Review of Research and Recent Case Law on Understanding and Appreciation of *Miranda* Warnings

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"You have the right to remain silent." So begins nearly every version of the *Miranda* warnings—the set of advisements given to people who are being interrogated by police. In doing so, the warnings intend to convey the cornerstone of the right against self-incrimination: Suspects in criminal investigations do not have to speak to the police. The statement, "You have the right to remain silent," and the ones that follow (in one variation or another) might seem easy to understand—you do not have to speak with the police; if you do speak with the police the statements you make can be used as evidence against you; you have the right to an attorney; if you cannot afford one, an attorney will be appointed to represent you; and you can exercise these rights at any point during the interrogation. However, these statements—and the Constitutional rights they convey—are deceptively complex. That complexity, and its effect on the suspects who hear or read the *Miranda* warnings, is the focus of this chapter.

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This chapter provides an overview of the legal and psychological landscape of the *Miranda* warnings. It begins with *Miranda*'s inception in 1966 and the cases that shaped the warnings over the following decades. Then, it covers the translation of *Miranda*'s legal requirements into psychological criteria suitable for evaluation by forensic mental health professionals. Based on this foundation, it covers recent advances in the *Miranda* warnings, both in terms of the contributions of researchers in measuring and identifying fundamental problems in understanding and appreciating the warnings and the judiciary's treatment of the *Miranda* decision over the past decade. Finally, the chapter concludes with recommendations for future research and policy work.

The Law Surrounding *Miranda* Warnings and Waivers.

In *Miranda v. Arizona* (1966), the Supreme Court of the United States issued a decision about when suspects' confessions could be used as evidence against them at trial. The following sections discuss the *Miranda* decision, place this landmark case in the broader context of confession and criminal procedure law in the twentieth century, and describe how the *Miranda* holding was refined and applied in subsequent decades.

Miranda v. Arizona

Miranda v. Arizona (1966) represents the Supreme Court's decision in four separate cases that were consolidated because they all presented the same fundamental question: Are statements made by suspects during police interrogation admissible as evidence if the suspects were not informed of their rights to silence and counsel? In each of these four cases, the defendants (Ernesto Miranda, Michael Vignera, Carl Calvin Westover, and Roy Allen Stewart) had been interrogated by police without being informed of their rights. And, in each case, the defendants ultimately made incriminating statements that were used against them at trial.

The central question in *Miranda v. Arizona* (1966), and the focus of this chapter, concerns a balancing act. On one side of the scale are the rights of individuals when they are questioned by police about a crime, and on the other side are the authority and rights of the state (i.e., police, prosecutors, and the public) when investigating and prosecuting criminal offenses. As one might imagine, a confession—a statement in which a suspect admits that he or she committed a crime—and other incriminating statements are extremely powerful evidence and potentially the *most important* form of evidence (e.g., Kassin & Neumann, 1997). Thus, police seek confessions, often zealously, and in ways that have the potential to jeopardize individuals' rights. As a result, in the *Miranda* decision, the Supreme Court of the

United States recognized an imbalance in the scale that favored the state and attempted to correct it with a set of warnings.

Like the *Miranda* warnings, the *Miranda* decision is more complex than many people appreciate. A simple summary of *Miranda v. Arizona*'s holding is: To secure the admissibility of a suspect's statements at trial, (1) police must inform the suspect of his rights, specifically the right to remain silent, intent to use a suspect's statements as evidence against him, the right to counsel—even if he is indigent—and the ability to assert rights at any time; and (2) if the suspect waives (i.e., gives up) the rights, that waiver must be provided knowingly, intelligently, and voluntarily to be considered valid. The set of rights about which suspects have to be informed, now known as the *Miranda* warnings, and the waiver requirements form the basis of forensic mental health evaluations of *Miranda* waivers (i.e., did the suspect have the capacity to execute a knowing, intelligent, and voluntary waiver?).

Miranda is better understood with some context and nuance. The law on the admissibility of confessions had been developing for 30 years prior to *Miranda*, beginning with a 1936 case in which the Court held that the state's use of confessions that had been extracted through physical torture violated the Fourteenth Amendment's Due Process clause ("[N]or shall any State deprive any person of life, liberty, or property, without due process of law"; *Brown v. Mississippi*, 1936). Thereafter, courts would look to the *totality of the circumstances*—all of the factors surrounding the interrogation and confession—to determine whether a confession was voluntary, that is, whether the defendant's "will was overborne" by law enforcement (*Haynes v. Washington*, 1963, p. 513). The *totality of the circumstances* analysis is, by definition, case specific and done *after* the interrogation—which made it nearly impossible for police or prosecutors to predict which statements would be admissible in court.

The *Miranda* decision was issued by the Supreme Court in 1966, the height of the Warren Court's criminal procedure revolution, and authored by Chief Justice Earl Warren himself. The decision followed a line of cases that gradually expanded rights for suspects and defendants, such as: expanding the definition of involuntary confessions (e.g., *Haynes v. Washington*, 1963; *Spano v. New York*, 1959), establishing that evidence from illegal searches and seizures would be excluded from trial (*Mapp v. Ohio*, 1961), recognizing the right to counsel for indigent suspects (*Gideon v. Wainwright*, 1963), and determining that suspects have the right to counsel during interrogations (*Escobedo v. Illinois*, 1964). Chief Justice Warren came to the bench with 22 years of law enforcement experience (18 as a district attorney and 4 as state attorney general), giving him a "keen awareness of the opportunities for coercion and exploitation of confusion in the custodial interrogation setting" (Kamisar, 2005, p. 11). Thus, he was cognizant of actual police interrogation tactics: the third-degree (i.e., infliction of physical pain) practices of the 1930s, and the more subtle—yet still intimidating—psychological strategies that had risen to prominence by the 1960s. As explained by popular interrogation manuals of the time (e.g., Inbau & Reid, 1962), the crux of this latter set of strategies involved isolation of the suspect augmented by persistent, often lengthy questioning, hostility, and deception.

Against this backdrop, the *Miranda* court articulated the primary holding of the case—not the *Miranda* warnings—but the fact that the Fifth Amendment's prohibition of compulsory self-incrimination ("Nor shall any person … be compelled in any criminal case to be a witness against himself") applies to informal pressure to speak during a custodial interrogation. Put another way, the inherently coercive environment of a custodial interrogation is equivalent to being compelled to testify against oneself. The Court stated,

> It is obvious that [the] interrogation environment is created for no purpose other than to subjugate the individual to the will of his examiner. The atmosphere carries its own badge of intimidation. To be sure, this is not physical intimidation, but it is equally destructive of human dignity. 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 (pp. 457–458).

The Court could have stopped there, holding that the privilege against self-incrimination applies to custodial interrogations. This would have left it up to Congress, the states, or individual police departments to craft appropriate safeguards. However, in the wake of the *totality of the circumstances* framework and the *Escobedo v. Illinois* (1964) holding that only vaguely described the new scope of a defendant's right to counsel—both of which left police, prosecutors, and judges with substantial uncertainty and discretion—the Court elected to describe a safeguard that would sufficiently dispel the coercion of police interrogation: a set of advisements of suspects' rights, since coined "the *Miranda* warnings."

Thus, the *Miranda* warnings were offered as a practical solution so that police, prosecutors, and judges could easily distinguish statements that were admissible from those that were not. This point brings into focus two other, related aspects of the *Miranda* decision. First, it articulates a rule of admissibility, *not* a rule of police conduct. Police are not required to read suspects the *Miranda* warnings as a general rule; they only have to do so to preserve a prosecutor's ability to admit the suspect's statements into evidence at trial. Although this framework generally incentivizes officers to read suspects their rights (but see Clymer, 2002), it is quite different from requiring it as a matter of course. Second, as referenced above, it reflects the Court's attempt to balance suspects' rights with the needs of law enforcement—not an attempt to tip the scales in favor of suspects. Thus, in many ways, the decision was designed to allow interrogations to proceed, but with better-informed suspects and better-prepared police officers.

Of course, interrogations were only supposed to proceed once the suspect waived the *Miranda* rights. Like other waivers of constitutional rights, a waiver of the *Miranda* rights must be knowing, intelligent, and voluntary in order to be considered valid. Generally, knowing and intelligent refer to the suspect's comprehension of the warnings, and voluntary refers to the absence of coercion in waiving the rights. Subsequent cases elaborated on the meaning of these waiver components, and some jurisdictional differences emerged with respect to the knowing and intelligent requirements. While some states require only a basic understanding of the warnings (e.g., *Illinois v. Bernasco*, 1990; *Michigan v. Daoud*, 2000), others also require evidence that the suspect appreciated the personal significance of the rights

and the consequences of waiving them (*Arkansas v. Bell*, 1997; *Pennsylvania v. DeJesus*, 2001). The Supreme Court issued a definitive opinion on the voluntariness requirement in 1986, holding that a statement is only involuntary if it is the product of governmental coercion (*Colorado v. Connelly*). Thus, the Court effectively foreclosed broader inquiries into the suspect's free will.

One year after the *Miranda* decision, the Supreme Court addressed the rights of juvenile suspects (*In re Gault*, 1967). *Gault* extended several due process protections (e.g., right to counsel, right to confront witnesses) to juveniles, including, by implication, the *Miranda* warnings and waiver requirements. The following decade, the Court also held that juvenile waivers would be evaluated using the *totality of the circumstances* approach used for adult waivers (*Fare v. Michael C.*, 1979).

The Aftermath of Miranda

Despite *Miranda*'s potential to dramatically change the landscape of interrogations and courts' admissibility analyses, in many ways it did not (Leo, 2001). Prior to the decision, many law enforcement agencies, including the Federal Bureau of Investigation, were already in the habit of administering a set of warnings prior to interrogation (Kamisar, 2005). After the decision (and a relatively brief adjustment period) other police departments followed suit. Nevertheless, many suspects waived their rights, meaning that any challenge to the validity of their waivers or admissibility of their statements was analyzed using the familiar *totality of the circumstances* framework (i.e., the same framework used prior to *Miranda*).

Under this flexible framework, no specific factors are required to be considered, and no one factor is dispositive across all cases. When courts evaluate the *totality of the circumstances* of a *Miranda* waiver, they generally focus their inquiry on two broad categories: characteristics of the suspect and situational conditions of the interrogation. Cases using this approach have referenced suspect-specific factors such as age, intelligence, apparent comprehension of rights, prior experience with police, and interrogation-specific factors such as length of questioning, promises of leniency, or denial of basic needs (e.g., food, drink, sleep; *Coyote v. United States*, 1967; *West v. United States*, 1968). The relationship between these factors and *Miranda* comprehension are discussed further in the following sections.

From the outset, *Miranda*'s scope was limited to suspects subjected to *custodial interrogation*, and the Court elaborated on these terms in subsequent cases. Specifically, custody was subsequently defined as whether a reasonable person would have felt he or she was at liberty to terminate the interrogation and leave given the circumstances surrounding the interrogation (*Thompson v. Keohane*, 1995). The Court defined interrogation as "any words or actions on the part of the police … that the police should know are reasonably likely to elicit an incriminating response from the suspect" (*Rhode Island v. Innis*, 1980, pp. 301–302). Thus, certain situations, including traffic stops (*Berkemer v. McCarty*, 1984) and even interviews at the police station in which the suspect is technically free to leave (*Oregon

v. Mathiason, 1977), are outside of *Miranda*'s scope. Additionally, through a series of cases, the Court also clarified that there were uses for un-*Mirandized* statements. For instance, when police elicit un-*Mirandized* statements from a suspect under the auspices of public safety, those statements can be introduced as part of the prosecution's case-in-chief (*New York v. Quarles*, 1984), meaning the portion of the trial in which the prosecution presents evidence in an effort to satisfy its burden of proof (i.e., beyond a reasonable doubt). Further, un-*Mirandized* statements can be used to impeach (i.e., undermine the credibility and reliability of) a defendant's testimony at trial (*Harris v. New York*, 1971). In all of these cases (i.e., cases in which *Miranda* does not apply and cases in which un-*Mirandized* statements are used), the only requirement is that the suspect's statement must have been voluntary.

Although the impact of *Miranda* was less significant than anticipated (see Leo, 2001), Congress passed a federal statute shortly after the decision that made the admissibility of suspects' statements turn on voluntariness only (18U.S.C. § 3501). However, the statute was not used to challenge *Miranda* until over three decades later. Given the substantial narrowing and carving-out of *Miranda*, described above, there was some speculation that the *Miranda* decision might be overturned. However, the Supreme Court rejected the attempt to legislatively "overrule" *Miranda*, holding that 18U.S.C. § 3501 was unconstitutional and reaffirming the constitutionality of the 1966 decision in *Dickerson v. United States* (2000).

Translating Legal Requirements into Psychological Constructs

Psychological testing and evaluation can help inform a court's *totality of circumstances* analysis of whether a suspect's waiver of rights was valid. Forensic evaluators typically assess the "cognitive" requirements: whether a waiver was knowing and intelligent (Goldstein & Goldstein, 2010; Oberlander & Goldstein, 2001; Oberlander, Goldstein, & Goldstein, 2003). Voluntariness may also be assessed by forensic evaluators; however, because of the primary focus of voluntariness on situational aspects rather than suspect features (*Colorado v. Connelly*, 1986), voluntariness challenges cannot contain cognitive questions (Grisso, 1998). This section, therefore, focuses on translation of the knowing and intelligent requirements.

The knowing, intelligent, and voluntary waiver standard, like many other concepts in criminal law, developed out of case law and analysis of legal principles, not out of empirical investigation of police interrogations. It is the nature of the law as an idiographic field to develop constructs in this manner, just as it is the nature of psychology as a nomothetic field to develop constructs empirically. This difference between the fields is not a problem, per se, but it does lead to the need for translation of terms and concepts. Legally meaningful terms like "insanity" have no direct equivalent in psychology; rather, legal concepts must be understood at the operational level and then linked to relevant concepts in psychology.

As with other questions of defendant abilities to take part in the criminal justice system (e.g., competence to stand trial), the knowing and intelligent requirements

indicate the need for a person to be able to *function* in a certain legal *context*. Grisso (2003) clearly describes the functional and contextual nature of legal competencies:

> Legal competence constructs focus on person-context interactions. A legal competence question does not merely ask the degree of functional ability or deficit that a person manifests. It asks further, "Does this person's level of ability meet the demands of the specific situation with which the person will be … faced?" Defined more formally, a decision about legal competence is in part a statement about the *congruency or incongruency between (a) the extent of a person's functional ability and (b) the degree of performance demand that is made by the specific instance of the context in that case.* Thus an interaction between individual ability and situational demand, not an absolute level of ability, is of special significance for legal competence decisions … The individual's level of ability will be important to consider, yet the fact finder can assess its significance only when it is weighed against the demands of the individual's specific situation (pp. 32–33, emphasis in the original).

With this general framework in mind, scholars have looked to case law to discern the functional abilities in which courts seem interested for each legal context and identified several broad abilities that are particularly relevant to most legal competencies. Appelbaum and Grisso (1988) identified four abilities that appeared to be of interest to the courts in cases in which the ability to make medical treatment decisions was at issue. The four "tiers" of ability are sufficiently general, however, that they have proven to be a sound basis for many other legal competencies. Depending on the context, a competence standard might require just one of the abilities, some of the abilities, or all four abilities. The following are the four competence-related abilities:

- *Communicating choices* refers to the basic ability to convey a choice consistently as evidence of decision-making ability.
- *Understanding relevant information* is the ability to comprehend information relevant to decision making.
- *Appreciating the situation and its consequences* is a concept that encapsulates the need for a person to grasp what information means *in his or her own case*.
- *Manipulating information rationally* is the ability to use logical thinking (reasoning) to weigh risks and benefits of options.

For *Miranda* waiver analyses, the knowing and intelligent components of the legal standard have been equated by scholars to the understanding and appreciation components in the Appelbaum and Grisso (1988) model of necessary abilities for legal decision making (Goldstein & Goldstein, 2010; Grisso, 1981). In the context of *Miranda* waivers, understanding denotes an individual's ability to understand the basic meaning of the warnings, and appreciation refers to an individual's ability to grasp the importance of the warnings in the legal context and to recognize the consequences of waiving the rights (Grisso, 1981, 2003). Drawing a distinction between knowing and intelligent is important from a theoretical standpoint, as it creates a need for distinguishing and operationally defining two constructs. It is significant in practice also because it establishes a context in which a suspect can meet one requirement but fail another (e.g., a suspect may understand that she has a right to

have an attorney present before and during questioning, but fail to appreciate the consequences of waiving that right; Frumkin & Garcia, 2003; Grisso, 1998). What is more, distinguishing between knowing and intelligent establishes a hierarchy of comprehension in which understanding basic details is necessary before someone can appreciate the significance of the rights and rights waivers.

The theoretical work just described is sound, yet it is important to recognize that it is based upon a general model of legal decision-making ability and that *Miranda* case law, unfortunately, does not provide a detailed or consistent operationalization of knowing and intelligent. As noted in the prior section of this chapter, lower courts have varied in their descriptions of knowing and intelligent, and the United States Supreme Court has not provided detailed guidance. Appellate decisions in many states appear to require two distinct abilities (e.g., *Arkansas v. Bell*, 1997; *Clay v. Arkansas*, 1994; *Pennsylvania v. DeJesus*, 2001; *In re Patrick W.*, 1978; *Tennessee v. Stephenson*, 1994). Additionally, a distinction between the knowing and intelligent requirements appears in United States Supreme Court opinions, as well—perhaps most notably in *Moran v. Burbine* (1986) where the Court indicated that an individual must be aware of both the nature and consequences of a *Miranda* waiver (see also *Brady v. United States*, 1970; *Escobedo v. Illinois*, 1964; *Fare v. Michael C.*, 1979).

Although an operational legal definition of knowing and intelligent remains elusive, some state courts require only a basic understanding of the *Miranda* rights in order to find a waiver valid (e.g., *Michigan v. Daoud*, 2000; *Michigan v. Cheatham*, 1996; *Illinois v. Bernasco*, 1990). Some of those courts, though, demonstrate ambivalence across opinions. In *Illinois v. Young* (2006), the Appellate Court of Illinois held that a waiver would be valid if the suspect had an awareness of the basic parts of the warning (i.e., that he could remain silent, he could request a lawyer, that his statements could be used against him). Yet, two years later, the same court seemed to describe a somewhat higher level of required comprehension in which a suspect had "a full awareness of both the nature of the right being abandoned and the consequences of the decision to abandon it" (*In re Dante W.*, 2008, p. 1044).

In between these poles, several courts have outlined intermediate approaches to *Miranda* waiver requirements—for example, holding that a suspect should have some understanding of waiver consequences but stating that a suspect does not need to be aware of every potential consequence (e.g., *Colorado v. Al Yousif*, 2002; *New Hampshire v. Bushey*, 1982). The Supreme Court also offered what seems to be an intermediate definition. The year after *Moran v. Burbine*, the Court noted that a suspect does not need to "know and understand every possible consequence of waiver of the Fifth Amendment privilege;" rather, recognition of at least some consequences of revocation of rights would suffice (*Colorado v. Spring*, 1987, p. 574). The Court also seemed to suggest that recitation of the *Miranda* warnings was sufficient to protect the Fifth Amendment privilege, however, even though the warnings do little to explain the consequences of a waiver. So, it seems that the Court requires appreciation of consequences, but namely just the consequence of having a suspect's statements used against him, as that was the only consequence described in the warnings used in that case (*Colorado v. Spring*, 1987; King, 2006).

To date, it appears that the Court does not consider the terms knowing and intelligent to be synonymous, but it has done little to establish operational definitions that distinguish them clearly (Grisso, 2003). A survey of state court judges, however, did find that the large majority of judges (1) reported that their state required both knowing and intelligent as two different types of comprehension and (2) that knowing and intelligent, as distinct types of comprehension, should be required to find a waiver valid (Zelle, 2012). In addition, the judges' responses to case scenarios with varied levels of comprehension indicated that they found a waiver in which the suspect had good understanding and good appreciation to be significantly more valid than a waiver in which the suspect had good understanding but poor appreciation, which further suggests that judges look for both understanding and appreciation when considering waiver validity.

Given the general, if at times vague, direction of the courts and the soundness of the theoretically based translation of knowing and intelligent to understanding and appreciation, it remains good practice for the psychological assessment of waiver capacity (whether for legal cases or for research) to address both understanding and appreciation. Grisso (1998) developed the Instruments for Assessing Understanding and Appreciation of Miranda Rights in order to assess both constructs. Based upon the theoretical distinction between understanding and appreciation, he created four individual tools that target the two constructs separately (Grisso, 1998; the instruments were recently updated and maintain the four distinct instruments aimed at the two constructs, though they were renamed as the Miranda Rights Comprehension Instruments [MRCI], Goldstein, Zelle & Grisso, 2014). Each of the instruments is scored independently from the others, and normative data are available for each. The first instrument, the Comprehension of *Miranda* Rights (CMR), addresses understanding by asking evaluees to paraphrase each of the five warnings in their own words. Because paraphrasing the warnings requires evaluees to demonstrate understanding through verbal expressive abilities that might be beyond what some evaluees possess, the Comprehension of *Miranda* Rights—Recognition (CMR-R) instrument also assesses understanding but by a different method: evaluees are asked to recognize whether a variety of sentences mean the same thing or something different from the warnings. Assessing understanding via the two methods also helps identify errors that might not have been apparent on one of the instruments (e.g., an evaluee might not express confusion about the difference between an attorney and a social worker when paraphrasing the rights, but might demonstrate the error when presented with a sentence that equates appointment of a social worker with appointment of an attorney). The Comprehension of *Miranda* Vocabulary (CMV) instrument includes 16 words that often appear in warnings and, if misunderstood, could lead to misunderstanding of the rights. Although originally thought of as another measure of understanding, research suggests vocabulary comprehension is actually a prerequisite for understanding and appreciation (Zelle et al., 2008). Finally, the Function of Rights in Interrogation (FRI) instrument assesses appreciation by asking evaluees about how the rights apply to relevant legal contexts. Evaluees are presented with scenarios (e.g., a suspect being questioned by police, a

suspect meeting with his attorney before interrogation) and asked what should happen if, for example, the vignette suspect tells police that he does not want to talk.

A second set of instruments is now also available, the Structured Assessment of *Miranda* Abilities (SAMA; Rogers, Sewell, Drogin, & Fiduccia, 2012). The SAMA includes measures of *Miranda* understanding (the Miranda Comprehension Template), misconceptions about *Miranda* rights (the Miranda Quiz), *Miranda* vocabulary (the Miranda Vocabulary Scale), and response style (the Miranda Acquiescence Questionnaire). Interestingly, the SAMA also includes an instrument aimed at assessment of "*Miranda* reasoning" (the Miranda Reasoning Measure), despite the courts' stated interest in, at most, only the appreciation of consequences of waiving the rights—not the ability to weigh risks and benefits when making a waiver decision. Assessment of and research concerning rational decision making in the context of *Miranda* may be important, however, for underscoring the shortcomings of the *Miranda* warnings as a prophylactic device. As the next two sections respectively discuss, there is far from universal comprehension of the *Miranda* warnings, undercutting their stated aim of balancing the scales between suspects and police, and recent case law has made the warnings more complicated to understand and to invoke. Evidence of people's misunderstandings and uninformed reasoning, therefore, might be quite relevant to future *Miranda* research and policy, if not evaluation practice.

Understanding and Appreciating *Miranda* Warnings: The State of the Science

The *Miranda* holding did not radically shift criminal investigations in the way that some might have anticipated, in large part because most people waive their *Miranda* rights. Based on observations of police interrogations and interviews with defendants, approximately 80% of adults and 90% of juveniles waive their rights and speak with police (Grisso & Pomicter, 1977; Leo, 1996; Viljoen, Klaver, & Roesch, 2005). The frequency of waivers raises questions about how they measure up against the knowing and intelligent standards. In this context, a review of the research on the factors associated with understanding and appreciation of the *Miranda* warnings is particularly important.

Beginning with Grisso's seminal work in the 1970s, decades of research have consistently shown that the *Miranda* warnings could be more difficult to comprehend than anyone might have predicted. As one might expect, certain individuals (e.g., juveniles, individuals with intellectual disabilities), as a group, have greater difficulties than others. In addition, other factors that might reasonably seem related to *Miranda* comprehension (e.g., prior legal experience, exposure to the warnings through television programs) have proven surprisingly unhelpful in predicting understanding or appreciation of legal rights. This section provides an overview of "the state of the science"—what nearly 40 years of research tells us about the factors

that best predict *Miranda* comprehension, the parts of the warning that are most problematic, and how situational demands of police interrogation contribute to poor comprehension. The discussion is organized by common factors courts consider in a *totality of the circumstances* analysis and those identified by research as having some bearing on *Miranda* comprehension. These include suspect factors (e.g., age, prior legal experience) and situational factors (e.g., the language and delivery of the *Miranda* warnings).

Suspect Factors

Miranda comprehension is determined, in part, by characteristics of the individual hearing or reading the warnings. These individual characteristics, or *suspect factors*, can range from rather indelible qualities like intelligence to more dynamic factors such as symptoms of mental illness. The most salient suspect factors, as determined by research and court opinions, are reviewed below.

Intelligence: Across decades of research, intelligence has emerged as an important factor—and perhaps the *most* important factor—in *Miranda* comprehension. Among studies of justice-involved youth, for instance, IQ has consistently been associated with *Miranda* understanding and appreciation (e.g., Colwell et al., 2005; Goldstein et al., 2003; Grisso, 1981; Viljoen & Roesch, 2005). Though the full range of intellectual abilities (often reflected, operationally, as a Full Scale IQ score) has a strong relationship with *Miranda* comprehension, verbal intelligence has a particularly strong association with both understanding and appreciation (Colwell et al., 2005; Viljoen & Roesch, 2005).

Available research suggests that the importance of IQ in *Miranda* comprehension among youth may vary depending on age, though the specific nature of this interaction differs by study. Grisso's (1981) research indicated that IQ might be most influential for youth ages 14–16 because younger youth, as a class, were generally unable to demonstrate understanding or appreciation of rights and older youth, as a class, generally demonstrated understanding and appreciation comparable to adults. By contrast, Viljoen and Roesch (2005) found that intelligence was more important for younger than older youth.

Among adults, IQ has consistently been the most consistent predictor of *Miranda* comprehension. Unlike youth, for whom developmental status (for which age is often the best proxy) has the potential to strongly influence *Miranda* comprehension, adults' understanding and appreciation of legal rights seems to hinge more directly on intellect. For instance, Grisso (1981) found that IQ had the strongest relationship with *Miranda* understanding, even when controlling for age, gender, race, and socioeconomic status. Perhaps not surprisingly, adults with cognitive impairment show significant deficits in *Miranda* comprehension. In absolute terms, many individuals with intellectual disabilities demonstrate profound misunderstandings of the *Miranda* warnings as reflected in an inability to paraphrase the warnings or accurately categorize statements as conveying information that is either

the same or different from one of the *Miranda* rights. For instance, in one study of *Miranda* comprehension among individuals with mild intellectual disability, 50% were unable to adequately paraphrase any component of the warnings, and only 2% scored significantly greater than chance when classifying statements as either meaning the same thing as or something different than a statement from the warnings (O'Connell, Garmoe, & Goldstein, 2005). In relative terms, individuals with intellectual disabilities often perform significantly worse on measures of *Miranda* comprehension than youth and the overwhelming majority of other adults (Fulero & Everington, 1995; O'Connell et al., 2005).

Age: Research has consistently revealed age as one of the most important factors in *Miranda* comprehension (e.g., Oberlander and Goldstein, 2001; Grisso, 1981; Colwell et al., 2005). Across the board, youth have more difficulty than adults with all elements of *Miranda* understanding and appreciation. Specifically, youth are less able to paraphrase or recognize the meaning of the rights, define vocabulary terms used in the *Miranda* warnings, or appreciate how the rights to silence and counsel function in practice (e.g., Grisso, 1981; Kelley, 2014). In addition to the distinction between youth and adults, there are important distinctions between younger and older youth. Across most studies that have explored the age-*Miranda* comprehension relationship, the greatest deficits are seen in youth under age 15, particularly in youth under age 13. By around age 15, most youth reach a plateau in their *Miranda* understanding, such that the ability to understand the basic meaning of one's legal rights does not seem to markedly improve past mid-adolescence (Abramovitch, Peterson-Badali, & Rohan, 1995; Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003; Grisso, 1981). In contrast, appreciation of the rights to silence and counsel and the ability to define critical *Miranda* vocabulary continue to improve throughout adolescence and into adulthood (Grisso, 1981; Kelley, 2014).

The types of errors youth tend to make often reflect fundamental misconceptions about the nature of rights. In the body of research on children's reasoning about rights, Melton (1980, 1983) described an age-related progression from egocentricity, perceiving rights in terms of what one can have or do (e.g., something allowed by an authority figure) to abstraction, considering rights based on morality and intangible principles (e.g., freedom of speech). Subsequent research has shown that this progression does not necessarily occur in a linear manner and certain developments may occur later than expected, depending on the context. Ruck et al. (1998) found that the majority of youth (ranging in age from 8 to 16) continued to define "right" as something one can or is allowed to do, not an entitlement. And, in contrast to some earlier findings, this research revealed that older children were *more* likely than younger children to believe that rights can be taken away. Additionally, whereas younger children most frequently contemplated that rights could be removed by parents, older children often conveyed that their rights could be revoked if they did something wrong (Ruck, Keating, Abramovitch, & Koegl, 1998).

Moving from the development of reasoning about rights generally to reasoning about *Miranda* rights specifically, the research reveals how these fundamental misconceptions can play out in a specific legal context. For instance, regarding the right to silence, Grisso (1981) found that the majority of youth did not recognize that

police should stop questioning if a suspect refuses to talk. Multiple studies have also revealed errors in youths' appreciation of the right to counsel and the attorney-client relationship. For example, youth often mistakenly report that defense attorneys only protect innocent clients and that attorneys play a fact-finding role and reveal all client communications with the judge (Abramovitch, Peterson-Badali, & Rohan, 1995; Goldstein et al., 2003; Grisso, 1997). Finally, youth often struggle with certain *Miranda* vocabulary terms, an issue that is revisited below in the section on *Miranda* wording. In particular, youth have the most trouble defining the terms "consult," "interrogation," "entitled," and "right" (Grisso, 1981; Zelle, Riggs Romaine, & Goldstein, 2015).

Importantly, although adults' *Miranda* comprehension is generally strong in a relative sense (i.e., when compared to youths' *Miranda* comprehension), their understanding and appreciation of rights is often far from perfect (e.g., Grisso, 1981; Kelley, 2014; Rogers, Rogstad, et al. 2010b). Further, because many *Miranda* abilities plateau in mid-to-late adolescence or early adulthood, age is *not* a useful predictor of *Miranda* comprehension among adults. Finally, among youth and adults, individual differences abound—particularly when other factors, such as intelligence, are taken into account—emphasizing the importance of individualized evaluations of *Miranda* waivers.

Developmental factors: Given the robust relationship between age and *Miranda* comprehension, some research has explored different aspects of development—cognitive, psychosocial, and neurological—to better understand the factors that account for this association. Certainly, as a prerequisite to even a rudimentary understanding of the *Miranda* warnings, one must have developed basic cognitive abilities such as *verbal abilities* to comprehend the language used in the warnings, *attention* to focus on the warnings sufficiently enough to comprehend them, *memory* to recall the warnings after they have been administered, and *executive abilities* to reason about the warnings and make a decision about waiving or invoking them. Cognitive abilities develop throughout childhood and adolescence and partially explain the relationship between age and *Miranda* comprehension. Specifically, Viljoen and Roesch (2005) found that general intellectual abilities mediated the relationship between age and youths' abilities to paraphrase the *Miranda* warnings, recognize statements conveying the same content as the *Miranda* warnings, define *Miranda* vocabulary, and appreciate how the rights to silence and counsel function during interrogations and court proceedings. Research has also revealed that, of the array of cognitive abilities, *verbal abilities* have the strongest relationship with *Miranda* comprehension (Colwell et al., 2005; Viljoen & Roesch, 2005).

Mapping these results onto the age findings discussed in the section above, cognitive abilities are an important part of the age-*Miranda* comprehension picture. Remember that most youth reach a plateau in *Miranda* understanding around age 15 or 16 (Abramovitch et al., 1995; Goldstein et al., 2003; Grisso, 1981). This is roughly the age at which many basic cognitive abilities crystallize. For instance, research suggests that basic logical abilities are generally in place by age 16 (Cauffman & Steinberg, 2000), giving youth the capacity to use rational algorithms to make decisions just as adults do (Quadrel, Fischhoff, & Davis, 1993). Thus, the

development of basic cognitive abilities seems to account for improvements in *Miranda* understanding over time. The continued development of *other Miranda* abilities, namely the ability to define key vocabulary and appreciate the function and significance of rights, must, then, involve additional capacities.

Another aspect of development is psychosocial maturity, or maturity of judgment, which refers to three broad categories of psychosocial factors that influence the process of decision making: responsibility, perspective, and temperance (Cauffman & Steinberg, 2000). Responsibility refers to autonomy, clarity of one's identity, and independence. Perspective refers to the ability to consider situations from multiple viewpoints and examine the short- and long-term consequences of decisions. Temperance refers to the ability to evaluate situations before acting and inhibit impulsive behavior. Early research in this area revealed that higher levels of psychosocial maturity were associated with more mature, socially responsible decision making (i.e., decision making that resulted in less antisocial or risky behavior; Cauffman & Steinberg, 2000). Research has also shown that younger adolescents are less likely to recognize the risks associated with legal decisions or recognize the long-term consequences of legal decisions (Grisso et al., 2003). Subsequent research on the relationship between psychosocial maturity and *Miranda* comprehension specifically indicated that responsibility significantly predicted youths' understanding and appreciation of the *Miranda* warnings (Colwell et al., 2005). Youth at lower levels of psychosocial maturity have also demonstrated significantly greater misconceptions about the *Miranda* rights and greater difficulty recalling the *Miranda* warnings than their more psychosocially mature peers (Rogers, Steadham, Fiduccia, Drogin, & Robinson, 2014).

Finally, the last couple of decades have seen remarkable advances in the understanding of neurological development, specifically age-related changes in both brain structures and connections. Much of this research has focused on the frontal lobes of the brain, the seat of executive functions such as decision making, regulating impulsivity, attention, planning, and problem solving (e.g., Gogtay et al., 2004; Steinberg, 2008). Imaging research has shown that these are the last part of the brain to reach maturity and that many important parts of frontal lobe development do not happen until the mid-twenties (e.g., Gogtay et al., 2004). At the same time, the limbic system, or socio-emotional center of the brain, is developed and highly active during adolescence (Kambam & Thompson, 2009). The activity of limbic system structures, such as the nucleus accumbens, seems to partially account for the increase in risky behavior seen in adolescence. The dopaminergic system—part of the brain's reward circuitry—is also remodeled during puberty, leading to a "rapid and dramatic increase in dopaminergic activity within the socioemotional system," followed by a decrease in activity and redistribution of dopamine receptors (Steinberg, 2008, p. 1764). This phenomenon has important implications for reward-seeking behavior in adolescence. The active, reward-sensitive limbic system combined with the immature frontal lobes—the structures that eventually control and regulate decision making—means that adolescents are more prone to risk-taking and reward-seeking behaviors than adults (Steinberg, 2008).

In the context of *Miranda* comprehension, these aspects of neurological development certainly have the potential to influence not only how youth understand and appreciate their rights, but also how youth make waiver decisions. For instance, under-developed frontal lobes can influence how youth appreciate the function of rights and the consequences of a waiver, both in terms of short-term outcomes (e.g., police questioning designed to elicit a confession) and long-term outcomes (e.g., incarceration). Additionally, police officers bring social (e.g., authority) and emotional (e.g., fear, stress) demands to an interrogation that are likely far more salient to youth than the purely logical calculus of reasoning about the meaning of the *Miranda* warnings and weighing the pros and cons of waiving rights.

Academic achievement: Academic skills, like intellectual abilities, can influence *Miranda* comprehension. In contrast to the larger body of literature on the relationship between age, IQ, and *Miranda* comprehension, the research on academic achievement is relatively sparse. Nonetheless, the studies that have investigated academic achievement found strong associations with *Miranda* understanding and appreciation (Kelley, 2014; Zelle, Riggs Romaine, & Goldstein, 2015). Indeed, it appears that skills specific to language comprehension—listening and reading comprehension—are the most important academic skills for *Miranda* comprehension, as might be expected. As further support of this premise, results from one study have shown that adults with a specific language impairment (i.e., SLI, language impairment in the absence of cognitive or neurological impairment) demonstrated significantly poorer understanding and appreciation of *Miranda* rights than peers without a SLI (Rost & McGregor, 2012).

Research on the relationship between placement in special education programming and *Miranda* comprehension has yielded conflicting results. One study found that youth with a history of special education demonstrated significantly lower comprehension than those without a special education history (Goldstein et al., 2003), but a larger study found that special education was not related to *Miranda* comprehension (Zelle et al., 2015). The authors of the second study noted that students can receive special education services for a wide variety of reasons, not all of which are related to learning disabilities (e.g., mental health issues, behavior problems). Therefore, academic skills relevant to *Miranda*, such as reading and listening comprehension, discussed above, are likely clearer indicators of comprehension (Goldstein & Goldstein, 2010).

Mental illness: Symptoms of mental illness can also influence *Miranda* comprehension, though research outcomes depend on the diagnosis and specific symptoms in question. Generally, available research suggests that symptoms of psychosis (e.g., hallucinations, delusions, disorganization) in psychiatric inpatients are related to *Miranda* understanding and appreciation, even after controlling for IQ (Cooper & Zapf, 2008; Viljoen, Roesch, & Zapf, 2002). In relative terms, Cooper and Zapf's (2008) study revealed that psychiatric inpatients generally performed worse than adults from Grisso's (1981) sample, either worse or comparable to Grisso's (1981) juveniles, and slightly better than offenders with intellectual disabilities from another study (Fulero & Everington, 1995). However, one study did *not* find an association between psychosis and *Miranda* comprehension, instead finding that

cognitive and academic achievement variables were the most significant predictors of *Miranda* comprehension, even among an inpatient sample (Rogers, Harrison, Hazelwood, and Sewell, 2007a).

Beyond psychosis, other symptoms certainly have the potential to influence *Miranda* comprehension. For instance, the cognitive slowing, negative distortions about one's self and abilities, and hopelessness about the future associated with depression could negatively affect one's motivation to evaluate the rights or the consequences of waiving them (Goldstein & Goldstein, 2010). Similarly, individuals with clinical anxiety, which can lead to cognitive processing difficulties, might have difficulty evaluating the meaning of their rights, particularly during a stressful interrogation (Covington & Omelich, 1987). There is limited research on these symptoms, and the studies that have evaluated the relationship between depression or anxiety and *Miranda* comprehension have not found significant associations in juveniles (Olubadewo, 2009; Viljoen & Roesch, 2005). In fact, Viljoen and Roesch (2005) found that the only symptoms that were related to *Miranda* comprehension among youth were markers of psychomotor excitation associated with Attention-Deficit/Hyperactivity Disorder.

Finally, substance use also has a strong theoretical relationship with *Miranda* comprehension. Studies have demonstrated the impact of intoxication on executive functioning skills, such as decreased inhibition, attention, reasoning, and self-monitoring and increased impulsivity and risk-taking (e.g., Fromme, Katz, & D'Amico, 1997)—all of which have the potential to influence the cognitive and psychosocial abilities needed to understand and appreciate legal rights. This relationship is particularly important given evidence that a significant proportion of youth and adults are intoxicated while being questioned by police or used illicit drugs in the 24 hours prior (Ferguson & Douglas, 1970; Pearse, Gudjonsson, Clare, & Rutter, 1998; Viljoen, Klaver, & Roesch, 2005). However, as with research on other aspects of mental illness and *Miranda* comprehension, there is a dearth of work in this area. One study found that substance use problems were associated with significant deficits in *Miranda* comprehension among justice-involved youth (Olubadewo, 2009). However, with respect to relative performance, a study that examined comprehension of rights to silence and counsel among psychiatric inpatients found that adults with substance use disorders demonstrated significantly better understanding than adults with psychotic or affective disorders (Viljoen, Roesch, & Zapf, 2002).

Prior exposure to the Miranda warnings: There is, perhaps, no other factor for which commonsense notions differ so dramatically from results of research than prior experience with police. Often, courts assume that a history of arrests provides suspects with opportunities to learn their *Miranda* rights through repeated exposure to the warnings and, perhaps, the implications of waiving their rights (Grisso, 1981). Research, however, has consistently refuted the idea that history of arrests has a relationship with *Miranda* comprehension.

Researchers have investigated this relationship in a number of different ways. Conventionally, research participants are asked about their number of prior arrests (among other relevant demographic and personal history questions) and complete

measures of *Miranda* understanding and appreciation. Statistical analyses then determine whether there is a significant relationship between the variables. Done this way, research has revealed that that understanding and appreciation of *Miranda* rights are unrelated to history of arrests for justice-involved youth (Grisso, 1981; Zelle et al., 2015), justice-involved adults (Grisso, 1981; Kelley, 2014; Rogers, Rogstad, Steadham, & Drogin, 2011), undergraduate students (Eastwood & Snook, 2010), and adults with mental illness (Cooper & Zapf, 2008; Rogers, Harrison, Hazelwood et al., 2007a; Viljoen & Roesch, 2005). In a more recent study, researchers administered five versions of the *Miranda* warnings in one sitting (interspersed with other tasks) and tested whether participants—pretrial detainees—demonstrated improved comprehension at the end of the session and again 2–4 weeks later (Rogers, Fiduccia, Robinson, Steadham, and Drogin, 2013b). Results revealed that, in general, improvements in comprehension were negligible at posttest (i.e., the end of the first session) or follow up (2–4 weeks later). Of low-performing participants—those who had most room to improve—less than one third (32%) improved with repeated administrations.

Finally, a small body of research recently investigated *Miranda* comprehension among the general population to address whether exposure to the rights—typically through popular media—has resulted in actual understanding of rights. As Zelle et al. (2015) summarized, "Despite the appeal of an osmotically based knowledge of rights, research suggests that exposure has not improved our *Miranda* comprehension" (p. 293). Results of other studies revealed that college students hold misconceptions about the *Miranda* warnings similar to those held by defendants, and jury-eligible adults similarly made significant errors both in terms of ability to recall the warnings and in their misconceptions (Rogers, Fiduccia, Drogin, et al., 2013a; Rogers, Rogstad, et al. Shuman, 2010b).

Although research does not support the notion of a relationship between prior arrests and global *Miranda* comprehension abilities, some studies have found a relationship between prior arrests and specific capacities. Among justice-involved youth, history of arrests has demonstrated a significant association with appreciation of the right to counsel (Grisso, 1981; Viljoen & Roesch, 2005). Among adults, number of prior felony arrests was significantly related to one aspect of *Miranda* understanding: ability to paraphrase rights, but unrelated to other aspects of understanding or any aspects of appreciation (Grisso, 1981). In sum, research suggests a few, narrowly carved relationships between arrests and certain aspects of *Miranda* comprehension, but generally refutes the notion that a history of arrests and police contact results in meaningful gains in understanding and appreciating legal rights.

Despite the general lack of association between arrest history and *Miranda* comprehension, research does suggest a positive relationship between *Miranda* comprehension and contact with attorneys. Viljoen and Roesch (2005) found that, among justice-involved youth, the number of hours spent with defense attorneys predicted multiple components of understanding and appreciation. Further, this contact was most important for youth with lower IQ scores. More recently, Zelle et al. (2015) observed a relationship between justice-involved youths' recollection of discussing *Miranda* rights with an attorney and recognition of the meaning of rights. Thus,

while interactions with police do not appear to bolster *Miranda* comprehension, contact with attorneys might—perhaps because it allows for direct exposure to the meaning of rights, significance of waivers, and first-hand appreciation of how defense attorneys function (Goldstein & Goldstein, 2010).

Innocence and guilt: The final suspect factor we review is somewhat different than the others because it cannot be known with certainty (in contrast with age, for example) or otherwise assessed (in contrast with factors such as intelligence or academic achievement). Thus, this final factor also cannot be evaluated as part of a forensic mental health assessment of a defendant's *Miranda* waiver, nor can it be considered in a court's *totality of the circumstances* analysis. Nevertheless, research has shown that suspects' guilt or innocence is relevant to their interrogation experience.

The relationship between guilt/innocence and *Miranda* comprehension has not been a topic of direct inquiry. Indeed, one would not expect systematic differences in understanding of legal rights between guilty and innocent suspects. However, one's status as guilty or innocent *can* influence stress during interrogation, which, as described in the Situational Factors section below, can influence understanding and appreciation of *Miranda* rights. Research has shown that guilty "suspects" (i.e., participants in laboratory settings) experienced more stress than innocent suspects when confronted with an accusation of wrongdoing, potentially because innocent suspects believed that their innocence would be apparent, and therefore, they perceived less need to engage in self-protection (Guyll et al., 2013). Differences in physiologic stress levels, however, diminished over the course of interrogation. Further, among innocent suspects, the act of resisting confession over the course of interrogation led to elevated activation of the sympathetic nervous system, suggestive of cognitive resource depletion (Guyll et al., 2013). Generalizing these lab-based findings to actual interrogations, guilty and innocent suspects might be differentially affected depending on when *Miranda* rights are administered in the course of speaking with police.

Research has also revealed different rates of rights waivers among guilty and innocent suspects, with innocent suspects generally executing waivers at *much higher* rates. For instance, in a laboratory study in which participants were assigned to either guilty or innocent conditions, Kassin and Norwick (2004) found that, while only 36% of guilty suspects waived their rights, 81% of innocent suspects did so. And, although participants across both groups cited concerns about looking guilty if they did not waive their rights, nearly three-quarters (72%) of innocent suspects who waived their rights cited innocence as a factor in their waiver decisions. This result has been replicated in more recent research (Scherr & Franks, 2015). Findings such as these, paired with research on false confessions, has led to a body of work on the phenomenology of innocence, or the ways in which "innocence may put innocent people at risk" (Kassin, 2005, p. 215) of waiving their rights and ultimately offering a false confession. Interestingly, some of this research has shown that a suspect's guilt or innocence influences not only waiver rights, but how interrogations proceed after a *Miranda* waiver (for a review, see Kassin, 2005).

Although a detailed discussion of the relationship between innocence and false confessions is outside the scope of this chapter, recent research has attempted to "unpack" the phenomenology of innocence and its effect on *Miranda* waivers. Overall, this research has shown that strong *just world beliefs* (i.e., the belief that people's actions are generally met with appropriate consequences) are associated with increased rights waivers (Scherr & Franks, 2015) and that innocent suspects' willingness to waive their rights was positively associated with endorsement of just world beliefs (Scherr et al., 2016). Research that has explored the effect of just world beliefs *and* a particular interrogation strategy among guilty and innocent suspects revealed that the effect of the interrogation strategy depended not only on the suspect's guilt or innocence, but also on the strength of their just world beliefs (Scherr et al., 2016). The results of this research are reviewed in more detail in the Delivery of the Warning section, below.

Situational Factors

Miranda comprehension is not entirely determined by individual characteristics. The circumstances surrounding the interrogation and the *Miranda* warnings can influence how well suspects understand and appreciate their legal rights. These contextual influences, or *situational factors*, include how the warnings are worded and the stress associated with custodial interrogations. The most relevant situational factors, as determined by research and legal decisions, are reviewed below.

Miranda wording: The language used to convey the *Miranda* warnings varies across, and even within, jurisdictions. In fact, Rogers and colleagues (Rogers, Harrison, Shuman et al., 2007b; Rogers, Hazelwood, Sewell, Harrison, et al., 2008a; Rogers et al., 2012) collected 945 unique general *Miranda* warnings and 371 unique juvenile-specific *Miranda* warnings from 888 jurisdictions. Several important findings have come out of this line of research. First, the length and reading level of these different warnings vary dramatically, from 49 to 547 words, and from warnings that require a third grade reading level to warnings that require post-college education (i.e., an eighteenth grade reading level; Rogers, Hazelwood, Sewell, Harrison et al., 2008a). Additionally, *Miranda* warnings often include vocabulary words that require at least a tenth grade education such as "accord," "alleged," and "coerced" (Rogers, Hazelwood, Sewell, Harrison et al., 2008a). Second, these wording differences result in variability in the content of the warnings. For instance, some warnings only mention the rights, while others provide an explanation (e.g., You have the right to remain silent, that means you have no obligation to talk with police). Others specify, sometimes incorrectly, the timeframe in which the right to counsel and ability to reassert rights operate. For example, some suspects are told that attorneys are available only *during* questioning or that silence can only be asserted *until* an attorney is available (Rogers, Harrison, Shuman et al., 2007b). Third, juvenile *Miranda* warnings are typically longer and more difficult to read

than their adult counterparts (Rogers, Hazelwood, Sewell, Shuman et al., 2008b; Rogers et al., 2012).

Far from being concerned with this variability, the Supreme Court has repeatedly held that it will not scrutinize the precise language used to convey the *Miranda* warnings. Instead, the Court only considers whether a particular set of warnings reasonably "conve[ys] [to a suspect] his rights as required by *Miranda*" (*California v. Prysock*, 1981, p. 361) or "touched all of the bases required by *Miranda*" (*Duckworth v. Eagan*, 1989, p. 203). In these and other decisions (e.g., *California v. Prysock*, 1981; *Duckworth v. Eagan*, 1989; *Florida v. Powell*, 2010), the Court reminded the parties that the warnings themselves are not constitutionally protected—the right against self-incrimination is—and, therefore, analysis of the language used to convey the warnings is somewhat relaxed.

Although variations in *Miranda* warnings do not always carry legal significance, researchers have investigated whether these variations might have practical significance. In other words, do changes in the wording of *Miranda* warnings influence comprehension? The research in this area is limited, but suggests that certain wording changes, for certain populations, have limited significance. Three studies have compared participants' *Miranda* comprehension after hearing two different versions of the warning. The first study (Ferguson & Douglas, 1970) compared adolescents' comprehension of the *Miranda* warnings used by the San Diego Police Department to a simplified version created by the authors. The other two studies compared comprehension of the *Miranda* warnings used in Grisso's (1998) original *Miranda* instruments to Goldstein and colleagues' (2012) version in the updated instruments that had a lower reading comprehension level among psychiatric inpatients (Cooper & Zapf, 2008) and detained youth (Messenheimer et al., 2009). In brief, all three studies found that simpler versions of the warning did *not* lead to improved comprehension.

In addition to addressing the relative complexity of entire *Miranda* warnings, research has also identified certain words and phrases that are most problematic. Rogers et al. (2011) identified the most challenging *Miranda* vocabulary as: "coercion/coerced," "demand," "proceedings," and "right"; depending on the word, from 56 to 86% of pretrial defendants in the study produced errors when defining these words. Some of the most problematic phrases were: (regarding the right to free legal services) "Have him present to advise you before we ask you any questions (86.1% made errors); (regarding the ability to reassert rights) "When you so desire, before or during the questioning" (73.9% made errors); and (regarding the right to silence) "This fact cannot be used against me" (60.4% made errors).

More recently, Gillard et al. (2014) explored the *Miranda* wording that framed the basis for the challenge in *Florida v. Powell* (2010) that conveyed, in relevant part, that suspects "have the right to talk to a lawyer *before* answering any [police] questions" (p. 1200, emphasis added). The defendant's contention, which was rejected by the Court, was that the law required police to inform him that he also had the right to an attorney *during* questioning. Gillard et al. (2014) found no differences in understanding between participants informed using the Powell language and those informed of the right to an attorney before and during questioning.

Delivery of the warning: Compared to research on other areas of *Miranda* comprehension, minimal research exists on how police actually administer or deliver the *Miranda* warnings. Based on review of numerous interrogation transcripts, Leo and White (1999) described three categories of delivery. In the first, officers deliver the *Miranda* warnings in a neutral manner, typically reading the warnings off of a preprinted card, often before engaging in any conversation with the suspect. In this way, officers are simply "conveyors of legal information" (p. 433). In the second, officers de-emphasize the significance of the warnings. Leo and White (1999) observed that officers implemented this strategy in a multitude of ways, for example: (1) reading the warnings in a perfunctory tone; (2) rushing through the warnings without pausing or looking at the suspect; (3) explicitly calling to the suspect's attention the formality of the warnings, thereby conveying their unimportance; (4) referring to the warnings' dissemination in popular culture; (5) focusing the suspect's attention on the importance of sharing his side of the story and implying that the warnings are the sole impediment to him doing so; or (6) creating the appearance of a nonadversarial relationship in which the officer is there to help the suspect. Finally, in the third category, officers implicitly offer some benefit in exchange for the rights waiver. For example, similar to one of the de-emphasizing strategies, they might focus attention on the suspect being able to share his side of the story or provide a compelling justification for his actions. Skillful interrogators convey—without explicitly stating—that doing so may lead to reduced charges or a lighter sentence.

Delivery of the warnings certainly has the potential to influence both how suspects interpret the warning and how they make decisions about speaking with police. In fact, some legal scholars have argued that, despite the actual meaning of the *Miranda* rights—which serve as a warning or caution about speaking with police—delivery of *Miranda* can encourage suspects to cooperate, that is, to waive their rights:

> Skillfully presented, the *Miranda* warnings themselves sound chords of fairness and sympathy at the outset of the interrogation. The interrogator who advises, who cautions, who offers the suspect the gift of a free lawyer, becomes all the more persuasive by dint of his apparent candor and reasonableness (Malone, 1986, p. 371, cited in Leo, 2001).

Although researchers have not systematically investigated how each of these different delivery styles might influence suspects, recent studies have addressed two of these strategies using samples of "wrongly accused" (i.e., innocent) participants: trivializing the importance of a set of legal warnings and treating the opportunity to speak with the police (and provide one's own "side of the story") as a scarce, time-limited resource. With respect to trivializing, results indicated that participants who heard the rights and associated waiver form described in unimportant terms were more likely to execute a waiver and demonstrated worse comprehension of the rights than participants who heard the rights and waiver form described as significant (Scherr & Madon, 2013). In contrast, researchers found that the "scarcity" ploy did not influence whether participants waived or invoked their rights (Scherr, Alberts, Franks, & Hawkins, 2016).

Another set of studies investigated whether "social proof pressure," or influencing others to believe that certain behaviors (e.g., rights waivers) are normal, affected rights waivers of "guilty" and "innocent" participants. Results revealed that social proof pressure did influence rights waivers, but affected guilty and innocent participants differently based on their endorsement of just world beliefs. Social proof pressure led to increased waiver rates among guilty participants with *strong* just world beliefs and innocent participants with *weak* just world beliefs (Scherr & Franks, 2015). Interestingly, in a subsequent study, researchers initially employed social proof pressure among innocent participants, but then gave a subset of participants information *inconsistent* with that expectation (i.e., they were explicitly told they had a choice about whether to sign the rights waiver form). Results indicated that this disruption of participants' cognitive fluency—by explicitly informing them of their choice—led to *decreased* rights waivers (Scherr et al., 2016). In a similar experiment, participants who were specifically asked whether they wanted to waive their rights had lower rates of waivers (17%) than participants who were not (86%; for the latter set of participants, researchers read the *Miranda* warnings and immediately began questioning without asking for an explicit waiver decision; Gillard et al., 2014).

Other research in this area has explored basic questions about both delivery and the effect of delivery on comprehension. A large-scale survey of American and Canadian investigators found that 67% of officers informed suspects of the *Miranda* warnings orally and 29% did so in writing (Kassin et al., 2007). The studies that have evaluated how mode of delivery affected comprehension of rights found results at odds with officers' typical mode of delivery: participants' comprehension of rights improved (sometimes dramatically) when they were delivered in written, as opposed to oral, format (Eastwood & Snook, 2010; Rogers et al., 2011; Rogers, Fiduccia, Robinson et al., 2013b). A likely contributor to the difficulty with oral warnings is the rate at which law enforcement officers read them. Research suggests that rates of speech beyond 150–200 words per minute are problematic for understanding (e.g., Jester & Travers, 1966, cited in Snook et al., 2010). Problematically, Snook et al.'s (2010) study of administration of rights in Canada revealed that the average speed of delivery was 262.6 words per minute for the right to silence and 204.7 words per minute for the right to counsel. Such speedy delivery is likely to be particularly problematic for nonnative English speakers and individuals with low intelligence or little formal education.

What about suspects who are informed of their rights multiple times during the same interrogation? As referenced above in the "Prior Exposure to the *Miranda* Warnings" section, Rogers, Fiduccia, Robinson and colleagues (2013b) found that hearing multiple versions of the *Miranda* warning within one session did not result in any meaningful benefits, and actually produced short-term *detriments*. Specifically, after hearing multiple versions of the warnings, significantly more pretrial detainees inaccurately believed that statements could be retracted if law enforcement used deception and that police could not falsely inform a suspect about an eyewitness identification.

Stress: Police interrogations are stressful, often by design (Kassin et al., 2010). Most important in the context of *Miranda* comprehension, a body of literature supports the premise that stress can compromise cognitive functioning, particularly working memory (for a brief review, see Scherr & Madon, 2012). In short, stress consumes valuable cognitive resources that might otherwise be used for attending to, processing, and recalling novel information, leading individuals under stress to make more errors and rely more on cognitive shortcuts.

Research on *Miranda* comprehension specifically has found that stress (typically induced in experimental settings by an accusation of wrongdoing) undermines the ability to understand and appreciate legal rights (Rogers, Gillard, Wooley, & Fiduccia, 2010a; Scherr & Madon, 2012, 2013). When considered in the context of the linguistic and conceptual demands of the *Miranda* warnings, these findings are perhaps unsurprising. However, the magnitude of these results should also be considered. For instance, in one study, participants in the stressful condition demonstrated *Miranda* comprehension on par with juveniles and with adults with psychotic disorders (Scherr & Madon, 2012).

Presence of parents (for juvenile suspects): Requiring parents (or legal guardians) to be present for interrogations of their children has been a logical outgrowth of the documented problems with youths' poor comprehension of rights. Nevertheless, state laws vary tremendously regarding whether parents need to be notified of their child's interrogation or present during it, and they are often contingent on the youth's age (for a review see Cruise, Pitchal, & Weiss, 2008). Additionally, departments have their own local policies and practices—not codified as law—that influence whether parents might be present, though internal agreement about and implementation of these polices can vary (Meyer, Reppucci, & Owen, 2006). Parental presence laws and policies, as well as common calls to either implement or expand them (e.g., Huang, 2001), have posed interesting questions for researchers about whether parents will educate their children about important gaps in knowledge identified by research (i.e., the meaning of the rights and implications of waiving or invoking them).

Research on this topic suggests that parental presence is far from the panacea hoped for by advocates and theorized by scholars. Early research based on observations of interrogations of youths with their parents present found that most often (70% of the time) parents did not offer any advice about the youths' legal rights, a finding influenced by the fact that, about two-thirds of the time (66%), the parents and youth did not speak to one another at all (Grisso & Ring, 1979). Of the one-third of parents who did offer advice, 60% of them encouraged youth to waive their rights; only 16% of this group (4% of all parents) advised against waivers (Grisso & Ring, 1979). The results of a more recent study (Viljoen, Klaver, & Roesch, 2005) were similar when juvenile defendants were asked to report on their experiences during interrogation. Roughly one-quarter of defendants had one or both parents present during interrogation. Of this group, 40% reported that they did not know what their parent wanted them to do. Of the other 60% who indicated that they did know their parents' wishes, nearly 80% perceived that their parents wanted them to speak with the police (to confess [57%] or to "tell the truth" [11%]).

Though decades apart, these studies both found that, during their children's interrogations, parents often fail to embody the role of legal advocate. Some researchers have questioned the premise of these laws and policies—whether parents have the capacity to compensate for youths' interrogation-related deficits. Results of this research revealed that, although parents generally demonstrated better understanding of the *Miranda* rights than their children, both parents and children demonstrated significant misunderstandings about police practices (e.g., whether police are permitted to lie to suspects) (Woolard, Cleary, Harvell, & Chen, 2008). Thus, available evidence suggests that parents generally do not protect the legal rights of their children and that they have limited abilities to do so. Admittedly, legal advocacy is a role many parents have neither prepared nor asked for, and some parents may perceive their child's moral development (taking responsibility for a guilty act by confessing) as paramount to a legal defense. Therefore, other protections for youthful suspects must be explored.

Recent *Miranda* Jurisprudence and Implications for Research

Two years before the *Miranda* decision, the Warren Court expressed concern about a criminal justice system too dependent on confessions:

> We have learned the lesson of history, ancient and modern, that a system of criminal law enforcement which comes to depend on the 'confession' will, in the long run, be less reliable and more subject to abuses than a system which depends on extrinsic evidence independently secured through skillful investigation. … We have also learned the companion lesson of history that no system of criminal justice can, or should, survive if it comes to depend for its continued effectiveness on the citizens' abdication through unawareness of their constitutional rights. No system worth preserving should have to fear that if an accused is permitted to consult with a lawyer, he will become aware of, and exercise, these rights. If the exercise of constitutional rights will thwart the effectiveness of a system of law enforcement, then there is something very wrong with that system
>
> (*Escobedo v. Illinois*, 1964, pp. 488–490).

The quote above clearly conveys the Court's motivation to establish that constitutional protections apply not only to court settings but to interrogation settings as well. *Escobedo* was a Sixth Amendment (right to counsel) case, as opposed to the Fifth Amendment focus of *Miranda*, but the evocative language presages *Miranda* well as the Court grappled with how to establish a mechanism, standard, or rule that would provide protection beyond the basic voluntariness standard that applied—all too amorphously—to suspects' statements to police. *Escobedo* captures the spirit of *Miranda* well, therefore, through its direct expression of the need to avoid abuses not only in terms of physical force but also in terms of exploitation of citizens' unwitting interactions with government agents. The quote above puts into relief the most expansive sense of *Miranda*'s aim and provides a sharp contrast to how the case law has since evolved.

As Part I noted, cases subsequent to *Miranda* (only some of which are covered in this chapter) whittled away at the precedent, assuring a more modest impact. Part I ended with *Dickerson v. U.S.*, which seemed to cement *Miranda* as foundational and robust against further efforts to revert back to the voluntariness-only approach to suspect interactions with police. *Miranda* has been contracted further within the past decade, however, by several Supreme Court opinions, to the point that some scholars argue that case law has effectively returned to a voluntariness-only regime (e.g., Primus, 2015). Lower courts, including federal Circuit Courts, have struggled with, and in many cases abridged, *Miranda* in recent years. This section: (1) reviews recent Supreme Court cases, (2) reviews issues raised by exemplar lower court cases, and (3) highlights what these developments indicate for research.

Recent Supreme Court Case Law

Focusing on the past decade, the first Supreme Court case of interest is *Montejo v. Louisiana* (2009). This case concerned a change in the Court's perspective on whether the right to counsel should be presumed to be invoked during questioning if the defendant had exercised the right by obtaining counsel at a previous arraignment or similar proceeding. A prior opinion, *Michigan v. Jackson* (1986), had concluded that a waiver of the right to counsel after invocation at arraignment would be presumed invalid; however, in *Montejo*, the Court overruled *Jackson* and held that individuals would still be required to invoke their rights even if they had previously requested counsel at an arraignment. The decision is somewhat complex because it involves developments that cross over between Fifth Amendment rights during interrogation and Sixth Amendment rights during arraignment, with the Court ultimately determining that the protections already in place for the Fifth Amendment in the interrogation context were sufficient. For the purposes of this section, *Montejo* is noted because it was, perhaps, the first decision of the Roberts Court to suggest that the Court was headed toward reversing any outward expansion of *Miranda*. It also exemplifies how recent *Miranda*-related cases have created a labyrinth of narrow decisions that impact how suspects' rights may be exercised but that few people probably understand.

The following year, 2010, three Supreme Court opinions directly addressed the *Miranda* rights. One, *Florida v. Powell*, was relatively straightforward in that it reaffirmed the Court's standing position on the wording of the warnings: no particular form or wording is required—the warnings must merely "reasonably convey" the rights (p. 1201). The defendant in *Powell* argued that the warnings administered to him did not make it clear that he had a right to counsel *during* questioning because the warnings only mentioned a right to counsel *before* questioning.

A second 2010 case, *Maryland v. Shatzer*, set a sort of "expiration date" on *Miranda* rights invocations. The Court reasoned that the purpose of the warnings was to alleviate the inherent pressure that an interrogation context conveys and that such pressure dissipates after someone is released from police custody because the

person is no longer in the interrogation context and, what is more, the person can seek advice from others. Thus, the Court reasoned, if a suspect invokes his rights during interrogation but is then released from custody, the rights invocation should be assumed to extend only for up to 14 days; after that time, if the person is again questioned by police, the person must re-invoke his rights if he wishes them to apply again.

The third and perhaps most impactful 2010 case was *Berghuis v. Thompkins*. In a previous case, *North Carolina v. Butler* (1979), the Court concluded that a rights waiver could be inferred based on a suspect's "course of conduct indicating waiver" (p. 373). In 1994, the Court held that an invocation of the right to *counsel* during interrogation must be explicitly made (*Davis v. United States*, 1994). This implicit waiver/explicit invocation paradigm was cemented in *Berghuis v. Thompkins*, which applied the same standard to the right to silence during interrogation. In other words, a suspect must now speak in order to remain silent, as remaining silent for nearly 3 hours (as the defendant in *Berghuis* did) is not sufficient to invoke the right to silence. And, as the Court's cases concerning invocation of the right to counsel have made clear, the Court expects that such explicit invocations be clear and unambiguous—suspects stating that they *think* they need a lawyer or otherwise seeming to question whether they do want to invoke either right will not be interpreted as invocations. The *Miranda* Court had envisioned a broader definition of invocation: "If, however, he indicates in any manner and at any stage of the process that he wishes to consult with an attorney before speaking, there can be no questioning. Likewise, if the individual is alone and indicates in any manner that he does not wish to be interrogated, the police may not question him" (pp. 444–45). *Berghuis*, however, has made clear that the modern Court is not interested in such a wide application of *Miranda* and the onus is on citizens to know the intricacies of how the rights, and waivers of those rights, actually work. What is more, citizens must be able to affirmatively, even forcefully, assert those rights in the face of the inherent coercion against which they want those rights to protect them.

Three years later, in *Salinas v. Texas* (2013), the Court again emphasized individuals' responsibility to invoke their rights during police interactions. The defendant in this case participated in a noncustodial interview—such that he was not informed of his *Miranda* rights—and when he remained silent but acted unusually in response to a question (he looked at the floor, shuffled his feet, bit his lip, clenched his hands, and "began to tighten up"), that silent reaction was later admissible in court as evidence of his guilt (p. 2178). Thus, the case underscored the limited application of *Miranda* as a protection for suspects (i.e., only suspects who are in custody are entitled to be informed of their rights to silence and counsel) and made clear that it is incumbent on citizens to invoke their right to silence.

Another recent Supreme Court case of interest, *J.D.B. v. North Carolina* (2011), concerned adolescents. The case was not directly about *Miranda waivers*; rather, it focused on whether an adolescent's age should be considered when applying the objective "reasonable person" standard to determine whether a suspect was in custody (and, thus, whether the *Miranda* warnings must be administered). Among the recent *Miranda*-related cases, *J.D.B.* is the one case that expands *Miranda*. The

Court held that adolescent age should be considered in the custodial determination based on the premise that youth are more likely than adults to believe they are in custody and unable to leave when faced with authority figures.

In contrast to the custody definition in *J.D.B.*, the Court in *Howes v. Fields* (2012) held that an adult prisoner who was removed from the general population and questioned about incidents unrelated to the charges for which he was sentenced was not in custody and, therefore, *Miranda* did not apply. The opinion is narrow in that it addressed whether inmates who are lawfully imprisoned upon conviction will be automatically considered "in custody" for purposes of *Miranda*. Nevertheless, the factual findings made by the Court demonstrate how narrowly the Court is restricting the application of *Miranda*. The prisoner, Fields, was taken from his cell by armed deputies during the night and taken to an interrogation room. Despite his requests to stop the interrogation, he was questioned for 5–7 hours. Nonetheless, the Court pointed to the fact that deputies told Fields he could ask to go back to his cell, the fact that he was not restrained or threatened, and the fact that the door was sometimes open as countering the idea that Fields was in custody. Moreover, the Court reasoned that prisoners are used to restrictions on their freedom, so questioning of the type that Fields experienced does not involve the inherent coercion about which *Miranda* precedent is concerned.

Although we will not review the cases in detail, it is worth noting that a parallel line of case law has developed concerning the use of un-Mirandized statements to impeach defendants when they choose to testify at their trials. As mentioned, the Supreme Court seemed to cement the constitutional status of *Miranda* in *Dickerson v. United States* (2000). However, the Court in that opinion was careful to describe *Miranda* as providing "constitutional guidance," and after that case, the Court quickly returned to emphasizing the *Miranda* warnings as a prophylactic measure, not a constitutional right. By characterizing the *Miranda* case law in this way, it allows the Court to hold that the use of un-Mirandized statements at trial is not a violation of the constitution; rather, it is simply a violation of a constitutionally related prophylactic rule. The distinction allows for a line of reasoning in which use of the statements for impeachment of a testifying defendant (i.e., to undermine the defendant's reliability as a witness), rather than for evidence of guilt, is permissible (see, e.g., *Kansas v. Ventris*, 2009; O'Neill, 2010; Todd, 2013). Although the difference between using evidence for impeachment rather than as evidence of guilt is an important *legal* distinction, in practice jurors have difficulty following the limiting instructions that direct them to make this distinction during deliberations (Tanford & Cox, 1988). In short, there is yet another angle of *Miranda* case law that circumscribes the protections—an angle about which few people are probably aware.

Collectively, these cases offer the following lessons. First, the Court requires suspects to be explicit with respect to invoking their rights: Witnesses not involved in custodial interrogations must assert the privilege against self-incrimination without first being informed of it (*Salinas v. Texas,* 2013), and suspects in custodial interrogations must unambiguously invoke their rights to silence and counsel (*Berghuis v. Thompkins,* 2010). Second, whereas invocations of rights must be explicit, waivers of *Miranda* rights may be implicit (*Berghuis v. Thompkins,* 2010).

Third, the Court will not scrutinize the language of *Miranda* warnings (*Florida v. Powell*, 2010). Fourth, the custody analysis remains highly contextual (e.g., being incarcerated, per se, does not amount to being "in custody;" childhood is a reasonable factor to be considered) (*Howes v. Fields*, 2011; *J.D.B v. North Carolina*, 2010). Finally, certain layers of prophylaxis around invocations of rights have been refined or removed, again placing a greater burden on suspects to assert their rights (*Montejo v. Lousiana*, 2009).

Lower Courts' Case Law

Review of a few lower court cases can help highlight how the Supreme Court's (lack of) precedent has led to (1) further narrowing of *Miranda* at the state court level, (2) differences between states in the application of *Miranda*, and (3) accidental and strategic administration variations by officers that undermine the purpose of the *Miranda* warnings.

The Supreme Court of the United States is not the only court to have hemmed in *Miranda* by focusing on the "underlying police-regulatory purpose" of the opinion (*Garner v. Mitchell*, 2009, p. 263). In *Garner v. Mitchell* (2009), the United States Court of Appeals for the Sixth Circuit considered appeals by the defendant, Garner, arguing that he did not validly waive his rights because his intellectual deficits led him to not understand the warnings. In short, the court found that Garner had knowingly and intelligently waived his *Miranda* rights based on his "conduct before and during the interrogation" and, more consequentially, established an "objective" police-perspective-based test for a suspect's misunderstanding of the warnings (p. 261). In determining that Garner's conduct was indicative of a knowing and intelligent waiver, the court noted a variety of externally-focused details, such as the fact that Garner "appeared 'perfectly normal' and 'very coherent,'" that the officers read the warnings at least twice, that Garner signed and dated a waiver form, that the officers asked after each warning if Garner understood the warning, and that Garner's statements about the crime indicated he knew of its wrongfulness (p. 272). The court also pointed to observations made by a psychologist in a competence to stand trial report, despite the focus of that report on a different topic (one for which it is common to educate an evaluee about the material) and different situational context of that evaluation. (As an aside, the case can also serve as an example of how some courts utilize apparent awareness of wrongfulness or attempts to lie to police as proxies for understanding constitutional rights, a nonempirical supposition that eases the way to finding a waiver valid.)

Ultimately, the court found that "even if Garner's mental capacity, background, age, and experience did somehow prevent him from actually understanding the *Miranda* warnings … the officers questioning Garner had no way to discern the misunderstanding in Garner's mind" (p. 262). The court supported its reasoning by focusing solely on the "police-regulatory" purpose of *Miranda*, wholly discounting the idea that police conduct was to be regulated by *meaningfully informing*

citizen-suspects, arming them with knowledge that they could comprehend and utilize (p. 263). The Sixth Circuit concluded that waiver "circumstances be examined, in their totality, primarily from the perspective of the police" (p. 263). The holding seems contrary to the *Miranda v. Arizona* approach that was concerned with the suspect's perspective and also raises questions about when police would ever find reason to believe that a suspect misunderstood the warnings. Given the often rote and administratively toned delivery of the warnings, it may be only the rare case in which someone demonstrates misunderstanding so great that it cannot be overlooked. Or, as some cases mentioned below suggest, it seems that when suspects do ask questions, officers might respond with confusing responses and suspects might end up signing waivers in resignation. In sum, the *Garner* case is noted here because of the pains it goes to in order to restrain the application of *Miranda* and ultimately turn the prophylactic rule to serve interrogators rather than suspects. We encourage interested readers to review the case in full, including Judge Moore's thoughtful dissent.

The Garner case is not only illustrative of the ways that lower courts have narrowed *Miranda*; it also provides a foil for a conflicting line of case law in Illinois, demonstrating one instance of lower court conflict over the application of *Miranda*. Illinois cases have led to a policy under which *Miranda* waivers "can be invalid based solely on the subjective inability of a suspect to understand the warnings" (O'Neill, 2010, p. 429). Although the *Garner* majority cited an opinion by the circuit court that covers Illinois (the Seventh Circuit), it seems that their reliance on that circuit's precedent may have been misplaced (see Judge Cole's partial dissent), and it appears to be settled case law in Illinois that *Miranda* waivers can be found invalid based on the subjective comprehension of the suspect-defendant. We will forego in depth review of the Illinois case law for the sake of space (see O'Neill, 2010 for a review), but the conflict is worth identifying because it demonstrates how lower courts are grappling with differing interpretations and that not all courts have accepted the narrow "police-regulatory" purpose approach to *Miranda*.

The Supreme Court's firm refusal to provide detailed guidance or expectations about how the warnings must be phrased has led to some startling exchanges between suspects and officers. It also seems that many officers might be unclear on how the rights function, and even if they mean well, can end up misleading suspects who ask questions about the rights. For example, the defendant in *United States v. Gray* (2015) seemed to have been talked out of asserting his rights due to a confusing conversation that took place after the defendant said "I want a lawyer present." Instead of stopping the interview, the officers talked with him about how he would get a lawyer and told him that he would only get an attorney appointed if he was arrested, which was not going to happen that day. The court noted that the defendant "said in apparent resignation: '[s]o fuck it. Let me sign that [waiver] then, I guess.'" (p. 2). Ultimately, the court suppressed his statement in that case. The Ninth Circuit Court of Appeals addressed similar problems in several cases. In one case, *Doody v. Ryan* (2011), an adolescent was administered the *Miranda* warnings using a juvenile-specific form with relatively uncomplicated language, including explanatory parentheticals. Nevertheless, the transcript of the warnings administration was

12 pages long because "of the detective's continuous usage of qualifying language" (p. 991) and deviations from the language of the form that were misleading. The Circuit Court ultimately found Doody's waiver to be invalid in that case, as well. (For additional examples, see *Alvarez v. Gomez*, 1999; *Sessoms v. Grounds,* 2014; *State v. Mayer*, 2015).

Finally, as noted in the Translating Legal Requirements section, state courts appear to be split on how they interpret the knowing and intelligent standard—whether it requires one level of understanding or two distinct levels. More generally, it is worth underscoring just how low the bar seems to be set by many courts. As the Seventh Circuit has noted, "It is only when the evidence in the case shows that the defendant could not comprehend even the most basic concepts underlying the *Miranda* warnings that the courts have found an unintelligent waiver" (*Collins v. Gaetz*, 2010, p. 588). Recognizing this, many scholars have begun to view the trajectory of *Miranda* and related confession law as returning to a focus solely on voluntariness (e.g., Primus, 2015) or to point out that *Miranda v. Arizona* (1966) effectively just incentivized officers to Mirandize suspects because Mirandized statements are virtually always found to be voluntary and admissible (Todd, 2013). There is also the interesting development of the Ninth Circuit utilizing the voluntariness standard for confessions in a relatively proactive way to suppress statements made by a young man with intellectual disability who was questioned using legal but problematic strategies (*United States v. Preston*, 2015), which falls in line with the presaged return to a focus on confession voluntariness. Any or all of these developments/realizations have implications for research, which, to date, has largely focused on assessing the knowing and intelligent prongs of the waiver standard.

Implications for Current Research

Why review so much case law? We feel it is imperative for social science researchers to attend to developments in the law because they have important implications for research, particularly given the apparent momentum toward substantive changes in *Miranda* precedent that had seemed relatively settled for decades. The psycholegal constructs appear to be evolving, or at least becoming increasingly complex and multifaceted, and the points for investigation are multiplying. The final part of this chapter points up future directions more specifically, but as a close to this part, we offer a brief review of what seem to be the most salient research implications from the case law.

First, researchers, us included, should broaden their view beyond examining the knowing and intelligent prongs of the waiver standard as laid out in *Miranda v. Arizona*. The focus on knowing and intelligent has been the keystone of *Miranda* research, and rightfully so given the apparent match of those cognitively-focused prongs to psychological constructs and psychologists' ability to provide relevant assessment of cognitive functioning. The courts, however, do not set the bar for knowing and intelligent very high, continue to differ in how they define the terms,

and seem to accept the fact of *Miranda* administration as sufficient to establish a "knowing, intelligent, and voluntary" waiver in a number of cases. There may still be a need to advance research on this facet if social scientists can figure out how to effectively impress upon the courts that the many people do not actually know their rights or how they function—but the assumption of widespread knowledge of the rights has proved to be incredibly intractable. One new point to the knowing and intelligent research comes from the recent cases that have complicated how the rights function; in addition to measuring how much (or little) people know about what the rights mean, there is a need to measure how much (or little) people know about how to invoke their rights. The shrinking scope of the knowing and intelligent prongs also suggests against trying to expend research energies on assessing peoples' reasoning behind decisions to waive because the courts seem to have made clear how little they are interested in examining the "subjective" experience and considering the actual suspect. If nothing else, researchers should consider how courts might apply the voluntariness standard (e.g., *United States v. Preston*, 2015; Primus, 2015) rather than continuing with the general assumption that voluntariness is about police conduct and therefore does not leave much for psychologists to assess.

Not all research has been so focused on the knowing and intelligent aspects of a valid waiver, of course. As the research section of this chapter highlighted, many researchers have contributed important, novel work that broadens the scope of *Miranda* research. As some of the case law makes clear, there is definite need for this work—for example, further examination of the actual mechanics and practices of *Miranda* administration is clearly needed. The variation in how the warnings are administered, both procedurally and substantively, has led to the warnings effectively being just one more tool in officers' armament of interrogation strategies rather than a meaningful equalizer and protection for suspects. Courts often treat the mere fact of *Miranda* administration by officers as a proxy for finding that suspects knowingly, intelligently, and voluntarily waive the rights. Thus, more research is needed on how officers administer the rights and the impact of those practices on understanding, as well as the human factors that are at play when a person is faced with an authority figure using multiple strategies to induce compliance. As Smalarz, Scherr, and Kassin (2016) insightfully noted, for example, research is needed to examine "whether the act of eliciting a waiver by signature implies a contractual and irrevocable forfeiture of rights" (p. 458).

Some final upshots concern context: the context of interrogations and the context of today's criminal justice system. As the case law review section, and particularly the Supreme Court case law review section, highlights, courts are keen to restrain the application of *Miranda* by strictly defining what "in custody" means. The Court defined, over 20 years ago, what it meant to be in custody by applying a "reasonable person" standard, yet there is virtually no research that examines when the average person, let alone someone from a more vulnerable population, might feel at liberty to terminate an interrogation and leave. The current state of case law and police interrogation strategies leaves plenty of room for the artful creation of "noncustodial" interviews because it is presumed that most people feel at liberty to stop police

questioning and leave. An escalating set of requests from police can lead to someone agreeing to go to the police station, and officers can defuse suggestions of custody with a statement that the person is free to go or that the interrogation room door is unlocked. Yet we do not actually know how citizens perceive these or other interactions with officers. The second context-related implication concerns taking into account the differences between the criminal justice system of the 1960s and now; because it is broader and less tied to the case law reviewed here, we discuss it in the next section.

Future Directions

Despite changes in the landscape of *Miranda* since the Supreme Court's decision decades ago, there are still many issues ripe for empirical examination and policy work. Future work in this area is reviewed below, organized by three broad domains: suspects, law enforcement, and the legal system.

Suspects

Perhaps one of the most consistent and important findings from the knowing and intelligent line of research is the vulnerability of certain populations to offering *un*knowing and *un*intelligent *Miranda* waivers. Youths and individuals with intellectual disabilities, in particular, struggle to understand language used to convey the warnings as well as the conceptual principles at stake (e.g., Fulero & Everington, 1995; Goldstein et al., 2003; Grisso, 1981; O'Connell et al., 2005). Research (e.g., Cooper & Zapf, 2008; Viljoen et al., 2002) suggests that individuals with certain mental health symptoms have difficulty fully comprehending the *Miranda* rights as well, though more research is needed on how such symptoms influence understanding and appreciation of legal rights.

Extant research underscores the need for enhanced protections of vulnerable populations during the *Miranda* warning and waiver process. It also indicates that merely having a parent or guardian present for interrogations of juveniles is insufficient (Grisso & Ring, 1979; Viljoen et al., 2005). Thus, future research and policy work should explore other options. Because there are questions about the developmental capacities of youth to sufficiently grasp the concepts conveyed in the *Miranda* warnings, regardless of whether they are clearly conveyed, researchers and advocates might explore possibilities such as a nonwaivable right to attorney or requiring consultation with counsel before effectuating a waiver (particularly for children and younger adolescents). Additionally, research could potentially assist law enforcement in identifying suspects vulnerable to poor *Miranda* comprehension through the development of brief screening instruments (of course, determining what to do following a problematic score on such an instrument would require

additional policy work and consensus-building between advocates and law enforcement).

Developments from recent case law also raise concerns about members of the general population that are not part of these vulnerable groups. As a broad point, it would be interesting to explore people's beliefs, more generally, about exercising constitutional rights in the face of government authority (for a review of people's beliefs in the context of Fourth Amendment searches, see the chapter by Brank and Groscup in this volume). And, as discussed above, a narrower line of inquiry more directly related to case law involves perspectives on custodial interrogation. Research could then inform how a "reasonable person" appraises his or her circumstances when being questioned by the police. Finally, moving forward, research should assess individuals' understanding of implicit waivers and explicit invocations as set forth in *Berghuis v. Thompkins* (2010).

Law Enforcement

The Supreme Court essentially delegated to local law enforcement the task of determining *when* and *how* to convey the *Miranda* rights to suspects. Although the Court prescribed "custody" as a threshold condition for the *Miranda* warnings and later provided a working definition of this term, in all practicality law enforcement officers are the ones to decide, in the moment, whether a suspect is in custody and, therefore, whether to administer the warnings. This has led to a practice of officers conducting "noncustodial" interviews (as in *J.D.B. v. North Carolina*, 2011) under conditions in which (arguably) a reasonable person would *not* feel at liberty to terminate the interrogation (Leo, 2001). This phenomenon speaks to a need for research on how police officers operationally define custody in the course of their work and the accuracy of their perceptions of relevant factors (e.g., a youth's age).

Regarding how *Miranda* rights are conveyed, the Court's laissez-faire attitude has produced considerable variability in terms of the language used and how the warnings are administered. Some research has explored how wording and delivery affect comprehension, but there are a number of avenues still worthy of exploration. Although previous studies revealed nonsignificant effects of *Miranda* wording on comprehension, much more research is needed. In particular, future research might explore how deliberate changes in wording—reflected in objective measures of readability *and* listenability—affect comprehension in different populations. Clinicians performing evaluations of *Miranda* waivers should also be attuned to meaningful discrepancies between the suspect's reading comprehension level and the reading level of the warnings he or she was administered. Other variations in mode of administration could be explored as well. For instance, researchers might investigate whether giving the suspect time to read the warnings to themselves, followed by oral administration, produces meaningful improvements in comprehension.

Research, like actual interrogations, should also extend beyond a fixed set of warnings administered by a law enforcement officer. Given the fact patterns in *United States v. Gray* (2015) and *Doody v. Ryan* (2011), discussed above, police may (inadvertently or not) mislead suspects about the meaning and function of their rights. These cases point to a need for both evaluation of how well law enforcement officers understand the *Miranda* rights, as well as training for officers so that they can answer suspects' questions accurately. Evaluating, more broadly, officers' perspectives of the *Miranda* warnings could also reveal biases about the rights of suspects in criminal cases that could potentially be rectified with training and mentorship. Finally, given the holding in *Garner v. Mitchell* (2009), researchers could evaluate the accuracy of officers' conclusions about suspects' *Miranda* comprehension against other metrics, such as existing *Miranda* assessment tools.

The Legal System

Finally, it is worth considering whether the vast difference between today's criminal justice system and the criminal justice system in place at the time of the *Miranda* opinion calls for a new facet of *Miranda* research. The justice system context at the time of the *Miranda* opinion was one defined by the Warren Court's expansion of constitutional rights for criminal defendants, but also was one in trials were more common than they are today (see, e.g., Galanter, 2004; Bureau of Justice Statistics, 2013). When a defendant goes to trial, there is the opportunity to challenge statements and, perhaps, have them suppressed on invalid *Miranda* waiver grounds during a pretrial hearing—or at least to challenge the reliability of the statements if they are determined admissible. With so many cases resolved through plea bargaining in the current context, there are new areas for research. Research on plea bargaining has expanded rapidly in recent years (e.g., Daftary-Kapur & Zottoli, 2014; Kutateladze, Andiloro, & Johnson, 2016; Redlich, Bushway, & Norris, 2016), and innocence work has demonstrated that both false confessions and plea bargaining have roles in some convictions that are later overturned. Without pretrial hearings or a trial, it is unclear how inculpatory statements, that might otherwise have been found inadmissible because of an invalid waiver, are used. Are inculpatory statements leveraged by prosecutors regardless of their likely admissibility? If so, how often? Are plea bargains pushed in some cases because of concerns that statements might not be admissible at trial but seem damning enough to use as leverage during plea bargaining? As with other questions about *Miranda* waivers and the plea bargaining process, these concerns and others remain in shadow but should be brought into the light through research.

Conclusions

The Supreme Court's decision in *Miranda v. Arizona* (1966) entitled suspects in custodial interrogation to be informed of their rights to silence and counsel, an eponymous notification now known as the *Miranda* warnings. In many ways, the decision reflected the Court's appreciation of the psychologically coercive nature of police interrogation, which it viewed as problematic enough to warrant an effort to level the playing field between suspects and law enforcement. Not long after *Miranda* was decided, the requirement that waivers of *Miranda* rights be executed in a knowing, intelligent, and voluntary manner served as a call for psychological research about how well individuals—particularly individuals from vulnerable populations—understand and appreciate their rights during police interrogations. Early research efforts paved the way for a rich body of literature on individual factors (e.g., intelligence, age) and situational factors (e.g., *Miranda* wording and delivery, stress) that influence *Miranda* comprehension.

Over time, the courts have interpreted the *Miranda* decision in an increasingly narrow manner and underscored the obligation that individuals have to unambiguously assert their rights during interactions with police. The shift in jurisprudence creates an obligation for researchers to adjust lines of inquiry accordingly. Just as courts have tended to assume widespread knowledge of the *Miranda* warnings due to the passage of time and their presence in popular culture, researchers have arguably become somewhat complacent in assuming that *Miranda* jurisprudence is settled. Recent federal and state case law demonstrates the dynamic nature of *Miranda*, however, and researchers and policymakers should recognize the opportunity and obligation to inform jurisprudence with relevant empirically based material. In certain respects, researchers have responded to this call by developing studies to specifically address recent Supreme Court holdings (e.g., Gillard et al., 2014). In other respects, there is much work left to be done, particularly with respect to law enforcement (e.g., comprehension and delivery of *Miranda* rights) and the criminal justice system (e.g., given the increase in plea bargaining since the *Miranda* decision).

The *Miranda* Court set out to address the psychological coercion evident in police interrogation practices, and in doing so clearly noted that the issue was not about favoring suspects but about striking a balance between individuals' Fifth Amendment rights and society's interests in identifying and prosecuting offenders. The *Miranda* Court's admonition that "the accused must be adequately and effectively apprised of his rights and the exercise of those rights must be fully honored" (p. 467) is a modestly phrased one, which has proved to have hidden depths when put into practice. Consequently, there is a continuing need to unpack that principle empirically as law enforcement practices and court jurisprudence develop.

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