2020).

[Place Table 1 about here]

### **Early Research on Miranda Comprehension**

The *Miranda v. Arizona* (1966) ruling fueled empirical research on Miranda comprehension, processes in interrogations and other associated concepts considering the knowing, intelligent, and voluntary standard of the ruling. For example, Grisso (1980) created *Comprehension of Miranda Rights* (CMR), *Comprehension of Miranda Vocabulary* (CMV), and *Comprehension of Miranda True/False* (CMRT/F). Grisso theorized that understanding the meaning and the significance of vocabulary and phrases were the two important domains in which comprehension of Miranda occurred, and that juveniles were especially susceptible to self-incrimination due to their lack of cognitive maturity. He also created a forensic assessment tool (*Function of Rights During Interrogation: FRI*) as an extension to understanding Miranda waiver decisions (Grisso, 1980). Grisso believed that beyond understanding what Miranda actually says, understanding the function and significance of the right to counsel and the right to silence- both while under interrogation and at subsequent legal proceedings- was necessary in order to apply the warnings “knowingly”, “voluntarily”, and “intelligently”. As expected, Grisso



(1980) found that younger participants showed significantly lower comprehension of Miranda than adults of comparable intelligence.

Most of Grisso's (1980, 1981) work focused on the limited knowledge, vulnerability, and the immaturity of juveniles. He concluded that Miranda waiver decisions were largely based on inadequate comprehension of Miranda. In 1998, Grisso developed the *Instruments for Assessing Understanding and Appreciating Miranda Rights (IAUAMR; Grisso, 1998)* which consisted of the *Comprehension of Miranda Rights (CMR)*, *Comprehension of Miranda Rights–Recognition (CMR-R)*, *Comprehension of Miranda–Vocabulary (CMV)*, and the *Function of Rights During Interrogation (FRI)*. This four-part assessment instrument was developed as an elaboration of his earlier findings and extend research on Miranda comprehension. They aimed to assess the ability to understand and appreciate Miranda. Grisso concluded that Miranda comprehension differed from the capacity and ability to appreciate and apply the warnings.

Other researchers (Abramovitch et al., 1993; Abramovitch et al., 1995; Goldstein et al., 2003; Redlich et al., 2003; Viljoen et al., 2007) also studied juvenile samples with respect to Miranda comprehension, with a focus on IQ and academic achievement (Zelle et al., 2015). Everington and Fulero, (1999); Fulero and Everington, (1995, 2004); and Cooper and Zapf, (2008) focused on samples with mental deficiencies and serious psychological disorders. Greenfield et al., (2001); Helms, (2003); Rogers, Hazelwood, Sewell, Harrison, and Shuman, (2008) studied Miranda comprehension reading levels, and Rogers et al., (2011) investigated the mental functioning of defendants.

### **Critique of the Miranda Comprehension Paradigm**

Grisso's (1980, 1981, 1998) pioneering work on Miranda comprehension led to further inquiry by other researchers. For instance, Rogers et al., (2004) and Rogers and Shuman (2005)

critiqued the *IAUMAR* for a number of reasons including the absence of interrater reliability data, as well as the absence of standard of error information and validity issues (e.g., *IAUMAR* scores were not compared to legal determinations of Miranda waiver competency). In response, Grisso (2004) and Frumkin (2008) discussed the psychometric properties of the tests and maintained that the *IAUMAR* was designed to provide information by assessing a person's current ability to understand and appreciate Miranda and was not designed to specifically assess a person's competency to waive Miranda during custodial interrogation.

In 2012, Goldstein and colleagues created the *Miranda Rights Comprehension Instruments (MRCI)* which was a revision of then *IAUAMR*. This measure reworded the Miranda warnings to more appropriately represent warnings used across jurisdictions. Critiquing this measure, Frumkin and Sellbom (2013) reported that the *MCRI* was an overall improvement compared to the *IAUMAR* including the simpler language used, and the addition of a fifth Miranda warning. However, Frumkin and Selbom (2013) also noted some issues with *MRCI* including the normative sample age range. Specifically, the *MCRI* defines juveniles as up to age 19 which is unrepresentative of the juvenile justice population since the justice system usually categorizes juveniles as under the age of 18.

The *Miranda Quiz* (Rogers et al., 2010) was developed from earlier instruments developed by Rogers and his colleagues which instructs participants to respond by paraphrasing each of the Miranda warnings, and assessing advantages and disadvantages of certain warnings. Rogers et al., (2010) identified several noteworthy "misconceptions" from their responses. The Miranda ruling (*Miranda v Arizona*, 1966) asserted that:

"He must be warned prior to any questioning that he has the right to remain silent, that anything he says can be used against him in a court of law, that he has the right to the presence of

an attorney, and that if he cannot afford an attorney one will be appointed for him prior to any questioning if he so desires. Opportunity to exercise these rights must be afforded to him throughout the interrogation” (p. 479).

Thus, even when Miranda rights have been waived, they can be reasserted. However, individuals may not be aware Miranda can be asserted even after it was waived. The seven ‘misconceptions’ noted by Rogers et al., (2010) follow:

1. Right to silence: defendants interpret “right” as a choice and not a Constitutional protection. Defendants may believe silence can be used against them in court.
2. Risks of talking: defendants may be confused about retracted statements, unsigned Miranda waivers, or “off the record” statements because these are not addressed in Miranda.
3. Right to counsel: suspects may be unaware that they are allowed to meet privately with their attorneys before any interrogation.
4. Free legal services: Miranda warnings assert that legal services can be provided but does not specify that access to legal counsel is free. Suspects may not understand that neither they nor their families are responsible for the cost of legal expertise.
5. Continuing legal rights: individuals may believe that after Miranda is waived, it cannot be invoked.
6. Misperceptions about Miranda: defendants may believe that Miranda protects only the guilty and has no relevance to the innocent.
7. Police practices during pre-interrogation: suspects may not be aware that police deception is legal and may be susceptible to deceptive police tactics.

Although much of this research focuses on comprehension of Miranda Rights, a lingering assumption that these rights are honored by law enforcement during interrogations remained. This assumption goes against anecdotal data and case law findings which suggest instances where law enforcement officers violate the due process rights of vulnerable suspects (*Fare v. Michael C.*, 1979). In the absence of the entire interrogation being recorded, there is no assurance that Miranda rights are actually honored during custodial interrogation. In response to the “misconception” formulation, Johnson et al., (2015) critiqued Rogers et al., (2011) stating “without direct evidence that questioning does in fact stop when a suspect requests counsel, it is an unconfirmed assumption that such belief is a misconception” (p.25). For instance, regarding Rogers’ ‘misconception’ number one above, how do we know a defendant’s silence is not used against him or her in court? Likewise, how do we know defendants are allowed to meet privately with their lawyers before any interrogation, as suggested in Rogers ‘misconception’ number three?

IE research therefore emerged from the recognition of limitations in the Miranda comprehension paradigm and issues of due process protection during custodial interrogation. IE therefore differs from the concepts offered by Grisso and Rogers. Specifically, IE is not considered an issue of understanding Miranda language, but rather a matter of appreciating police discretion during custodial interrogation as another factor affecting the Miranda waiver decision.

A further element in the critique of the Miranda comprehension paradigm is that while suspects are making their decision to waive or assert their Miranda rights, police are actively encouraging them to surrender their rights. So, it is not comprehension in an abstract or academic sense rather, it is a judgment while under adversarial influence. Johnson et al. (2015) research

suggests that suspects may understand their Miranda rights but waive them because they do not expect that the police will comply with their rights during interrogation. As cited in Johnson et al., (2015) one case law example is the U.S. Supreme Court *Fare v. Michael C.* (1979) case. The suspect was informed of his right to counsel but was apprehensive to assert that right because of his expectations of police deception. Specifically, the suspect feared the police would provide another police officer impersonating a lawyer and so, he requested to consult with his parole officer instead. The U.S. Supreme Court subsequently ruled the request to consult with his probation officer did not protect Michael C. from self-incrimination. Michael's Miranda waiver decision was based solely on his expectations of police deceit.

In addition, police are permitted to lie and deceive suspects during custodial interrogation. Different types of police lying include lies about the strength of a case, fabricated evidence, lies about culpability, and lies about the circumstances of the interrogation. Young (1996) outlined many cases in which judicial tolerance of police lying is evident (e.g., *Lewis v. United States*, 9th Cir. 1934) and in all the cases listed, the courts have ruled that police lying was not a factor affecting voluntary confessions. Further, in the *Miranda v. Arizona* (1966) ruling, although the Supreme court acknowledged incommunicado interrogations, and as Rogers et al., (2016) explained, "the Court did not directly tackle the core issues of deceptive police practices or 'adequate protective devices' for incommunicado interrogations...in doing so, it left untouched deceptive stratagems designed to induce a confession out of trickery" (pp.491). More recent Supreme Court rulings (see *Frazier v. Cupp*, 1969; *Oregon v. Mathiason*, 1977) have explicitly allowed police deceit and implied that deception alone is not sufficient to render a confession inadmissible. The Miranda court assumed that citizens would understand their rights and lawyer up as a way to protect themselves from self-incrimination. However, that did not

happen (see Smalarz, et al., 2016). This therefore leaves room to suggest that due to known police lying and deceit, suspects may be hesitant to take Miranda warnings as reliable. In other words, suspects may not believe that their asserted rights will be honored by law enforcement officers while being interrogated. Smalarz et al., (2016) in a psychological analysis of Miranda argued that Miranda has failed in its protective function and that even adults without IQ limitations or intellectual disabilities are at risk of being coerced under pressure during interrogation.

### **Interrogation Expectations**

Johnson et al. (2015) examined IE among a sample of 280 adults from northern New Jersey. Vocabulary level, comprehension of Miranda rights, and demographic variables were assessed. IE was evaluated via quantitative assessment of subjects' responses to a series of 12 interrogation vignettes. Participants read each case vignette and indicated how they believed police will respond. Following is an example of one interrogation vignette:

Justin had been working for a construction company for five years. In the last year he had begun to drink a lot and had been showing up late. More recently he had shown up to work drunk and had been making mistakes on the job. Justin was fired. Out of anger Justin planned to set the work site on fire. 10 days later there was an arson attack at the work site and an employee was seriously hurt. Justin was picked up and questioned about the fire. After police read him his Miranda rights Justin said he no longer wanted to talk and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer (a score of 2)

- b) continue questioning Justin even though he said he did not want to talk and requested a lawyer (a score of 1)
- c) pressure Justin with threats of prolonged detention, threats of assault, or other harsh penalties (a score of 0)

Johnson et al. (2015) found that close to 20% of participants expected that police would consistently honor suspects' Miranda rights and provide a lawyer once asserted. However, the large majority of respondents (80%) showed differing degrees in their expectation of police compliance among the different vignette scenarios. The variation in IE found in the sample was associated with racial/ethnic group, reported arrest history, age, childhood neighborhood and was found to be independent of vocabulary and Miranda comprehension. The mean IE scores for Blacks ( $M=10.76$ ,  $SD=7.23$ ) were significantly lower than IE scores for Whites ( $M=16.57$ ,  $SD=7.29$ ) and Latinos ( $M=13.67$ ,  $SD=6.97$ ). There was also a negative correlation between number of arrests and IE scores. The mean IE score for those reporting two or more arrests ( $M=9.00$ ,  $SD=7.20$ ) was significantly lower than the mean IE score for those reporting no arrests ( $M=14.15$ ,  $SD=7.50$ ). In addition, lower mean IE scores were associated with inner city ( $M=11.95$ ,  $SD=7.62$ ) or urban ( $M=10.46$ ,  $SD=7.09$ ) childhood neighborhood compared to suburban ( $M=15.37$ ,  $SD=7.14$ ) or rural ( $M=17.37$ ,  $SD=7.04$ ) childhood neighborhood. In terms of age, the mean score for the third quartile (ages 28-40;  $M=10.70$ ,  $SD=8.01$ ) was significantly lower compared to the youngest quartile (age 18-20;  $M=14.38$ ,  $SD=6.76$ ).

To test whether variation in IE can be measured with a short form version of the IE vignettes (IESF-A) King, Johnson and Massey (2015) conducted a study with a NYC public college sample ( $n=298$ ). In this sample 31.2% of respondents expected police would consistently provide a lawyer when suspects requested counsel. Results from this study found the association

in IE scores were predicted by language spoken at home (i.e., only English compared to English and/or another Language) and English as a first language. Those who spoke only English had a significantly lower total score ( $M= 7.46, SD= 3.73$ ) than those who spoke another language ( $M= 8.50, SD= 3.25$ ). No effect for age, race/ethnicity or arrest history was found.

Subsequently, King (2017) conducted additional research with the short form version of the IE vignettes (IESF-B) using a sample of adults from Brooklyn ( $n=258$ ). Consistent with prior findings, there was substantial variability in IE scores with 20.5% of participants expecting police to routinely stop questioning when suspects requested counsel. Results specifically indicated variation in IE was predicted by number of previous arrests, age, and time in the U.S. Age was a significant predictor of IE scores where the third quartile (ages 30-41) endorsed the lowest expectations ( $M=6.64, SD=3.56$ ) and the fourth quartile (ages 42-69) scored the highest ( $M=7.13, SD=3.894$ ). Years in the US was also a significant predictor of IE. Those in the first quartile (0-19) exhibited higher expectations ( $M=8.31, SD= 3.56$ ) and the third quartile (26-36) exhibited the lowest ( $M=5.72, SD=3.70$ ). In terms of number of arrests, those who had never been arrested ( $M=7.09, SD=3.85$ ) expressed higher expectations of police compliance than those who had been arrested at least once ( $M=6.3, SD=3.67$ ). These findings therefore suggest that *Miranda* waiver decision may be affected by the varying expectations of police behavior during custodial interrogation.

### **Critique of IE**

Two recent publications by Rogers' research group have referenced IE findings on the one hand raising the question of media coverage of police behaviors and on the other hand, acknowledging the importance of IE in examining the public's understanding of Miranda rights. Citing law enforcement survey data indicating reliance on Miranda procedure is infrequent,



Rogers, Henry et al., (2016) suggest the Johnson et al. (2015) IE findings are an artifact of the misrepresentation of interrogation in police dramas. Specifically, Rogers et al. (2016, pg. 200) implied that “saturated media coverage” about police abuse affected IE results. Nevertheless, Rogers, Sharf et al., 2016 recognized the results of IE research were relevant in understanding the Miranda waiver process and the consideration of the need for “enhanced rights”. Other researchers (Kennard & Kassin, 2009; Cleary & Warner, 2017; Bull & Blandon-Gitlin, 2019; Rendall & MacMahon, 2020) have cited early IE research (Johnson et al., 2015) therefore supporting the relevance of IE as a construct in the study of Miranda rights waiver decisions.

### **Race/ethnicity and Interrogation**

Many scholars have focused their research on the relationship between race/ethnicity and law enforcement. Specifically, when examining individual variables, race played the most influential role in negative views of the police besides age (Decker, 1981; Brown & Benedict, 2002; Weitzer & Tuch, 2004). It is possible that this is due to U.S. race/ethnic minorities feeling they are more susceptible to procedural injustices compared to Whites (Woolard et al., 2008). Research shows that people of color are more likely to harbor negative perceptions and skeptical views of police compared to Whites and are twice as likely to believe routine police behaviors to be hostile and excessive (Webb & Marshall, 1995; Hurwitz & Peffley, 2005; Weitzer et al., 2008; Johnson, 2008; Peck, 2015; Flexon et al., 2015; Lai & Zhao, 2016; Nadal et al., 2017). In addition, people of color described feelings of dehumanization in their experiences with police contact (Nordberg et al., 2016). In terms of contextual variables, neighborhood type was one of the most influencing factors in negative attitudes towards police. Specifically, citizens of urban neighborhoods held more negative attitudes toward police (Decker, 1981) and urban neighborhoods are more likely to be viewed as suspicious by police, therefore having higher

levels of police involvement (Leiber et al., 1998; Hurst et al., 2000; Brunson & Weitzer, 2009). Within the Miranda comprehension paradigm, Grisso's (1981) original research sample found that Blacks scored lower on Miranda comprehension than their White counterparts, even with controls for IQ. In addition, Goldstein, et al., (2003) studying juvenile samples on Miranda comprehension found that overall African American youth scored significantly higher on Miranda rights comprehension than did Latino youth, ethnicity was a moderator between the number of arrests and overall Miranda comprehension, and ethnicity also moderated the relationship between Miranda comprehension and the number of police detainments. Surprisingly, the more detainments reported by Latino youth in which Miranda was given, the worse their Miranda comprehension was. Johnson et al., (2015) referencing Johnson (2003) stated "the score difference could be the result of a difference in perspective, context, or expectations rather than comprehension" (pg.18).

Kennard and Kassir (2009) investigated the relationship between race, trust in police and Miranda waiver rates in a study designed to replicate 'the innocence effect' in the Miranda waiver process. That is, prior research by Kassir (2004) found that innocent research participants were more likely to waive their Miranda rights than those who committed a mock crime. However, Kennard & Kassir (2009) found that while Black and White participants waived their Miranda rights at similar rates, the innocence effect obtained in the White sample was not found among Black participants. In this study, Kennard & Kassir used a brief (four vignette) version of the IE measure and found that Black suspects exhibited lower expectations of police compliance with Miranda than Whites.

As reported above, Johnson et al., (2015) found IE scores to be associated with race/ethnicity with Black participants exhibiting significantly lower expectations of police

compliance with Miranda than White participants. However, a subsequent data collection (King et al., 2015) using a short-form, six vignette, version of the IE vignettes (IESF-A) with a college student sample found a variable distribution of IE scores but no association with race/ethnicity. Also, an additional data collection with an adult community sample (King et al, 2017), found no association with self-identified race/ethnicity. As summarized in Table 2 (Appendix B), the three IE data collections have found substantial variation in IE scores but the associations with variables were inconsistent. That is, the findings regarding race/ethnicity, age, arrest history, language spoken at home, English as a first language and years in the U.S. varied in the three data collections.

[Place table 2 about here]

Thus, the prior IE research relied on quantitative analysis and found that suspects have varied expectations of police behavior during interrogation, which may influence the *Miranda* waiver decision. The current study will use quantitative analysis along with qualitative assessment of open-ended responses to the IE vignettes, to further examine expectations of police conduct during custodial interrogation and to further test the variation in IE associated with race/ethnicity and other demographic variables. The hypotheses therefore come in two parts:

- 1- Substantial individual variation in IE will be found in the sample
- 2- Variations are associated with demographic variables, specifically race/ethnicity, age and arrest history:
  - Self-identified African American (Black/Afro Caribbean) identity is associated with lower IE scores
  - Negative correlation between number of arrests and IE scores

- Curvilinear relationship between age & IE scores with intermediate age associated with lowest IE scores

Although findings for the association between age and IE scores have not been consistent in prior IE research (possibly due to sample differences), the current study predicts an effect of age on IE as a curvilinear relationship. Qualitative data will more broadly assess participants' responses to the IE vignettes. Specifically, qualitative data will further assess participants' perception of police behavior and identify factors related to their expectations of police behavior.

## **Method**

### **Design**

This research utilized procedures similar to the initial IE research (Johnson et al, 2015) that is using the 12-item IE vignettes and demographic questions. A survey research format was used to record data via an online program (Qualtrics) and data were coded into SPSS for quantitative analysis. Participants were recruited via Prolific ([www.prolific.co](http://www.prolific.co)) platform (see Appendix C for participants' recruitment notice). Differing from previous IE research, to supplement the quantitative findings, a qualitative survey was presented to participants to further assess expectations of police behavior. The entire survey took an average of 23 minutes to complete.

The survey was presented in the following order: an informed consent (Appendix D), instructions for participation and the IE vignettes (Appendix E), an open-ended response survey (Appendix F) and a demographic data (Appendix G). This methodology therefore differs from prior IE studies. As described below, data from the qualitative survey were coded using NVivo software.

Data were stored on a personal computer for analysis. No identifying information was collected from the participants. Specifically, Qualtrics provided an “anonymous link” to prevent participants’ personal information from being recorded. In addition, the “anonymize responses” setting was activated to prevent participants’ IP addresses and location from being recorded. This ensured complete anonymity while taking this survey. After sample size was achieved, the survey was closed using a feature setting on Qualtrics to expire the anonymous link.

**Participants:**

Participants included a sample of 340 adults from the United States. Using a comparison approach, an a priori power analysis was conducted using G\*Power3.1 (Faul et al., 2009) to conduct a linear multiple regression using a small effect size (0.10) and an alpha of .05. It determined that a total sample of 262 participants was required to achieve a power of 0.95. After inflating sample size to account for attrition, targeted sample size was determined to be  $n=340$ . There were no restrictions on demographic factors for participants other than age and ability to access and use an online platform. Participants under the age of 18 were ineligible for survey participation. The online platform prolific ([www.prolific.co](http://www.prolific.co)) was used for participant recruitment (Appendix C) and Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)) was used to record data from each participant. Specifically, the research study with a link to Qualtrics was published on [www.prolific.com](http://www.prolific.com) which allowed research participants from across the United States access to this study.

A total of 369 responses were collected via Prolific ([www.prolific.co](http://www.prolific.co)) of which 30 were not used (18 ‘returned’<sup>1</sup> and 12 ‘timed out’<sup>2</sup> submissions). Two pilot surveys were run prior to collecting the final dataset. These pilot studies were conducted to ensure the survey was running appropriately on Prolific. Only one pilot participant was from the US and so, this study response

was included in the final dataset. The resulting 339 submissions plus one US pilot submission comprised the  $n=340$  dataset. All participants were U.S. residents and over the age of 18.

The resulting dataset was then examined for responses which were only partially completed or completed “exceptionally fast”. It was calculated that the average time to complete the survey was 23 minutes, 14 seconds. Any responses that were completed in less than 1.5 standard deviations below the average time (five minutes, three seconds) were considered “exceptionally fast”. In addition, responses containing failed attention check answers and typos that would disrupt data analysis were removed from the dataset. As a result, five responses were removed for the following reasons: three responses had numerical typos regarding age and time lived in the US (e.g., aged 50, lived in US 51 years; aged 10), one was eliminated for having a failed attention check response (endorsing “winter”), and one was eliminated for inserting the word “Washington” for “years lived in the US”. After these exclusions, the final dataset was  $N=335$ . Participants were compensated \$3.50 for their time. Partial compensation (50%) was provided to participants who timed-out their responses.

### **Measures and Procedures**

*IE vignettes*- After obtaining informed consent and providing instructions, the IE vignettes used in Johnson et al. (2015) were presented to each participant. Each of the 12 vignettes describes the police questioning of a male suspect (without any reference to the suspect’s ethnicity, age or other demographics).

In each scenario, the suspect requests to speak with a lawyer. The participant was then asked whether they expect that the police would (a) comply with *Miranda* and provide a lawyer (a score of 2); (b) continue questioning the suspect (a score of 1); or (c) pressure the suspect with threats of prolonged detention, threats of assault, or other harsh penalties (a score of 0).

Participants' response to each vignette ranged from 0-2, therefore the sum of all responses results in the total IE score which can range from zero to 24 (Appendix E). In order to detect and minimize response bias, an attention check question "what season is July in?" was presented after the first 6 vignettes.

*Open-ended Response Survey-* The second measure required participants to share their thoughts, ideas, and reasoning for their IE vignette responses. A series of 12 open ended questions were presented to each participant, such as "Did you consider or think about the race or ethnicity of the suspect in each case? Please explain" and "What do you think about police lying to suspects? Please explain" (Appendix F).

*Demographic Survey-* The final measure was a self-report demographic survey that asked each participant to provide information about their age, gender, race/ethnic identity, years lived in the United States, arrest history and other demographic queries (see Appendix G).

## **Procedures**

Participants were presented with an informed consent, followed by instructions for participation. Those who choose to participate in this study firstly completed the 12 IE vignettes, then answered open-ended questions, and finally responded to demographic questions.

## **Quantitative Data Analysis**

Quantitative data analysis methods were similar to those used in the initial IE study (Johnson et al. 2015). Data were analyzed using descriptive and regression analyses. A codebook was created (Table 3, see Appendix H), and each survey response option was given a numeric code used to identify the response during data entry. The answers for each item for each participant was entered into SPSS for statistical analysis, and IE vignette total was entered as the dependent variable.

Frequency analyses were conducted to assess IE mean score distribution and IE scores by each demographic variable in order to gain an overall idea of sample statistics. Univariate analyses along with correlations were then run to assess relationships and predictor variables among each demographic variable and IE scores. Age and years in the U.S. were initially entered as continuous variables and were later converted to categorical variables in order to gain a more comprehensive analysis of these variables. After conducting univariate and correlation analyses to determine the effect of each demographic variable on IE, a multiple regression analysis was conducted to assess the relation of multiple independent variables and IE scores. The following variables were included in the regression model: race/ethnicity, age, gender, years in the US, employment status, student status, highest level of education, highest level of parent education, arrest history, childhood neighborhood, and English as a first language. Finally, a bivariate analysis was conducted to compare participants with an IE score of 24 with the remainder of the sample.

### **Qualitative Data Analysis**

QSR International's Nvivo software program (release 1.4, 2021) was used in qualitative analysis to manage and interpret data. Using a thematic methodology (Braun & Clarke, 2006), participant data were first organized into "cases" by uploading an excel sheet directly into Nvivo. A case classification "*participant demographics*" was created to assign demographic attributes and their values to each participant in Nvivo. The variables "age" and "years in the US" were coded as quartiles. As presented in Table 4 (Appendix I), each of the 12 qualitative questions comprised a domain. These 12 domains were then grouped into four categories (A to D) based on the primary focus of each domain. For example, Category "A" was titled "Perception of Study Presentation" and included questions 1, 11, and 12 which examined participants thoughts



about the survey. Category “D” was titled “Race/ethnicity” and included questions 7, 8, and 9 which examined assumptions about the race/ethnicity of the suspects in the case scenarios.

After domains and categories were created, themes were identified to correspond to the participants’ responses. Some responses provided two or more references or ideas and so, they were coded into more than one theme. For example, when asked “which factor served the greatest influence for your answers in this survey?”, one participant responded: “severity of crime as well as media representation of interrogation” (*reference 45*). Therefore, a reference for “severity of the crime” was coded into the “crime” theme, and a reference for “media representation of interrogation” was coded into the “TV/Media” theme. Responses which were difficult to interpret or obscure were coded into a “cannot categorize” theme for each domain (see table 5, Appendix J for examples). Thus, every reference from the totality of all the participant responses, were coded into a theme and accounted for numerically.

[Place Table 4 about here]

### **Quantitative Results**

The final secured sample ( $N=335$ ) was diverse. Gender differentiation was unremarkable (51.6% of participants identified as female, 46.9% identified as male, and 1.5% identified as “other”). The majority of the sample (66.9%) identified as White/European descent, while 14.3% identified as Black/African American, 9.6% as Asian, 5.4% as LatinX, and 3.9% as “other”. The mean age was 45.69 ( $SD = 16.38$ ) ranging from 18-81years. Only 11.6% of the sample were students of which 6.6% were full-time undergraduates. Sixty-three percent (63%) of the sample were employed, and 45.1% of these worked full-time.

The sample was also diverse with regard to attained educational level. Forty percent (40.6%) of participants completed Associate’s degree and less than 1% earned less than a high

school degree. Twenty-nine percent of participants indicated their parents' highest level of education was an Associates' or Bachelor's degree with over 6% indicating their parents' highest level of education was less than a high school degree. Participants reported being from a range of different neighborhoods: 55% suburban, 21% urban, 17% rural, and 6% inner-city. The majority of the sample (76.1%) reported no arrests during adolescence or adulthood, while 6.3% of the sample reported having at least 2 arrests in their lifetime. Ninety-six percent (96%) of participants reported having English as their first language and the mean number of years lived in the U.S. was 44.39 ( $SD=16.80$ ).

### **IE Mean Score Distribution**

IE scores ranged from 0-24 ( $M=16.02$ ,  $SD=6.58$ .) The scores approximated a normal distribution; however, there was a pronounced spike at the modal score (24) indicating 26.9% of the participants expected the police to adhere to Miranda protections in every instance (see Figure 1, Appendix K).

[Place Figure 1 about here]

### **Univariate Analyses and Correlations**

Among the several independent variables only age and years in the U.S. were significantly correlated to IE scores. More specifically, a significant correlation between age and IE scores was found ( $r = .334$ ,  $p < .001$ ). The direction of the relationship was positive (see Figure 2, Appendix L), but the magnitude of the relationship was weak. A regression analysis showed that age contributed to 11.2% of the variance found in IE ( $R^2=.112$ ).

[Place Figure 2 about here]

Similar to the finding for age, there was also a statistically significant correlation between years lived in the U.S. and IE scores ( $r =.332$ ,  $p < .001$ ). The direction of the relationship was positive

(see Figure 3, Appendix ), and the magnitude of the relationship was weak. A regression analysis showed that years in the U.S. accounted for 11.0% of the variance found in IE ( $R^2 = .11$ ).

[Place Figure 3 about here]

In order to further assess age and years in the U.S. and their association to IE score, these two continuous variables were converted into categorical variables by grouping them into equal percentiles (quartiles, 25% in each group) using visual binning. This was done to offer a more comprehensive analysis of age and years in the U.S. by specifically assessing which age groups exhibited the highest and lowest IE scores. As reported in Table 6 (Appendix N), a one-way ANOVA further supported that age was significantly associated to IE scores [ $F(3, 331) = 12.46, p < 0.001$ ]. Participants in the first age quartile (aged 32 and under) exhibited the lowest IE scores ( $M=13.16, SD=5.50$ ) compared to people in the fourth quartile (61 and older) who exhibited the highest IE scores ( $M=18.61, SD=6.29$ ). In regard to years in the U.S., results from a one-way ANOVA showed that IE scores also significantly differed depending on the years in the U.S. [ $F(3, 331) = 11.93, p < 0.001$ ]. Participants in the first quartile who lived in the U.S. 30 years or less had the lowest IE scores ( $M=13.48, SD=5.82$ ) compared to participants in the fourth quartile who lived in the U.S. at least 60 years ( $M=18.95, SD=6.05$ ; see Table 6, Appendix N). In addition, age and years in the U.S. were significantly correlated to each other ( $r = .947, p < .001$ ).

[Place Table 6 about here]

As presented in Table 7 (Appendix O), there were no significant differences in IE scores associated with other hypothesized variables (such as race and arrest history). The mean scores by race/ethnicity differed slightly (means of 14.50, 15.89, 16.43, 15.72, and 15.46, for Blacks, Whites, and LatinX, Asian, and “other” respectively), and these differences were not statistically significant [ $F(4, 330) = 0.89, p = 0.467$ ]. Due to the small representation of African American

participants in the sample (14.3%) all other than-White participants were grouped to further assess the association of race/ethnicity and IE scores. Grouping the other than White participants together, they represented 30% of the entire sample. The mean IE score for Whites was 16.43 ( $SD=6.67$ ) while the mean IE score for all other than Whites was 15.19 ( $SD=6.35$ ). Results from an ANOVA showed that there were no significant differences between these groups on IE scores [ $F(1, 333) = 2.63, p = 0.105$ ].

Likewise, with regard to arrest history, ANOVA revealed no significant difference in IE score [ $F(3, 331) = 0.485, p = 0.693$ ] when comparing those with one arrest ( $M=14.82, SD=5.31$ ) with those without a history of arrest ( $M=16.20, SD=6.71$ ). Further, results from a Spearman rho correlation showed no statistically significant correlation between arrest history and IE ( $r_s = -.04, p = .470$ ).

There were also no significant differences in IE scores associated with the other demographic variables such as gender, level of education completed by participants nor their parents, childhood neighborhood, student status, employment status, and English as first language. These data are presented in Table 6 below:

[Place Table 7 about here]

### **Multiple Regression Analysis**

A multiple regression was run to further predict IE scores from the assessed independent variables (race/ethnicity, gender, age, years lived in the US, number of arrests, highest level of education completed, highest level of education completed by either parent, employment status, student status, English as first language and childhood neighborhood). The model was significant ( $F(11, 323) = 4.149, p < 0.01$ ) accounting for 12.4% of the variance ( $R^2=.124$ ). However, due to high multicollinearity among the independent variables (specifically age and years in the US),

there were no statistically significant predictors of IE. In response, a hierarchical regression using a step-wise method was conducted to more accurately assess multiple predictors of IE (See figure 4). This was done by holding age and years in the U.S. constant. The variables (age, years in the US, race/ethnicity, arrest history, childhood neighborhood, and English as first language) that were found to be significant predictors of IE in at least one prior empirical examination (Johnson et al, 2015; King et al., 2015; King, 2017) were entered into the regression model. This model was statistically significant  $F(6, 328) = 7.383, p < .001$  and it accounted for 11.9% of the total variance in IE scores ( $R^2=0.119$ , adjusted  $R^2=.103$ ). The standard error was high (6.24) therefore suggesting low predictability. As presented in Table 8 (Appendix P), the first model in the regression excluded years in the U.S. As a result, only age resulted as a significant predictor of IE ( $B=1.35, t(329)=6.44, p < .001$ ). In the second model, when years in the US was added, no predictors resulted in significance. In the final model, age was removed and so, years in the U.S. resulted as the only significant predictor of IE ( $B= .136 t(329) = 6.533, p < .001$ ). Contrary to what was hypothesized, race was not a significant predictor in the model ( $B= .224 t(328)= .654, p =.513$ ), and arrest history was also not a significant predictor of IE ( $B= -.346 t(328)= -.861, p =.390$ ).

[Place Table 8 about here]

### **Bivariate Analysis**

Bivariate analyses were run to compare those with the IE ceiling score of 24 (26% of the sample) versus those with scores of 0 to 23 (the remainder of the sample). Participants who had a score of 24 were more likely to be 61 or older [41.1% compared to 17.6% of those whose total scores ranged from 0-23;  $X^2(3, N=335) = 29.04, p < .001$ ]; to have lived in the US for at least 60 years [41.1% compared to 18.4% of those whose IE scores ranged from 0-23;  $X^2(3,$

$N=335$ )=24.40,  $p<.001$ ]; and have received post-bachelor training [37.8% compared to 21.6% of those whose total scores ranged from 0-23,  $X^2(2, N=335)=11.97, p=0.18$ ].

### **Qualitative Findings**

As reported above, twelve open ended questions were posed to the participants to further assess their expectations of police behaviors. Each of the 12 queries reflected a domain and the domains were grouped into four categories. The data from this qualitative assessment are reported below and summarized in Table 9 (see also Appendix Q).

#### **Category A: Perception of the Study Presentation**

This category contained three domains which referred to participant's thoughts about the study presentation, thoughts about the purpose of the study and any issues or concerns participants had while responding to the survey.

##### ***Thoughts about IE vignettes***

Within this domain, two themes emerged: "positive" responses and "negative" responses. A total of 339 references were coded into these two themes, while five were coded into the "cannot categorize" theme. Approximately 77.28% responses were coded in the "positive" theme which represented any positive feedback given about the vignettes. Participants mostly found the survey to be interesting and easy to read:

*"I found them to be somewhat interesting. Each provided some nuance about a case that might make it more complex than what you might expect from a case. I like reading about the justice system. I was trying to get in the head of the interrogating officer and see how he would act" (reference 60).*

In the “negative” theme, 22.71% references were coded that mentioned some type of negative thoughts about the vignettes. Some participants found it to be quite repetitive while others found it be quite boring. For example, reference 3 stated:

*“They became repetitive after a while. The answers are inherently subjective so somewhat difficult to choose between, and not enough information (e.g. race of accused/victim, etc) was provided to ascertain the most likely police response”.*

### ***Purpose of the Study***

Six themes emerged from this domain (“perception of police behavior”, “race and law enforcement”, “differences among respondents”, “biases, “guilt/innocence of suspect”, do not know/unsure”). A total of 305 references were coded into these themes and 31 responses were coded into the “cannot categorize” theme. Over half (56.39%) of all references thought that the purpose of this study was to assess participant’s perception of police behaviors:

*“I think they survey investigator may have been trying to determine how people view police treatment of people in different situations” (reference 25).*

Approximately equal proportions thought the purpose of the study was to assess race and law enforcement (12.45%):

*“How police officers treat people depending on your race” (reference 3)*

or were genuinely unsure of its purpose (12.78%):

*“I’m honestly not sure. While the crimes were different, the options and police description was (sic) the same. I’m not sure what could be determined” (reference 15)*

Other participants thought that the purpose of the survey was to assess differences among respondents (8.85%) or that it was about biases, (7.54%) or assessing the guilt of the suspect in each scenario (1.96%).

### *Study Issues or Concerns*

Three themes emerged from this domain (“no issues”, “have an issue”, and “typo”). A total of 330 responses were collected and 329 references were coded into these themes. Only one response was coded into “cannot categorize” theme. The majority (82.9%) of respondents had no issues or concerns about the survey. Over 10% mentioned having an issue ranging from wanting more information on the suspects and case scenarios, to thoughts generated while taking the survey. For example, one participant stated:

*“The stories are a little bit too vague to come up with a good guess of how the police are going to behave. I found myself selecting option 2 for almost every question, just because I found myself defaulting to how I think police behave in the "average" situation where a suspect has requested a lawyer” (reference 3).*

Another participant stated:

*“Wondering if innocence until guilt is proven can really be true” (reference 17)*

Just under 7% (see Table 8) of participants mentioned that there was a typo with one of the vignettes in the survey. The second vignette described the arrest of a suspect by the name of “Skip” but his name was mentioned as “Tom” in the answer key. Some participants thought it was a trick while most others recognized that it was a typo:

*“There was one question that asked about Skip but then mentioned Tom in the answers. I read it wondering if it was a trick, but I think it was a typo” (reference 15)*

### **Category B: Responding to the Survey**

This category is comprised of two domains which represent participants’ manner of responding to the survey. It includes participants’ influences for their expectations and whether they responded appropriately to the study.



***Greatest Influence (for expectations)***

Of the total 335 responses that were collected, 387 references were coded into themes TV/Media, Crime, Knowledge, Experience, History, Content Other Than Crime, and Political Climate. Thirty responses were coded into the “cannot categorize” theme. The most frequently cited theme was TV/Media as the greatest influence for their responses to the IE vignettes (25.83%). Responses coded into TV/Media included documentaries, fictional shows, news media, movies, and interrogation videos found on the internet. For example, one participant stated:

*“I have followed some crime and interactions between police and suspects in the news. I have seen a lot of movies and TV shows, but I don't think they reliably portray reality”*  
(reference 31)

Different aspects of the crime described in the IE vignettes accounted for 23.51% of all references coded. For example, these references included”

the severity of the crime:

*“I think the more severe the crime, with injuries, the more likely it is the cops would continue trying to get answers before calling a lawyer”* (reference 18)

the nature of the crime:

*“The greatest factor was a violent crime vs a non violent crime. I believe the police will act in more of a hurry in violent crimes, and thus, be more willing to break the law”*  
(reference 5)

amount of evidence available and the assumed innocence or guilt of the suspect:

*“incriminating evidence found (such as fingerprints or bodily harm) that undeniably, without a reasonable doubt, linked the person in question to the crime”* (reference 21)

Having some type of general knowledge about police suspect encounters derived from reading, education, or work experience accounted for 21.96% of the references. For example, one participant stated:

*“I have friends who are lawyers and also I’ve read plenty of case studies about police interactions to know how different factors influence how a police interrogation can go”*  
(reference 12)

Other themes included personal and familial experiences, history of relations between suspects and police, some content of the scenarios other than crime (such as the suspect asserting their rights), as well as the current political climate (see Table 7).

***Would do or Should do:***

This domain assessed whether participants’ responses reflected what they thought the police should do in each case, or whether their responses reflected what they thought the police would do, given each case. Of 335 responses collected, 311 references were coded into the “would do”, “should do” or “mixture of both” themes. Twenty-four responses were coded into the “cannot categorize” theme.

In accordance with the purpose of this study, most participants responded by what they thought the police would do given each case (66.55% of references coded). Just over 24% of references indicated that participants responded based on what they thought they police should do in each case. In addition, some participants indicated that they responded in a manner that reflected both would do and should do; some participants described changing their approach during the survey or indicated that what they thought police should do is what the police would do in each case. For example:

*“My responses were based off both what I thought the police should and would do. I think that they should stop questioning and allow for a lawyer because it's the fair thing to do, and from my limited experiences I think police would generally do the same”*  
(reference 4)

### **Category C: Legal Perspectives**

This category comprises four domains which represents participants' perspectives on legal policy and practices. They include participants' knowledge of the legality of police deceit, their thoughts about police deception and their reasoning for deceptive practices and false confessions.

#### ***Legality of Police Deceit***

Of 335 participant responses, 321 references were coded into the “yes”, “no” and “do not know” themes. Fifteen responses were coded into the “cannot categorize” theme. The majority of references (63.55%) indicated that participants thought police deception is legal. However, 18.69% said police deception is illegal. Some even indicated that although they thought it was illegal, they believe police to lie anyway. For example, one participant stated:

*“they may not be allowed legally, but they often do”* (reference 12)

Just over 17% of references coded (see Table 7) indicated participants were genuinely unsure of its legality. For example, one participant stated:

*“I don't know if they are 'allowed' to, but I think they do it”* (reference 21)

#### ***Reasons for Police Deceit***

This domain asked participants why they think police would lie to a suspect. Of 335 responses, 305 references were coded into the “to obtain info/confession”, and “easy way to build a case” themes. Thirty responses were coded into the “cannot categorize” theme. The large

majority of participants (97.37% references) indicated that police lie to suspects mainly to gain information and gain confessions:

*“to get them to confess to a crime, or to get them to give information they might not give otherwise.” (reference 66)*

Less than 3% of references indicated that police lie to suspects in order to make their jobs easier.

For example:

*“Hypothetically, because that could be one way of getting at the truth when the suspect will lie. In reality, because it makes their jobs easier and is a good way of confirming what they have already decided to be true” (reference 3)*

### ***Thoughts About Police Deceit***

This domain examined participants' thoughts about police deception. Of 335 responses collected, 326 references were coded into the “critique”, “undecided/neutral”, and “justification” themes. Ten responses were coded into the “cannot categorize” theme. Just over half (50.61%) of coded references indicated some type of critique of police deception. For example, one participant stated:

*“I think fear is very powerful that it can even mess up innocent people. I do not think they should use lying. It seems like another psychological tactic” (reference 11)*

Another participant stated:

*“I have a hard time with lying in general and tend to take people at their word so having someone in a position of authority lying to suspects doesn't sit well for me” (reference 32)*

Undecided or neutral thoughts about police deceit accounted for 25.15% of references.

Responses in this theme mainly described that police deceit should be used in certain circumstances such as in cases of violent and serious crimes. For example, one participant stated:

*“I think it depends on the gravity of the crime. If the police are trying to catch a violent offender or a repeat offender, I think it could be a useful tactic. If it's for something small, especially for a crime that may not even have jail time, it is completely egregious to use such a tactic” (reference 21)*

Another participant stated:

*“This is a complicated question. I go back and forth between police should never lie to suspects and police should be able to lie to suspects. I could definitely imagine where lying to a suspect would be necessary. The thing that complicated the issue is that there is a lot of corruption in the police department. Lying is a necessary tool, much like a knife, but you wouldn't want Ted Bundy holding one while you are trapped in a very small room with him” (reference 6)*

Some participants offered direct justification for police deceit. This theme accounted for 24.23% of references. One participant stated:

*“I don't think police lying would make innocent people confess to crimes they didn't commit. I think it could be very useful in sort of tricking guilty people into admitting what they've done” (reference 37)*

### ***Reasons for False Confessions***

Of the total 335 participant responses, 408 references were coded into a six themes (“police behavior”, “external circumstances”, “emotional reactions”, “suspect characteristics”, “plea agreement/lighter sentence”, and “they would not”) . Twenty-two responses were coded

into the “cannot categorize” theme. The largest proportion of references (48.28% references coded) indicated that false confessions are a result of police behaviors. These include pressuring suspects and using questionable tactics such as lengthy interrogations and deception. For example, reference 19 stated:

*“Some one could confess to a crime they didn't commit because the police are trained to manipulate people in order to get answers out of them. They could be putting a lot of pressure on a person. They could deprive them of food, water, and sleep”.*

Other reasons for false confessions as reported by participants include external circumstances (e.g., protecting others, to gain notoriety, and to gain food and shelter), emotional reactions to the interrogation process (such as anxiety, stress and fear), suspect characteristics (including low IQ, mental illnesses, and young age), and to gain plea agreement/lighter sentence. Less than 1% reported that people would not confess to crime they did not commit (see Table 9).

#### **Category D: Race/Ethnicity**

This category comprises of three domains which assess assumptions about the race/ethnicity of the suspect in each scenario and how race/ethnicity affects their expectations of police.

##### ***Consideration of Suspect Race/Ethnicity***

This domain assessed whether or not participants considered the race of the suspect in each scenario. Of 335 responses collected, 331 references were coded into four themes (“No”, “Yes”, “Assumed Race”, and “Could Not Determine”). Four responses were coded into “cannot categorize” theme. The majority of participants stated that they did not consider the race of the suspect in each case scenario (64.65% references). However, despite the intended neutral suspect names, 35.34% of participants considered race. In fact, of those who considered race, over 7%

actually made a definitive determination of the suspect race/ethnicity. For example, one participant stated:

*“I was imagining each suspect as White. It was a default thought, because I am White (reference 16)*

Another participant said:

*“I don't recall race or ethnicity being mentioned in the scenarios but assumed most if not all had to be minorities” (reference 21)*

Less than 7% indicated that they thought about the suspect's race but could not make a determination (see Table 9).

### ***Suspect Race/Ethnicity Affecting Responses***

This domain examined whether participant responses would change if the race/ethnicity of the suspect was given. Of 335 responses, 317 references were coded into four themes (“would change”, “would not change”, “minorities treated more harshly”, and “do not know/unsure”). Eighteen responses were coded in the “cannot categorize” theme. Over half (52.99%) indicated that their responses would change if the race/ethnicity of the suspect was given. Over 39% of those indicated that their responses would reflect minorities being treated more harshly. For example, one participant stated:

*“If the suspect was Latino or Black, I would likely not give the answer “the officer would stop questioning.” I would only answer “they would keep questioning” or “they would threaten”, based on the biases that officers may have” (reference 55)*

Just over 40% indicated that their responses would not change:

*“My responses would not differ as I tried to focus on facts of the case and I assume officers would do the same and not have a bias toward the race of the suspect” (reference 103)*

Less than 5% indicated that they were unsure whether their responses would change (see Table 9).

### ***Police Interactions Based on Race***

This domain examined participants’ opinions on whether police interactions with Whites differ from their interactions with Minorities. Of 335 responses collected, 321 references were coded into four themes (“yes”, “Minorities treated more harshly”, “no”, and “do not know/unsure”). Fourteen responses were coded into the “cannot categorize” theme. The large majority of coded references (84.10%) indicated that there is a difference in police interactions based on race. Of those, 62.30% believed that police treat Minorities more harshly compared to Whites. For example, reference 25 stated:

*“Absolutely and you’re an idiot if you think otherwise. Police murder black people”*

Reference 183 stated:

*“Really? does anyone think there aren't? Do you remember Harvard University professor Henry Louis Gates Jr. was arrested at his own door? Do you remember Christian Cooper, the black bird watcher in central park and the White woman (Amy Cooper) who felt threatened and called the cops? There is not enough time on your study to list all the incidents. White parents don't have to give their sons "the talk" Does George Floyd ring a bell on police SOP? Again, don't have enough time left to give you the list of names this question deserves. Racial profiling is a reality. Incarceration*



*rates ...and time served are another index into the difference between White and minority treatment”*

Less than 10% reported there were no differences in police interactions based on race (see Table 9)

[Place Table 9 about here]

## **Discussion**

This study examined IE among a diverse adult sample recruited online via Prolific. Characteristics of this sample were substantially different compared to past IE research specifically in terms of race, age, and childhood neighborhood. This sample tended to be older, White, suburban people compared to a younger, more urban, and ethnically diverse sample in prior studies (Johnson et al, 2015; King et al., 2015; King, 2017). This is because prior IE studies were drawn from convenience sampling that were regionally specific (NYC Metropolitan area) while the current study utilized representative sampling of the U.S. from Prolific’s participant pool (Prolific, 2020; see <https://www.prolific.co/demographics/>).

This study hypothesized that substantial individual variation in IE will be found in the sample and that these variations are associated with demographic variables, specifically race/ethnicity, age, and arrest history. More specifically, it was hypothesized that self-identified African Americans would exhibit lower IE scores compared to their White counterparts, there would be a negative correlation between arrest history and IE, and that a curvilinear relationship between age and IE would be found indicating an intermediate age range as exhibiting the lowest IE scores. Some of the hypotheses were supported but others were not. The hypothesis that substantial individual variation in IE will be found was supported; that is close to 27% of participants expected that when a suspect asserts their rights, police will comply with Miranda in

every instance. However, the large majority (73%) indicated they expect police compliance with Miranda to vary depending on the different IE scenarios presented. The hypothesis that this variation is associated with demographic variables was also supported; age and years lived in the U.S. were significant predictors of IE. Older people tended to have higher expectations of police compliance to Miranda compared to younger people who showed more nuanced responses to the IE vignettes. Also, those living in the U.S. for a longer period exhibited higher expectations of police compliance. However, race/ethnicity and arrest history were not found to be associated with IE in the sample. Finally, a curvilinear relationship between age and IE was not found, but age was found to be a significant predictor of IE with a positive correlation.

In past IE research (Johnson et al, 2015; King et al., 2015; King, 2017) several variables (age, years in the US, arrest history, race/ethnicity, childhood neighborhood, English as first language, and language spoken at home) were found to be associated with IE scores (the current study did not include language spoken at home as a demographic variable). The current study found that consistent with past research, age and years in the U.S were significant predictors of IE. More specifically, people aged 61 and over had higher expectations of police compliance compared to younger people (aged 32 and younger) who tended to have more skepticism regarding police behaving in accordance with the law. Since age and years lived in the U.S. are not independent of each other, results were similar (those who lived in the U.S. over 60 years exhibited higher expectations of police compared to those who lived in the US for less than 30 years). In addition, in the current sample, substantial variation in IE was found approximating a normal curve with a modal spike at the ceiling IE score of 24. These participants who expected police to follow protocol in every instance were more likely to be older, lived in the US for a longer period of time, and had an education level of at least associates degree. This is an

important finding because it suggests that older people with advanced education as a group expect police will follow ‘the letter of the law’ regarding Miranda more than the younger less educated portions of the population.

Differing from the initial IE research (Johnson et al, 2015), race was not found to be a predictor of IE in the current study. Although African Americans in this sample showed overall lower expectations of police compared to Whites, the difference was not statistically significant. Although the current sample proportion of African-Americans is in fact comparable to the reported representation of African-Americans in the U.S., this finding may still be an artifact of limited representation of Black/African-American participants for this study (only 14.3%). Even after grouping all other than White participants, they only accounted for approximately 30% of the sample, and results showed that there was no statistically significant difference in mean IE score.

Among the past three IE studies (Johnson et al, 2015; King et al., 2015; King, 2017) only Johnson et al., 2015 study found race to be a predictor of IE although all three studies utilized an ethnically diverse sample (self-identified African Americans represented over half of each sample). This could have been due to the fact that the other two IE studies (King et al., 2015; King, 2017) utilized the Short-Form IE measure. Shortening the measure in this way could have contributed to the alternate findings of race as a predictor of IE. However, the current study used the 12-item IE vignettes and did not find a significant difference for race/ethnicity.

Another finding that differs from past research (Johnson et al., 2015; King, 2017) is the association of arrest history and IE. Contradicting the hypothesis of a negative correlation, results from a Spearman’s rho correlation test showed that there was no significant correlation between arrest history and IE. Similar to past studies, most of this sample (76.1%) had never

been arrested as a juvenile or adult. Although this majority expected police to comply with Miranda more often than those who had been arrested once, the difference was not significant.

Childhood neighborhood has been found to be a significant predictor in past IE studies (specifically Johnson et. al., 2015). The current study found no significant association. As mentioned earlier, most participants in this study reported that they grew up in a suburban neighborhood. However, distinguishing between neighborhood types (e.g., urban vs suburban) is subjective with questionable reliability. In addition, inner city childhood neighborhood had limited representation in the current sample, accounting for only 6%. This could have contributed to the disparate finding for the association between childhood neighborhood and IE.

Finally, English as first language was found to be a significant predictor of IE in past studies (specifically King et al., 2015). Again, the current study sampled majority older, White, suburban participants who were born, raised, and spent most of their lives in the US. Therefore, people who spoke English as their first language dominated the sample representing 96%. This may explain the lack of significant finding between language and IE.

There are two over-arching and robust findings from this line of study. The first is that there is substantial individual variability when examining expectation of police behaviors. Further, this variability is associated with demographic variables though the specific variables associated with IE have not been consistent across studies. However, it is reasonable to assert that the inconsistent pattern emerging from this line of research over time is due to differences in sampling and sample characteristics. As mentioned earlier, past IE research sampled younger, more diverse participants from the NYC metropolitan area using convenience sampling. The second robust finding is that this line of research has consistently shown a considerable proportion of respondents expect police to honor a suspect's right to silence in every instance.

However, the majority do not. Considering Miranda rights were created to ensure due process and provide protections for the accused, people generally do not expect police to honor them. In other words, most people expect suspects' rights are likely to be violated by police.

While deficient Miranda comprehension (Grisso 1980, 1981, 1998; Rogers et al., 2010, 2011; Goldstein, 2012; Zelle 2015) has been presented as an explanation for the high rates of Miranda waiver, the Miranda comprehension perspective proceeds from the written law without adequate consideration of actual police practice which is largely discretionary and unregulated. That is, interrogation occurs in private, secret settings (see Johnson, 2005). Criminal suspects are without protection from police abuse or coercion in these settings. When suspects are violated, they can only retrospectively grieve abuses, and courts rarely provide relief in the form of ruling statements inadmissible. Therefore, this line of research supports that IE is another paradigm that explains these waiver decisions. In other words, regardless of suspects' comprehension of the Miranda warnings, they also do not expect police to routinely honor the rights when asserted. These findings therefore reinforce the importance of IE in the field and the continued need to assess IE empirically.

Based on prior IE studies (Johnson et al., 2015; King et al., 2015; King, 2017) which found substantial variation in IE, this study implemented a qualitative assessment as a supplement to these findings. The purpose of this assessment was to further assess IE by examining participants' rationale for their expectations of police conduct during interrogations. As the first qualitative assessment of IE, this study offered a more in-depth understanding of the IE measure, as well as IE as a construct affecting Miranda waiver decisions.

Findings from Category A suggested that participants generally had positive thoughts about the study; they found the case descriptions to be interesting and easy to read. Those who

expressed negative feelings about the study generally thought that it was repetitive and lacking in case details to make a sound judgement about how they expect police to respond. However, the IE vignettes were designed to keep demographic variables anonymous in order to assess expectations of police behaviors based on the case scenarios alone. The majority of participants also mentioned having no issues or concerns, and rightfully assessed that the survey investigators were trying to determine perceptions of police behaviors. This finding therefore reinforces the face validity of the IE measure.

There were two main findings from Category B which assessed the factors influencing participants' responses as well as the manner in which participants responded to the vignettes. The first finding was that television and media, crime details in the scenarios, knowledge, and experience were the most referenced influences of participant expectations. Participants in this study frequently mentioned that TV shows such as Law and Order were influences in their expectations of police behaviors. Crime genre television and fictional media outlets have long been understood to glorify and romanticize police misconduct while miseducating the public on legal policy (Color of Change Report, 2020). Conversely, in a dyadic role, news media can raise awareness of miscarriages of justice, as well as contribute to wrongful convictions by creating public panic and outrage in fear of crime (Chancellor, 2019). This finding reinforces the impact of TV and media on people's perception of the legal system, perception of police behaviors, crime, and many other social issues.

Participants also indicated that aspects of the crime in each scenario were influential in their determination of police behaviors. Although all suspects have the right to silence, a generous proportion of the sample expects police adherence to Miranda to vary depending on different aspects of the crime (such as the severity of the crime, the nature of the crime, and

whether evidence is available or not). It may be reasonable to assume that suspects may harbor the same expectations when determining whether or not to assert their rights while under interrogation. In other words, the severity of the crime a suspect is accused of may affect their decision to assert their Miranda rights while under interrogation.

Another noteworthy finding from Category B resulted from assessing whether participants responded to the survey based on what they thought the police *would* do compared to what they expect the police *should* do in each case scenario. Although the majority of the sample responded according to the instructions of the study, almost a quarter of the sample responded to the survey based on what they thought the police are legally required to do. This indicates that these participants likely produced ceiling (24) IE scores and intentionally negated their own doubt about how the police were likely to respond.

There were two over-arching findings from Category C which assessed participants' perspectives on legal policy and practices. The first is that although the majority of participants knew that police deceit is legal, a large proportion (over 36%) either thought it was illegal or were genuinely unsure of its legality. Further, this proportion of participants also indicated that common and routine police practices included deceit. In other words, they believed it was illegal but that the police lie to suspects anyway. This is an important finding that suggests participants believe the police routinely break the law.

The second important finding from Category C resulted from the domains "Reasons for Police Deceit", "Thoughts About Police Deceit" and "Reasons for False Confessions". This finding is that the majority of participants believe police deceit should be illegal because it influences false confessions, takes advantage of the mentally ill or intellectually disabled, and is against the morale of authority figures. Further, they believe that police behaviors (including the

use of deception) are the leading cause of false confessions. In addition, just over half of the sample indicated that police deceit should be used depending on the severity or nature of the crime. This idea that the severity of the alleged crime is a determinant of how suspects should be treated including whether they are lied to, or whether their rights are honored is again apparent. It is reasonable to assert the construct of “moral outrage” (Johnson, 2021) derived from the type and severity of the crime to be an explanation for this finding; that is, the more severe the crime, the greater the public outrage for justice, and the greater latitude and license is granted to law enforcement.

There were three important findings from Category D which assessed race/ethnicity of the suspects in each case scenario. The first important finding is that the majority of the sample reported that they did not consider or think about the race of the suspects while responding to the survey. This finding is therefore in accordance with the intention and design of the IE vignettes. However, over one third of the sample did consider the race/ethnicity of the suspects; more participants who actually made a determination of the suspects’ race/ethnicity indicated that they believed the suspects were White.

Secondly, over half of the sample indicated that if the race of the suspect was given, their responses would differ. Of those, 39% indicated that they would expect the police to treat minorities more harshly. It was evident from the majority of responses that to the participants, assigning race meant only assigning a Minority race to the suspects.

The final important finding from this category was that the large majority of the sample believed that police interactions with Whites differ from their interactions with Minorities. Of those who held this belief, over 62% made a determination that Minorities were treated more harshly. Since TV and media were found to be the greatest influence for participants’



expectations, this finding may have been a result of the recent and widely publicized instances of police brutality against Minorities across the country.

Since some participants assumed the suspects were White, and later indicated that their responses would be different if the race/ethnicity was assigned to the suspects, mainly because Minorities are treated more harshly, this may have also contributed to higher IE scores found in the sample.

### **Limitations**

There were limitations to this study that warrant attention. The first is that this study utilized a self-report measure which can allow participants to present themselves favorably and less than honestly. The second limitation is that age and years in the U.S. were not independent of each other. Therefore, the significant association between years in the U.S. and IE was likely an artifact of the age variable. A sample with a higher number of immigrant participants may contribute to a more concise analysis of the association between years in the U.S and IE. Finally, there were concerns regarding the U.S. representative sampling from Prolific. Although this study utilized an overall representative sample of the US, LatinX participants were under-represented and older participants were over-represented in the sample (US Census Bureau, 2020).

The qualitative assessment also had limitations that are important to note. The first is that some of the questions were not truly open-ended. For example, question 7 asked “Did you consider the race/ethnicity of the suspect while responding to the survey? Please explain”. This question allowed participants to simply respond “yes” or “no” without further explanation. This resulted in the inability to fully understand participants’ rationale for their responses.

Another limitation is that question two asked “Which factor served the greatest influence for your answers in this survey? (e.g., personal experience with police, family experience, television, history of relations between police and suspects, severity of the crime etc.). Please explain”. Offering response ideas in this way were highly suggestive and may not have been representative of participants’ true influences.

Another limitation was that this study surveyed participants on sensitive social issues such as race/ethnicity, and due to recent racial tensions in the media, participant responses may have been distorted by social desirability bias<sup>3</sup> (Krumpal, 2013).

In addition, this study lacked measures of inter-rater reliability. The development of domains and themes were based on the informed judgement of the principal investigators and were not tested further. Finally, there was a typographical error in one of the vignettes which may have affected how participants responded to the survey. However, less than 7% acknowledged it and those who mentioned it, simply assumed it was an error and proceeded to complete the survey.

### **Future Research**

Although African Americans were adequately represented in this sample based on the US population, a closer analysis of race and IE is warranted. Perhaps a larger proportion of African Americans in future studies should be considered. An adequate representation of African Americans is relevant to the literature considering variation in IE was also apparent in the largely African-American sample reported in Johnson et al. (2015). Also, the lengthy history of conflict between the African-American community and law enforcement calls for such examination.

Participants from the qualitative survey indicated that knowing the race/ethnicity of the suspects will change their responses and expectations of police behaviors. Therefore, identifying

the race of the suspect in each vignette could be beneficial to further assessing race and IE. By doing this, the expectation that suspects rights will be violated based on their race while under custodial interrogation can be more closely examined. While African-Americans comprise a relatively modest percentage (13-14%) of the US population, there is reason to believe that with Black citizens, and in neighborhoods with large concentrations of Black populations, police adherence to Miranda protections is affected by perceptions of race.

In addition, a full qualitative assessment of IE will be beneficial to the literature. That is, utilizing an interactive methodology where participants read the IE vignettes, then respond to how they expect the police will respond and why. This methodology therefore removes the IE scoring key and will allow researchers to directly ask participants about their rationale for their expectations of law enforcement as well as follow-up questions to their responses. Future research should also consider including a social desirability scale (Crowne & Marlowe, 1960; Haghighat, 2007) to assist with curbing social desirability bias and skewed results.

Finally, the IE vignettes were originally formulated utilizing male-identifying names for the suspects. This formulation followed the informed assumption that variation in IE would be more accurately assessed using male suspects. Although males are over-represented in the criminal justice system compared to females, there has been a narrowing of gender representation in the criminal justice system over time (Britton et al., 2017). Perhaps future research can include female-identifying names to further assess the consistent variation found in IE.

### Notes

<sup>1</sup> Returned submissions refer participants who withdrew their submission to the study (Prolific, 2020).

<sup>2</sup> Timed-out submissions refer to participants who exceeded the maximum time (67 minutes) allotted by Prolific (Prolific, 2020; see Palan & Schitter, 2018)

<sup>3</sup> Data collection for this study was conducted in October 2020 immediately following protests and demonstrations that erupted as a result of the murder of George Floyd by the hands of a law enforcement officer. Racial tensions in the media and around the country at this time were high; specifically regarding police brutality against African Americans. Therefore, the impact of George Floyd's murder may have affected responses generated by this study.

<sup>4</sup> A typographical error was made in the IE measure presented to participants; the suspect's name in vignette number two was "Skip". However, the suspect's name in the answer key was "Tom" (see Appendix E).

### References

- Abramovitch, R., Higgins-Biss, K. L., & Biss, S. R. (1993). Young person's comprehension of waivers in criminal proceedings. *Canadian Journal of Criminology*, *35*, 309–322
- Abramovitch, R., Peterson-Badali, M., & Rohan, M. (1995). Young people's understanding and assertion of their rights to silence and legal counsel. *Canadian Journal of Criminology*, *37*, 1–18
- Appleby, S. C., & Kassin, S. M. (2016). When self-report trumps science: Effects of confessions, DNA, and prosecutorial theories on perceptions of guilt. *Psychology, Public Policy, and Law*, *22*(2), 127. Doi: 10.1037/law0000080
- Bedi, S. A. (2003). The constructed identities of Asian and African Americans: A story of two races and the criminal justice system. *Harv. Blackletter LJ*, *19*, 181
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Britton, D. M., Jacobsen, S. K., & Howard, G. E. (2017). *The gender of crime*. Rowman & Littlefield.
- Brown, B., & Benedict, W. (2002). Perceptions of the police. *Policing: An International Journal of Police Strategies & Management*, *25*(3), 543–580. doi:10.1108/13639510210437032
- Brown v. Mississippi*, 297 U.S. 278, (1936)
- Brunson, R. K., & Weitzer, R. (2009). Police relations with Black and White youths in different urban neighborhoods. *Urban Affairs Review*, *44*(6), 858-885
- Chancellor, L. (2019). Public contempt and compassion: Media biases and their effect on juror impartiality and wrongful convictions. *Manitoba Law Journal*, *42*, 427.

- Cooper, V. G., & Zapf, P. A. (2008). Psychiatric patients' comprehension of Miranda rights. *Law and Human Behavior, 32*, 390–405. doi:10.1007/s10979-007-9099-3
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of consulting psychology, 24*(4), 349
- Decker, S., (1981). Citizen attitudes toward the police: A review of past findings and suggestions for future policy. *Journal of police science and administration, 9*(1), 80-87
- Everington, C., & Fulero, S. (1999). Competence to confess: Measuring understanding and suggestibility of defendants with mental retardation. *Mental Retardation, 37*, 212–220.
- Fare v. Michael C.*, 442 U.S. 707 (1979)
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior research methods, 41*(4), 1149-1160.
- Flexon, J. L., Greenleaf, R. G., Dariano, D. S., & Gibson, D. (2015). An examination of police stops and youths' attitudes toward police: Do interracial encounters matter? *Journal of Ethnicity in Criminal Justice, 14*(1), 21–39. doi:10.1080/15377938.2014.997953
- Frazier v. Cupp*, 394 U.S. 731 (1969)
- Frumkin, I. B. (2008). Psychological evaluation in Miranda waiver and confession cases. In Denney R. L., & Sullivan J. P. (Eds.), *Clinical neuropsychology in the criminal forensic setting* (pp. 135–175). New York: Guilford.
- Frumkin, I. B., & Sellbom, M. (2013). Miranda rights comprehension instruments: A critical review. *Assessment, 20*(5), 545–554. <https://doi.org/10.1177/1073191113481054>
- Fulero, S., & Everington, C. (1995). Assessing competency to waive Miranda rights in defendants with mental retardation. *Law & Human Behavior, 19*, 533– 543

- Fulero, S., & Everington, C. (2004). Mental retardation, competence to waive Miranda rights, and false confessions. In G. D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 163–179). New York, NY: Kluwer Academic.
- Goldstein, N. E. S., Condie, L. O., Kalbeitzer, R., Osman, D., & Geier, J. L. (2003). Juvenile offenders' Miranda rights comprehension and self-reported likelihood of offering false confessions. *Assessment, 10*(4), 359–369
- Goldstein, N. E. S., Zelle, H., & Grisso, T. (2012). *The Miranda rights comprehension instruments*. Sarasota, FL: Professional Resource Press.
- Greenfield, D. P., Dougherty, E. J., Jackson, R. M., Podboy, J. W., & Zimmerman, M. L. (2001). Retrospective evaluation of Miranda reading levels and waiver competency. *American Journal of Forensic Psychology, 19*(2), 75–86.
- Grisso, T. (1980). Juveniles' capacities to waive Miranda rights: An empirical analysis. *California Law Review, 68*(6), 1134–1166. doi:10.2307/3480263
- Grisso, T. (1981). *Juveniles' waiver of rights: Legal and psychological competence*. New York, NY: Plenum Press.
- Grisso, T. (1998). *Instruments for assessing understanding & appreciation of Miranda rights*. Sarasota, FL: Professional Resource Press.
- Grisso, T. (2004). Reply to “A critical review of published competency-to-confess measures.” *Law & Human Behavior, 28*, 719–724.
- Haghighat, R. (2007). The development of the brief social desirability scale (BSDS). *Europe's Journal of Psychology, 3*(4)
- Haley v. Ohio*, 332 U.S. 596 (1948)

- Helms, J. (2003). Analysis of Miranda reading levels across jurisdictions: Implications for evaluating waiver competency. *Journal of Forensic Psychology Practice*, 3(1), 25–37.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *Power and Education*, 25(4), 179–185.  
<https://doi.org/10.2304/power.2011.3.2.179>
- Hurst, Y. G., Frank, J., & Browning, S. L. (2000). The attitudes of juveniles toward the police. *Policing: An International Journal of Police Strategies & Management*.
- Hurwitz, J., & Peffley, M. (2005). Explaining the great racial divide: Perceptions of fairness in the U.S. criminal justice system. *Journal of Politics*, 67, 762–783.
- Innocence Project (2020). *Byron Halsey*. <https://www.innocenceproject.org/cases/byron-halsey/>
- Innocence Project (2020). *False Confessions and Recording of Custodial Interrogations*.  
<https://www.innocenceproject.org/false-confessions-recording-interrogations/>
- Inbau, F., & Reid, J. (1962). *Criminal Interrogation and Confessions*.
- Inbau, F., Reid, J., Buckley, J., & Jayne, B. (2011). *Criminal interrogation and confessions*. Boston: Jones & Bartlett Publishers.
- Johnson, D. (2008). Racial prejudice, perceived injustice, and the Black-White gap in punitive attitudes. *Journal of Criminal Justice*, 36, 198–206. doi10.1016/j.jcrimjus.2008.02.009
- Johnson, M. B. (2003, July). *Insuring due process for juveniles during interrogation: A review of various approaches*. Panel presentation at Psychology and Law International, Interdisciplinary Conference, University of Southampton, Edinburgh, Scotland
- Johnson, M. B. (2005). The Central Park jogger case-police coercion and secrecy in interrogation: The 14th Annual Frantz Fanon MD Memorial Lecture. *Journal of Ethnicity in Criminal Justice*, 3(1-2), 131–143. [https://doi.org/10.1300/J222v03n01\\_07](https://doi.org/10.1300/J222v03n01_07)



- Johnson, M. B. (2021). *Wrongful Conviction in Sexual Assault: Stranger Rape, Acquaintance Rape, and Intra-familial Child Sexual Assaults*. Oxford University Press, USA.
- Johnson, M.B., Citron, K.L., Massey, C., Raghavan, C. & Kavanagh, A. (2015) Interrogation expectations: Individual and race/ethnic group variation among an adult sample. *Journal of Ethnicity in Criminal Justice*, 1-14 doi: 10.1080/15377938.2014.936641
- Johnson, M. B., Citron, K., & Raghavan, C. (2007). *Ethnic differences in "Expectations of police compliance with Miranda protections": Preliminary findings*. Paper presented at Off the Witness Stand: Using Psychology in the Practice of Justice, The Graduate Center, City University of New York, New York, NY
- Johnson, M.B., & Drucker, J. (2009). Two recently confirmed false confessions: Byron A. Halsey and Jeffery M. Descovic. *The Journal of Psychiatry & Law*, 37(1), 5172  
<https://doi.org/10.1177/009318530903700105>
- Kassin, S. (2004). Why people waive their "Miranda" rights: The power of innocence. *Law and Human Behavior*, 28(2), 211-221.
- Kassin, S. M. (2005). On the psychology of confessions: Does innocence put innocents at risk? *American Psychologist*, 60(3), 215–228. doi:10.1037/0003-066x.60.3.215.
- Kassin, S. M. (2008). False confessions: Causes, consequences, and implications for reform. *Current Directions in Psychological Science*, 17(4), 249–253.  
doi:10.1111/j.1467-8721.2008.00584.x
- Kassin, S. & Gudjonsson, G. (2004). The psychology of confessions: A review of the literature and issues. *Psychological Science in the Public Interest*, 5, 2, 33-67.

- Kassin, S. M., Kukucka, J., Lawson, V. Z., & DeCarlo, J. (2014). Does video recording alter the behavior of police during interrogation? A mock crime-and-investigation study. *Law and Human Behavior, 38*, 73–83. doi:10.1037/lhb0000047.
- Kennard J.B. & Kassin, S.M. (2009). Race differences in Miranda waivers: Do black suspects exhibit the “Innocence Effect?” American Psychology-Law Society Conference.
- King, R. (2017). Interrogation expectations short form assessment with an adult new york sample. Unpublished paper.
- King, R., Johnson, M. B. & Massey, C. (2015). *Interrogation Expectations: Short-form Assessment*. American Psychology-Law Society Conference.
- Kozinski, W. (2017). The Reid interrogation technique and false confessions: Time for change. *Seattle Journal for Social Justice, 16*(2), 301-346.
- Krumpal, I (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity, 47*(4): 2025–2047. doi:[10.1007/s11135-011-9640-9](https://doi.org/10.1007/s11135-011-9640-9).
- Lai, & Zhao (2010). The impact of race/ethnicity, neighborhood context, and police/citizen interaction on residents' attitudes toward the police. *Journal of Criminal Justice, 38*(4), 685-692. doi: 10.1016/j.jcrimjus.2010.04.042
- Leiber, M. J., Nalla, M. K., & Farnworth, M. (1998). Explaining juveniles' attitudes toward the police. *Justice quarterly, 15*(1), 151-174
- Leo, R. A. (1996a). Inside the interrogation room. *The Journal of Criminal Law and Criminology, 86*, 266–303.
- Leo, R. (2008). *Police Interrogation and American Justice*. Cambridge, Mass: Harvard University Press
- Lewis v. United States, 74 F.2d 173 (9th Cir. 1934)*

*Miranda v. Arizona*, 384 U.S. 436, 457-458 (1966)

Nadal, K. L., Davidoff, K. C., Allicock, N., Serpe, C. R., & Erazo, T. (2017). Perceptions of police, racial profiling, and psychological outcomes: A mixed methodological study. *Journal of Social Issues*, 73(4), 808-830

National Commission on Law Observance and Enforcement. (1931). *Report on the Enforcement of the Prohibition Laws of the United States*. 1/07/31.

<https://www.ncjrs.gov/pdffiles1/Digitization/44540NCJRS.pdf>

Nordberg, A., Crawford, M. R., Praetorius, R. T., & Hatcher, S. S. (2016). Exploring minority youths' police encounters: A qualitative interpretive meta-synthesis. *Child and adolescent social work journal*, 33(2), 137-149

Normalizing Injustice: A Report by Color of Change and the USC Annenberg Norman Lear Center. January, 2020. <https://hollywood.colorofchange.org/crime-tv-report/>

*Oregon v. Mathiason*, 429 U.S. 492 (1977)

Palan, S., & Schitter, C. (2018). Prolific. ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22-27.

Prolific (2020). <https://www.prolific.co/>

Peck, J. H. (2015). Minority perceptions of the police: A state-of-the-art review. *Policing: An International Journal of Police Strategies & Management*, 38(1), 173–203.  
doi:10.1108/pijpsm-01-2015-0001

QSR International (2021). Nvivo Release version 1.4 (4349). *QSR international Pty Lmt.*

Qualtrics (2020). <https://www.qualtrics.com>

- Redlich, A. D., Silverman, M., & Steiner, H. (2003). Pre-adjudicative and adjudicative competence in juveniles and young adults. *Behavioral Sciences & the Law*, *21*, 393–410. doi:10.1002/bsl.543
- Rogers, R. (2005a). Miranda Rights Scale (MRS). *Unpublished measure, University of North Texas, Denton.*
- Rogers, R. (2005b). Miranda Statements Scale. *Unpublished measure, University of North Texas, Denton.*
- Rogers, R., Gillard, N. D., Wooley, C. N., & Fiduccia, C. E. (2011). Decrements in Miranda abilities: An investigation of situational effects via a mock-crime paradigm. *Law & Human Behavior*, *35*, 392–401 doi:10.1007/s10979-010-9248-y
- Rogers, R., Harrison, K. S., Hazelwood, L. L., & Sewell, K. W. (2007). Knowing and intelligent: A study of Miranda warnings in mentally disordered defendants. *Law and Human Behavior*, *31*(4), 401–418. doi:10.1007/s10979-006-9070-8
- Rogers, R., Hazelwood, L. L., Sewell, K. W., Harrison, K. S., & Shuman, D. W. (2008). The language of Miranda warnings in American jurisdictions: A replication and vocabulary analysis. *Law and Human Behavior*, *32*, 124–136. doi:10.1007/s10979-007-9091-y
- Rogers, R., Hazelwood, L. L., Sewell, K. W., Shuman, D. W., & Blackwood, H. L. (2008). The comprehensibility and content of juvenile Miranda warnings. *Psychology, Public Policy, and the Law*, *14*, 63–87. doi:10.1037/a0013102.
- Rogers, R., Henry, S. A., Helfers, R. C., Williams, M. M., Drogin, E. Y., & Clark, J. W. (2016). Law enforcement and the rights of the accused: Are the police getting a bad rap? *Journal of Police and Criminal Psychology*, *31*(3), 200–207. doi:10.1007/s11896-015-9183-4
- Rogers, R., Jordan, M.J. & Harrison, K.S. (2004) *Commentary: A critical review of published*

- competency-to-confess measures. *Law and Human Behavior* 28: 707.  
<https://doi.org/10.1007/s10979-004-0794-z>
- Rogers, R., Rogstad, J. E., Gillard, N. D., Drogin, E. Y., Blackwood, H. L., & Shuman, D. W. (2010). “Everyone knows their Miranda rights”: Implicit assumptions and countervailing evidence. *Psychology, Public Policy, and Law*, 16(3), 300–318. doi:10.1037/a0019316
- Rogers, R., Rogstad, J., Steadham, J., & Drogin, E. (2011). In plain English: Avoiding recognized problems with Miranda miscomprehension. *Psychology, Public Policy, and Law*, 17(2), 264–285. <https://doi.org/10.1037/a0022508>
- Rogers, R., Sharf, A. J., Clark, J. W., Drogin, E. Y., Winningham, D. B., & Williams, M. M. (2016). One American Perspective on the Rights of Accused: An Initial Survey of Miranda Rights in a Broader Context. *Behavioral Sciences & the Law*, 34(4), 477–494. doi:10.1002/bsl.2240
- Smalarz, L., Scherr, K., & Kassin, S. (2016). Miranda at 50: A psychological analysis. *Current Directions in Psychological Science*, 25(6), 455–460.
- US Census Bureau. (2020). Census.gov.<https://www.census.gov/>.
- Viljoen, J., Zapf, P., & Roesch, R. (2007). Adjudicative competence and comprehension of Miranda rights in adolescent defendants: A comparison of legal standards. *Behavioral Sciences & the Law*, 25, 1–19. doi:10.1002/bsl.714
- Webb, V., & Marshall, C. (1995). The relative importance of race and ethnicity on citizens attitudes toward police. *American Journal of Police*, 14(2), 45–66.
- Weitzer, R., & Tuch, S. A. (2004). Race and perceptions of police misconduct. *Social problems*, 51(3), 305–325

Weitzer, R., Tuch, S. A., & Skogan, W. G. (2008). Police–community relations in a majority-Black city. *Journal of Research in Crime and Delinquency*, 45(4), 398–428.

doi:10.1177/0022427808322617

Woolard, J. L., Harvell, MPP, S., & Graham, Ph. D, S. (2008). Anticipatory injustice among adolescents: Age and racial/ethnic differences in perceived unfairness of the justice system. *Behavioral Sciences & the Law*, 26(2), 207-226

Young, D. (1996). Unnecessary evil: Police lying in interrogations. *Connecticut Law Review*, 28, 425-477.

Zelle, H., Romaine, C. L. R., & Goldstein, N. E. S. (2015). Juveniles' Miranda comprehension: Understanding, appreciation, and totality of circumstances factors. *Law and Human Behavior*, 39, 281–293. doi:10.1037/lhb00 00116.

## Appendix A

**Table 1.***History of Interrogations in the United States (Leo, 2008)*

Eras	Title	Description
1st	Third Degree Tactics (became illegal in 1936)	A euphemism of torture including intimidation, refusal of access to counsel, inflicting physical pain and harm, and illegal detention during custodial interrogation.
2nd	Era of Psychological Interrogation (1936-present)	This era allowed police to develop interrogation tactics based on psychological manipulation, deception, and persuasion.
3 <sup>rd</sup>	Era of Innocence (began early 1990s)	This era is based on the release of innocent persons from prison due to DNA testing.
4th	Video-Taping of Interrogations (emerging)	Aimed at combatting false confessions via coercion. Today only 26 states mandate electronic recording of custodial interrogations. (Innocence Project, 2020)

## Appendix B

**Table 2.***Comparative Data from 3 Interrogation Expectations ('IE') Studies*

	<u>'IE' Johnson et al., 2015</u>	<u>'IESF-A' King et al., 2015</u>	<u>'IESF-B' King, 2017</u>
Sample size	N= 300 (n=280)	N= 300 (n=298)	N= 300 (n=258)
Sample location	Northern, New Jersey	NYC public college	Brooklyn train station
Year data collected	2006 and 2007	2015	2017
'IE' instrument	12-Item IE vignettes	6-Item IE vignettes	6-Item IE vignettes
Miranda measure	CMR-R	CMR-R	CMR-R
Vocabulary measure	SILS	Split half version of SILS	Split half version of SILS
Key findings	Variable distribution of IE scores; pronounced spike at ceiling score (18.2%), scores associated with race/ethnicity, age, arrest history, and childhood neighborhood	Variable distribution of IE scores, pronounced spike at ceiling score (31.2%), scores associated with language spoken at home and English as a first language	Variable distribution of IE scores, pronounced spike at ceiling score (20.5%), scores associated with age, arrest history and years in the US



## Appendix C

**Participants' notice**

This is a study about police-suspect encounters.

If you are willing to participate, you will respond to twelve law enforcement apprehension scenarios, complete a brief questionnaire about yourself and finally, you will be given a survey to openly and freely express your thoughts and ideas about this study. Your participation in this study should take approximately 20 minutes.

## Appendix D

**Informed consent**

Welcome to the research study. We are studying police - suspect encounters. This research project is conducted by Shereen Lewis and Matthew B. Johnson PhD at John Jay College of Criminal Justice. You will be presented with information relevant to police questioning of suspects and asked to answer some questions about it. The survey should take you around 20 minutes to complete.

**Purpose:**

The purpose of this study is to assess perceptions of police-suspect encounters in order to identify factors associated with police practices.

**Procedures:**

If you volunteer to participate you will be asked to provide reactions to 12 brief descriptions of police-suspect encounters. The time commitment of each participant is expected to be about 20 minutes. There will be additional questions about your thoughts and ideas about the study, and about your background (age, race/ethnic group, gender, etc.). The surveys will be taken online via Qualtrics.

**Time Commitment:**

Your participation in this study is expected to last for a total of 20 minutes.

**Potential Risks or Discomforts:**

You will be asked to respond to personal questions about yourself and you may feel uncomfortable when answering them, or you may be concerned about confidentiality. However, you will not be asked to provide information that can identify you. If you decide you no longer

want to continue you can withdraw at any time or you can decline to answer any question throughout the survey.

**Potential Benefits:**

You will not directly benefit from participating in this study. However, results from this study will benefit the field of forensic psychology by contributing to police behavior and criminal justice research and will provide society with a better understanding of police practices and legal rights.

**Payment for Participation:**

You will be compensated \$3.50 for your participation. However, failure of the attention check item, or failure to complete the entire protocol, are grounds for the research team to determine you will only receive 50% compensation.

**Confidentiality:**

We will not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify your answers, and no one will know whether or not you participated in the study. Please be assured that your responses will be kept completely confidential.

**Participants' Rights:**

Your participation in this research study is entirely voluntary. If you decide not to participate, there will be no penalty to you. You can decide to withdraw your consent and stop participating in the research at any time.

**Questions, Comments or Concerns:**

If you have any questions, comments, or concerns about the research, you can contact Dr. Matthew B. Johnson via email [mjohnson@jjay.cuny.edu](mailto:mjohnson@jjay.cuny.edu). If you have questions about your rights

as a research participant, or you have comments or concerns that you would like to discuss with someone other than the researcher, please call the CUNY Research Compliance Administrator at 646-664-8918. Alternately, you can write to:

CUNY Office of the Vice Chancellor for Research

Attn: Research Compliance Administrator

205 East 42nd Street

New York, NY 10017

By clicking "I consent" below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

## Appendix E

**IE vignettes and instructions**

*After reading the following descriptions of police investigation situations, please select the response that indicates how you expect the police will respond.*

## 1.) Mike

Mike went to the grocery store to get a sandwich. After buying it, he paid the clerk and left the store. A half hour later, the cashier of the grocery store was robbed at gunpoint. The cashier reported the robber as approximately 25 years old, five feet ten inches tall, of medium build and wearing a dark colored sweatshirt. After canvassing the neighborhood, the police saw Mike wearing a dark gray sweatshirt and took him in for questioning. The police told Mike that he matched the description given by the cashier. The police also told Mike that if his fingerprints were found in the store he was going to be in big trouble. They read him his Miranda rights and told him that he was under arrest, at which time Mike said he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Mike even though he said he did not want to talk and requested a lawyer.
- c) pressure Mike with threats of prolonged detention, threats of assault, or other harsh penalties.

## 2.) Skip

Skip was walking home one night when he saw a boy from school walking alone through the park. Skip did not like the boy ever since he lost a basketball game to him a few weeks before. Skip snuck up behind the boy, hit him in the back of the head with a rock, and kicked him while

he was on the ground. A couple of days later, police questioned Skip at school along with several other students. Due to the fact that Skip appeared nervous, the police asked him to come to the station for questioning. At the station the police read him his Miranda rights and continued questioning. At that time, Skip said that he did not want to talk and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Skip even though he said he did not want to talk and requested a lawyer.
- c) pressure Tom<sup>4</sup> (see endnote 4) with threats of prolonged detention, threats of assault, or other harsh penalties.

### 3.) Jake and Lee

Jake and Lee were at a house party, where they met up with other friends. Around one o'clock a fight broke out. Someone hit Jake from behind and he swung back. The guy he hit was knocked down. Jake and Lee then pushed their way out and headed for their car. Just as they were getting to the car the police arrived. They were picked up and taken down to the precinct along with many other people from the party. While at the precinct they were held in different rooms for about two hours. Jake and Lee were then read their Miranda rights and questioned separately. Jake and Lee both stated that they didn't know how the fighting began. They both admitted throwing a few punches as they were trying to get out of the party. After more questioning, Jake and Lee were told that someone in the party had been stabbed and was in intensive care. Jake then said he did not want to talk any more until he could talk to a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.

- b) continue questioning Jake even though he said he did not want to talk and requested a lawyer.
- c) pressure Jake with threats of prolonged detention, threats of assault, or other harsh penalties.

#### 4.) Robert

Robert lost five hundred dollars gambling and needed a way to get it back. While walking home one night he noticed an elderly woman wearing expensive jewelry and followed her down a dark, empty street. He grabbed the woman from behind, put a knife to her throat, and took her purse. Robert then ran away while the woman screamed behind him. Robert accidentally dropped the knife, and then emptied the purse and dropped that as well, keeping only the wallet. At that point, a neighborhood police officer chased him down and tackled him. The officer found the wallet in Robert's possession. After being arrested, read his Miranda rights, and taken to the police station, a police officer told Robert that his fingerprints were found on the purse and the knife. Robert said that he did not want to talk anymore and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Robert even though he said he did not want to talk and requested a lawyer.
- c) pressure Robert with threats of prolonged detention, threats of assault, or other harsh penalties.

#### 5.) Alex

Alex was driving through a wealthy neighborhood when his car ran out of gas. He walked to the nearest gas station and purchased a container of gasoline. Alex then returned to his car, poured

the gasoline in his tank, and he left the container by the curb. Alex then went back to the station, filled up his tank, and went home. Two days later Alex was picked up by police and brought to the station. While being questioned, Alex was told that he was suspected of arson because someone's garage had burned down a block away from where he had left a gas container. Alex was also told that someone in the neighborhood had taken down his license plate number. After being read his Miranda rights, Alex said he did not want to talk anymore and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Alex even though he said he did not want to talk and requested a lawyer.
- c) pressure Alex with threats of prolonged detention, threats of assault, or other harsh penalties.

6.) Justin

Justin had been working for a construction company for five years. In the last year he had begun to drink a lot and had been showing up late. More recently he had shown up to work drunk and had been making mistakes on the job. Justin was fired. Out of anger Justin planned to set the work site on fire. 10 days later there was an arson attack at the work site and an employee was seriously hurt. Justin was picked up and questioned about the fire. After police read him his Miranda rights Justin said he no longer wanted to talk and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.



- b) continue questioning Justin even though he said he did not want to talk and requested a lawyer.
- c) pressure Justin with threats of prolonged detention, threats of assault, or other harsh penalties.

#### 7.) Tom

Tom was out with his friends one night when another group of guys started to insult and verbally harass Tom and two of his friends. When the argument escalated one of Tom's friends picked up a bottle from the sidewalk and hit one of the opposing guys in the head, knocking him unconscious. When Tom saw his two friends run away, he followed them so as not to be left alone with the victim's friends. Tom and each of his friend's went home. The following day police came to Tom's home and told him that he was under arrest for assault. He was taken to the police station for questioning and the police told Tom that his two friends were in custody. The police then read Tom his rights. After being read his rights, Tom said he did not want to talk about the incident until he could see a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Tom even though he said he did not want to talk and requested a lawyer.
- c) pressure Tom with threats of prolonged detention, threats of assault, or other harsh penalties.

#### 8.) Joe

Joe was hanging out with a group of friends when somebody mentioned holding up the deli Joe worked in. After some planning it was decided that the 3 guys would go into the store on the

night Joe was working and Joe would go along and give them all the cash in the register. The night of the robbery Joe was working with another store clerk. During the robbery the other store clerk attempted to hit the emergency button and one of the masked robbers shot him. Joe was knocked unconscious to cover up his involvement. Three days later Joe showed up to work to find a police car at the deli. Joe was arrested, read his Miranda rights and taken in for questioning. He was told that he was being charged with attempted murder because one of the other robbers stated he had been part of the plan to hold up the store. Joe said he did not want to talk to police and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Joe even though he said he did not want to talk and requested a lawyer.
- c) pressure Joe with threats of prolonged detention, threats of assault, or other harsh penalties.

9.) Marc & Nate

Marc and Nate were walking home from a friend's house around 11pm. Nate started to complain that he needed some money to buy some beers. Marc saw an old man walking towards them about two blocks away and suggested that they hold him up for some cash. Nate told Marc he must be crazy and that he had to go. Nate turned at the corner and began to head away from Marc. Marc assaulted the old man and since the man resisted, he stabbed him. Two days later, the police showed up at Nate's apartment and placed him under arrest, reading him his Miranda rights. At the police station, Nate was told that he was under arrest for assault and armed robbery. The police told him that Marc had been picked up the night before and had

already confessed to the crime. Marc had also told them that Nate had been involved in the robbery. Nate said he did not want to talk to police and that he wanted a lawyer.

Do you expect the police will:

- a) stop the questioning and provide a lawyer.
- b) continue questioning Nate even though he said he did not want to talk and requested a lawyer.
- c) pressure Nate with threats of prolonged detention, threats of assault, or other harsh penalties.

10.) Bob

Bob went to a costume party wearing a Darth Vader mask and outfit. He met Beth at the party who was dressed as a superhero. After taking Beth into an upstairs bedroom, Bob raped Beth. After the rape Bob left the room and the party, and no one noticed him leave. Beth put her clothes back on, ran out of the party, and went home and showered. Two days later Beth decided to go to the police station and report the rape. After obtaining a list of guests from the host of the party, police brought several people, including Bob, in for questioning. After observing that Bob seemed nervous and suspicious, police read him his Miranda rights before continuing questioning. Bob then said he no longer wanted to talk and that he wanted a lawyer.

Do you expect the police will

- a) stop the questioning and provide a lawyer.
- b) continue questioning Bob even though he said he did not want to talk and requested a lawyer.
- c) pressure Bob with threats of prolonged detention, threats of assault, or other harsh penalties.

## 11.) Jason

Jason had a reputation in his community as a trouble-maker. After a house in his neighborhood was burglarized, Jason was asked by police to come in for questioning. The burglars had taken a television set, jewelry, a stereo and a computer. Jason agreed to be questioned even though he knew nothing about the burglary. After the initial questioning at the station, officers noticed that Jason was very nervous, and they believed that he was hiding something. They read him his Miranda rights, at which time Jason said he did not want to answer any more questions and that he wanted a lawyer.

Do you expect the police will

- a) stop the questioning and provide a lawyer.
- b) continue questioning Jason even though he said he did not want to talk and requested a lawyer.
- c) pressure Jason with threats of prolonged detention, threats of assault, or other harsh penalties.

## 12.) Dylan and Lou

Dylan and Lou were walking home around 11 PM after having a few drinks. They walked along a dark, somewhat deserted street and then a car pulled up, down the block and a young woman got out. They walked over and began to taunt her, asking her if they could get a ride. She cursed at them and told them to get out of her way. Dylan pulled a knife out of his pocket and told the girl to hand over the keys. The girl dropped the keys and Lou picked them up. They got into the car while the girl yelled and tried to get them to stop. Dylan hit her and shoved her hard and she fell hitting herself against a pole. Dylan and Lou drove off. They rode around for a few hours and then abandoned the car. A few days later the police came to their homes. They were

taken in and questioned separately. Each of them was given Miranda warnings. They were told by police that the girl was in the hospital and had been severely injured by the attack. She had described them and told police where they hung out. Dylan and Lou were also told that the car had been dusted for fingerprints. They were told that they should admit to the assault, but once their fingerprints were matched they would be in deeper trouble. Lou said he wanted to talk to a lawyer.

Do you expect the police will

- a) stop the questioning and provide a lawyer.
- b) continue questioning Lou even though he said he did not want to talk and requested a lawyer.
- b) pressure Lou with threats of prolonged detention, threats of assault, or other harsh penalties.

## Appendix F

**Open-ended Survey**

*The following questions will give you an opportunity to tell us about your experience. Please answer openly and truthfully. Please explain your responses.*

1. Did you find the case descriptions to be interesting, boring, repetitive, easy to read? Please explain. (A)
2. Which factor served the greatest influence for your answers in this survey? (e.g., personal experience with police, family experience, television, history of relations between police and suspects, severity of the crime etc.). Please explain. (B)
3. Did your responses reflect what you thought the police should do in each case? Or did your responses reflect what you thought the police would do, given each case? (B)
4. Are police allowed to lie to suspects? (C)
5. Why would police lie to a suspect? (C)
6. What do you think about police lying to suspects? Please explain. (C)
7. Did you consider or think about the race or ethnicity of the suspect in each case? Please explain. (D)
8. If the race of the suspect was given, how would your responses differ? Please explain. (D)
9. Does police interaction with Whites differ from their interaction with Blacks or other minorities? If so, how? (D)
10. Why would someone confess to a crime they did not commit? (C)
11. What do you think the survey investigator was trying to determine? (A)

12. Were there any issues, concerns or questions that arose while responding to any of the survey questions? (A)

## Appendix G

**Demographic survey**

*Please complete the following screening questions about yourself.*

1. What is your age?
2. What gender do you identify as?
  - Male
  - Female
  - Other
3. What is your Race/Ethnicity?
  - Black / African American / Afro- Caribbean
  - White / Caucasian / European American
  - Asian
  - Latino(a) / Hispanic
  - Arab / Arab-American
  - Other
4. Are you a student?
  - No

If Yes:

Check one:

- Fulltime
- Part-time

Check one:

- Undergraduate
- Graduate

5. Are you employed?
  - NoIf Yes, Check one:
  - Fulltime
  - Part-time
6. How long have you lived in the United States?
7. Highest education level completed:
  - less than high school degree
  - high school degree or GED
  - some college



- Associate's or Bachelor's degree
- post Bachelor's training

8. Number of arrests as a juvenile or adult:

- none
- one
- two
- more than two

9. Highest education level completed by either parent:

- Less than high school degree
- high school degree or GED
- some college
- Associate's or Bachelor's degree
- post Bachelor's training

10. Type of neighborhood you grew up in

- inner city
- urban
- suburban
- rural

11. Is English your first language?

- yes
- no

## Appendix H

**Table 3.***Interrogation Expectations Code Book*


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Demographic Survey	Age in years
	Gender
	1 = Male
	2 = Female
	3 = Other
	Race/ Ethnicity
	1= Black / African American/ Afro-Caribbean
	2 = White / Caucasian/ Euro American
	3 = Asian
	4 = Latino / Hispanic
	5= Arab / Arab American
	6 = Other
	Student Status
	0 = no
	1 = yes
	Fulltime Undergraduate=1
	Fulltime Graduate =2
	Part-time undergraduate=3
	Part-time graduate=4
	Employment
	0 = no

- 1= yes
- 2= fulltime
- 3=part-time

Time in US in years

Education

- 1 = Less than HS
- 2 = HS or GED
- 3 = Some college
- 4 = Associates degree / BA
- 5 = Post BA

Number of Arrests

- 0 = 0
- 1 = 1
- 2 = 2
- 3 = More than 2

Parent Education

- 1 = Less than HS
- 2 = HS or GED
- 3 = Some college
- 4 = Associates degree / BA
- 5 = Post BA

Childhood Neighborhood

- 1 = Inner City
- 2 = Urban
- 3 = Sub-urban
- 4 = Rural

English as first language

0 = No

1 = Yes

Individual vignettes: 0 = pressure with threats

Total Compliance (0 – 24) 1 = continue questioning

2 = stop questions

---

## Appendix I

**Table 4.***Qualitative Categories*

Category	Category Description
A	Perception of the study presentation (questions 1, 11, 12)
B	Responding to the study (questions 2, 3)
C	Legal perspectives (questions 4, 5, 6, 10)
D	Race/Ethnicity (questions 7, 8, 9)

## Appendix J

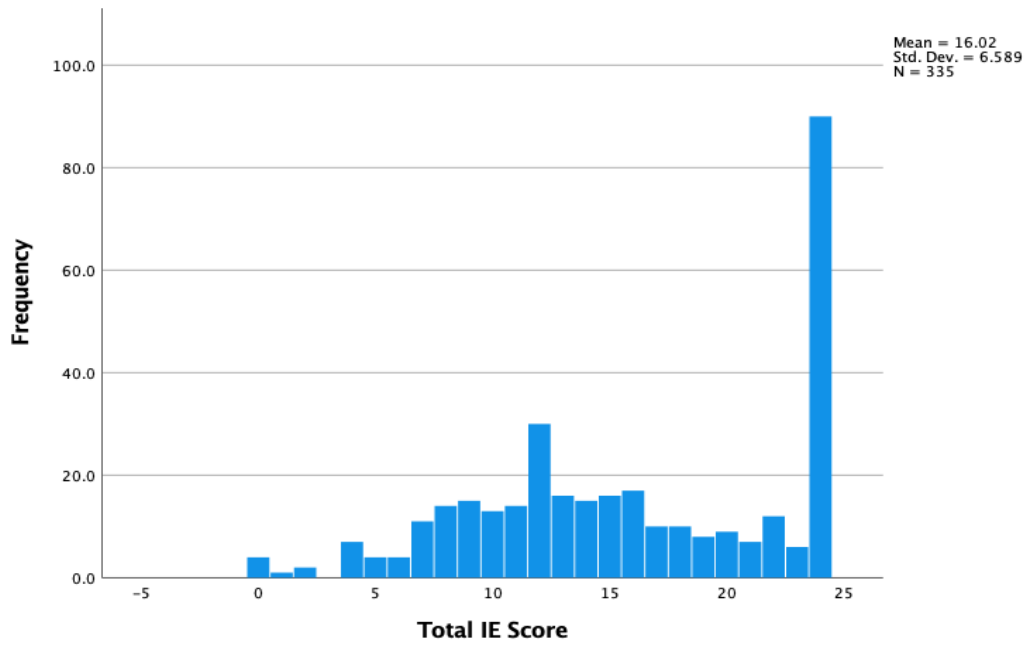
**Table 5.***Response Examples Coded into “Cannot Categorize” Theme*

Category	Domain	Response Examples
A	Thoughts about the IE vignettes	<i>“These scenarios would have many different reactions from the police officers” (reference 1)</i>
A	Purpose of the study	<i>“If facts in each case would override the legal process” (reference 3)</i>
A	Study issues or concerns	<i>“When the gap of the rich and poor is too big, the bottom ones will have to fight for their survival” (reference 1)</i>
B	Greatest influence (for expectations)	<i>“Following Miranda rights” (reference 30)</i>
B	Would do or Should do	<i>“Yes the police were honest in these case scenarios and did their jobs and allowed a lawyer to be provided to all suspects after questioning of all suspects” (reference 16)</i>
C	Legality of police deceit	<i>“Sometimes, in order to get a confession. Like they could say we have you on camera committing a crime in order to make the person feel caught and admit to what they did” (reference 4)</i>
C	Reasons for police deceit	<i>“So they can get out of trouble” (reference 3)</i>
C	Thoughts about police deceit	<i>“It is OK if they have a sound racist to do so” (reference 1)</i>
C	Reasons for false confessions	<i>“If pressure is asserted by the Christian are causing confusion” (reference 9)</i>



Appendix K

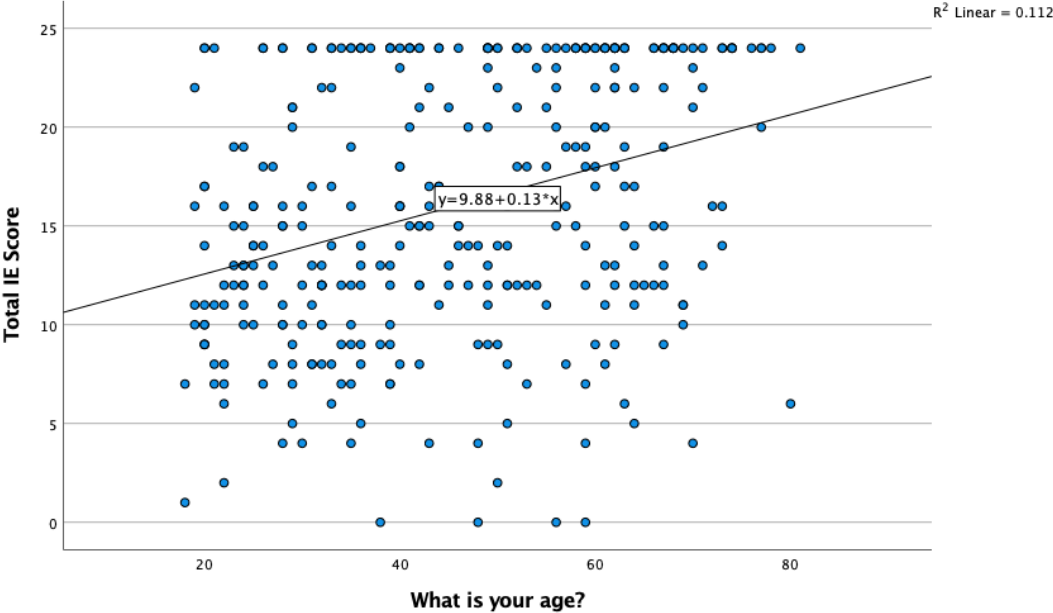
**Figure 1.** Histogram showing mean IE score distribution





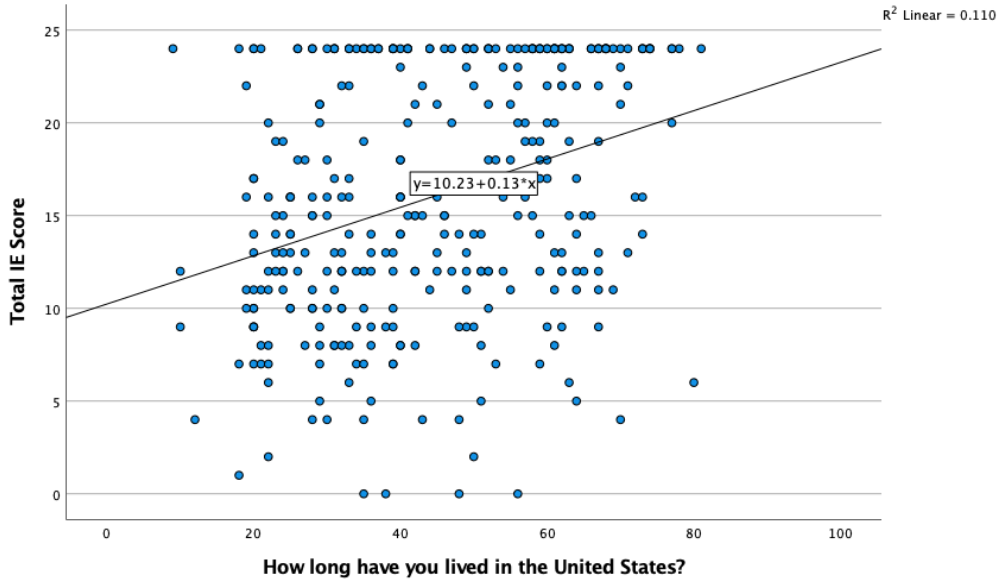
Appendix L

Figure 2. Scatterplot showing association between IE scores and age



Appendix M

**Figure 3.** Scatterplot showing association between IE scores and years in the US



## Appendix N

**Table 6.***Significant predictor variables of IE scores*

Predictor variables	IE Mean Score	SD	N (%)	Sig.
Age Quartiles				$p < .001$
$\leq 32$	13.16	5.50	92 (27.5%)	
33-45	15.65	6.61	77 (23%)	
46-60	16.71	6.86	86 (25.7%)	
61+	18.91	6.09	80 (23.9%)	
Years in the US				$p < .001$
$\leq 30$	13.48	5.82	85 (25.4%)	
31-43	14.92	6.71	86 (25.7%)	
44-59	16.87	6.51	82 (24.5%)	
60+	18.95	6.05	82 (24.5%)	

## Appendix O

**Table 7.***Predictor variables and their association to IE*

Predictor variables	IE Mean Score	SD	N (%)	Sig.
<b>Race/Ethnicity</b>				
Black / African American/ Afro-Caribbean	14.50	6.07	48 (14.3%)	.467
White / Caucasian/ Euro American	16.43	6.67	224 (66.9%)	
Asian	15.72	6.79	32 (9.6%)	
Latino / Hispanic	15.89	6.87	18 (5.4%)	
Arab / Arab American	-	-	-	
Other	15.46	6.03	13 (3.9%)	
<b>Number of arrests</b>				
None	16.20	6.71	255 (76.1%)	.485
One	14.82	5.3	38 (11.3%)	
Two	15.95	6.73	21 (6.3%)	
More than two	16.05	7.13	21 (6.3%)	
<b>Gender</b>				
Male	15.77	6.37	157 (46.9%)	.794
Female	16.25	6.83	173 (51.6%)	
Other	15.60	4.98	5 (1.5%)	
<b>Neighborhood</b>				
Inner city	16.90	6.52	20 (6%)	.290
Urban	16.23	6.85	72 (21.8%)	
Suburban	16.02	6.51	185 (55.2%)	
Rural	15.44	6.63	57 (17%)	
<b>Students</b>				
Yes	14.23	6.03	39 (11.6%)	.071
No	16.25	6.63	296 (88.4%)	

Student Status				.980
Full-time Undergrad	14.8	6.38	22 (6.6%)	
Full-time Grad	15.00	4.73	6 (1.8%)	
Part-time Undergrad	13.63	6.18	8 (2.4%)	
Part-time Grad	14.67	8.32	3 (0.9%)	
Employment				.059
Yes	15.50	6.65	211 (63%)	
No	16.90	6.39	124 (37%)	
Employment Status				.176
Full-time	15.11	6.59	151 (45.1%)	
Part-time	16.48	6.76	60 (17.9%)	
Education				.058
Less than high school degree	8.33	5.13	3 (0.9%)	
Highschool degree or GED	16.50	6.66	34 (10.1%)	
Some college	15.20	6.87	75 (22.4%)	
Associate's/Bachelors	15.69	6.18	136 (40.6%)	
Post-bachelor training	17.31	6.75	87 (26%)	
Parent Education				.188
Less than high school degree	15.87	6.24	23 (6.9%)	
Highschool degree or GED	16.83	6.91	84 (25.1%)	
Some college	17.21	5.96	58 (17.3%)	
Associate's/Bachelors	14.92	6.35	99 (29.6%)	
Post-bachelor training	15.66	7.00	71 (21.2%)	
English as first Language				.757
Yes	15.46	7.98	322 (96.1%)	
No	16.04	6.54	13 (3.9%)	

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## Appendix P

**Table 8.***Multiple regression model predicting IE*

Model		Unstandardized B	Coefficients std. error	Standard Coefficients Beta	t	Sig.
1	(Constant)	9.340	2.568		3.637	<.001
	Age	.135	.021	.335	6.446	<.001
	Race/Ethnicity	.231	.342	.036	.674	.501
	Number of Arrests	-.298	.400	-.039	-.746	.456
	Childhood Neighborhood	-.339	.448	-.040	-.757	.450
	English as first language	1.140	1.803	.033	.632	.528
	2	(Constant)	11.432	3.225		3.544
Age		.037	.094	.092	.394	.694
Race/Ethnicity		.224	.342	.035	.654	.513
Number of Arrests		-.346	.402	-.045	-.861	.390
Childhood Neighborhood		-.372	.449	-.044	-.830	.407
English as first language		-.881	2.609	-.026	-.338	.736
Years in the U.S.		.100	.094	.256	1.072	.285
3	(Constant)	12.277	2.405		5.105	<.001
	Race/Ethnicity	.220	.342	.034	.644	.520
	Number of Arrests	-.362	.399	-.048	-.908	.365
	Childhood Neighborhood	-.386	.447	-.045	-.864	.388

English as first language	-1.608	1.841	-.047	-.873	.383
Years in the U.S.	.136	.021	.348	6.533	<.001

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a. Dependent Variable: Total IE Score

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## Appendix Q

**Table 9.***Qualitative Categories, Domains and Themes*

Category	Domain	Themes	Reference Percentages
A	Thoughts about the IE vignettes	Positive	77.28%
		Negative	22.71%
		Cannot categorize	<i>n</i> =5
A	Purpose of the study	Perception of police behaviors	56.39%
		Race and law enforcement	12.45%
		Differences among respondents	8.85%
		Biases	7.54%
		Guilt/innocence of suspect	1.96%
		Do not know/unsure	12.78%
		Cannot categorize	<i>n</i> =31
A	Study issues or concerns	No issue	82.72%
		Have an issue	10.30%
		Typo	6.96%
		Cannot categorize	<i>n</i> =1
B	Greatest influence (for expectations)	TV & Media	25.83%
		Crime	23.51%
		Knowledge	21.96%
		Experience	18.08%
		History	5.16%
		Content other than crime	3.87%
		Political Climate	1.55%
Cannot categorize	<i>n</i> =30		



B	Would do or Should do	Would do	66.55%
		Should do	24.11%
		Mixture of both	9.32%
		Cannot categorize	<i>n</i> =24
C	Legality of police deceit	Yes	63.55%
		No	18.69%
		Do not know	17.75%
		Cannot categorize	<i>n</i> =15
C	Reasons for police deceit	To obtain information/confession	97.37%
		Easy way to build a case	2.62%
		Cannot Categorize	<i>n</i> =30
C	Thoughts about police deceit	Critique	50.61%
		Justification	24.23%
		Undecided/neutral	25.15%
		Cannot Categorize	<i>n</i> =10
C	Reasons for false confessions	Police behaviors	48.28%
		External circumstances	14.21%
		Emotional reactions	12.99%
		Suspect characteristics	12.99%
		Plea agreement/lighter sentence	10.78%
		They would not	0.73%
		Cannot categorize	<i>n</i> =22
D	Consideration of suspect race	No	64.65%
		Yes	20.84%
		(Yes-Assumed race)	7.55%
		(Yes-Could not determine)	6.94%
		Cannot categorize	<i>n</i> =4
D	Suspect race affecting responses	Would change	13.56%

		Minorities treated more	39.43%
		harshly	42.90%
		Would not change	4.10%
		Do not know/unsure	<i>n=18</i>
		Cannot categorize	
D	Police interactions	Yes	21.80%
	based on race	Minorities treated more	
		harshly	62.30%
		No	9.34%
		Do not know/unsure	6.54%
		Cannot categorize	<i>n=14</i>

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