

THE OBJECTIVITY DEMAND: EXPERIENCES AND BEHAVIORS
OF PSYCHOLOGISTS IN CAPITAL CASE
EVALUATIONS

by

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ABSTRACT

Mental health professionals who work in the legal system are bound by ethical standards to practice objectively and to leave personal beliefs and opinions out of their work; however, whether objectivity is practiced is an empirical question. This series of studies was designed to examine the effect of human bias and error in clinical forensic evaluations. Four specific aims were achieved: 1) integrating quantitative and qualitative methods in compiling descriptive information about forensic psychologists' occupational socialization processes, awareness of biases, capital punishment attitudes, and behaviors in capital case evaluations; 2) investigating how psychologists' personal attitudes toward capital punishment influence data interpretation and conclusions in assessments of capital defendants; 3) comparing evaluator awareness of bias to implicit bias; and 4) generating hypotheses for future research on bias recognition and mitigation.

The studies involved a three-part mixed-method plan, starting with a qualitative interview with board-certified psychologists ($N = 20$). The purpose of the first study was to explore forensic psychologists' thoughts about and experiences with potential biases. An unexpected wealth of data emerged regarding strategies psychologists use to mitigate the effects of biases. Twenty seven unique bias correction strategies were discovered. Study two surveyed a large national sample of forensic psychologists ($N = 334$). Psychologists' personal attitudes toward capital punishment systematically predicted from whom they were willing to accept capital case referrals. This novel finding has not been documented elsewhere in the literature. An analysis of actual capital case reports was undertaken in the third study to examine the report-writing

behavior of forensic psychologists ($N = 122$ reports). Results suggest psychologists act in more biased ways in than they think they do. Individual clinicians accounted for a large portion of the variance (up to 68%) in several outcome variables indicative of potential bias.

Since bias is an issue worthy of concern, the field has a duty to teach new practitioners to become aware of and minimize the effects of potential biases. The strategies discussed herein may be beneficial for inclusion in clinical training programs to emphasize objectivity in the process of clinical judgment and decision-making.

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
β	Beta weight (regression coefficient)
<i>CI</i>	Confidence interval
η_p^2	Partial eta squared (strength of observed power)
<i>F</i>	Fisher's <i>F</i> Ratio
HLM	Hierarchical Linear Model
ICC	Intraclass Correlation Coefficient (a measure of reliability)
<i>M</i>	Mean (arithmetic average)
MANOVA	Multivariate Analysis of Variance
MANCOVA	Multivariate Analysis of Covariance
MSO	Mental State at time of Offense
<i>N</i>	Number of participants (entire sample size)
<i>n</i>	Number of participants in subsample (size of selected portion of sample)
n.d.	No publication date available
NGRI	Not Guilty by Reason of Insanity
<i>p</i>	Probability
p.	Page number
<i>r</i>	Pearson's product-moment correlation (strength of a relation)
<i>SD</i>	Standard deviation
<i>SE</i>	Standard error

SPSS	Statistical software program for predictive analyses
t	Computed value of t test
X^2	Computed value of a chi-square test
<	Less than
>	Greater than
=	Equal to

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INTRODUCTION

“In this case, the crime was particularly brutal. Two people were killed, the means of death allegedly involved torture that took place over an extended period of time and the insertion of a baseball bat into the vagina of one of the victims. This alleged behavior was heinous. Yet I believed that I could conduct an objective assessment of the defendant, free from the effects of interference from the repulsive details of this capital crime. Why did I believe this?” (Heilbrun, Marczyk, & DeMatteo, 2002, p. 150).

How is it that police recruits “become” police officers, air force cadets “become” fighter pilots, medical students “become” surgeons, and psychology graduate students “become” forensic psychologists? There is a transformative process people go through – people change after they are trained and work in a profession in ways that are consistent with others who work in the profession (Bennett, 1984; Coffey & Atkinson, 1994; Dubinsky, Howell, Ingram, & Bellinger, 1986; Melia, 1987). This process of “becoming” a member of a profession is termed “occupational socialization” (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994; Frese, 1982).

Frese (1982) argued that occupational socialization works to engender changes in individuals due to their participation in work; that is, to mold or shape an individual’s cognitions, emotions, and values to be consistent with the work they do. This argument suggests mental health professionals can be occupationally socialized to act objectively in their work, even if they hold deep personal values and beliefs that might otherwise bias their work. Additionally, organizational ethics prescribe objective practice as a cornerstone of psychological assessments (Committee on Ethical Guidelines for Forensic Psychologists, 1991; Principle E and standards 2.04, 2.06, 3.06, and 9.01 of APA Ethics Code, 2002). However, an historical controversy has

existed in the legal (e.g., Bazelon, 1974) and psychological (e.g., Faust & Ziskin, 1988; Poythress, 1977) literature regarding whether objectivity on part of the expert is possible.

Possibly in response to this controversy regarding the ability of forensic psychologists to be objective, forensic psychologists are trained to believe in and strive for impartiality in their work as part of their occupational socialization process. For example, several professionals in the field of forensic psychology have published articles arguing it is possible and necessary to divorce one's personal values and beliefs and to be objective when practicing in a professional capacity (Bonnie, 1990; Brodsky, 1990; Brodsky, Zapf, & Boccaccini, 2001; Connell, 2008; Dietzman, Kennedy, & Beckham, 1991; Eisenberg, 2004; Murrie & Warren, 2005). Further evidence is provided by Niederjohn and Rogers (2009), who note, "It is often assumed that psychologists will be objective when conducting evaluations or that current training standards will neutralize potential sources of bias" (p.70).

Clinical judgment holds an important role in clinical-forensic decision-making. Clinical judgment is "founded upon clinical expertise in a particular area...and is based upon a thorough analysis of extensive data" (Schalock & Luckasson, 2005). An important addition to Schalock and Luckasson's discussion of clinical judgment deals with the issue of bias: "Clinical judgment should not be thought of as a justification for abbreviated evaluations, a vehicle for stereotypes or prejudices, a substitute for insufficiently explored questions, an excuse for incomplete or missing data, or a way to solve political problems" (p. 6). Tasse (2009) concluded on the basis of this discussion that "clinical judgment should not be used as a shield when one draws conclusions that are not supported by the assessment results, observations, and/or case records" (p. 121).

For the purposes of this study, biased forensic decision-making is defined as interpretations of data, opinions, or conclusions offered by the expert that are colored or distorted as a result of personal, theoretical, or situational factors (Dietchman, 1991; Otto, 1987). Two types of “objectivity,” building on Williams’ (1990) two-part definition, are defined here. “Pure objectivity” is defined as interpretations of data, opinions, or conclusions offered by the expert that are wholly divorced from any personal, theoretical, or situational factors experienced by the expert. “Methodological objectivity” is defined as interpretations of data, opinions, or conclusions offered by the expert in which s/he regularly and systematically considered the influence of personal, theoretical, or situations factors that might have influenced their decision-making in an effort to reduce the impact of such factors on the outcome of the process.

Although “pure” objectivity is the ideal, in which evaluator opinions would be so reliable that clinicians would essentially be interchangeable (Murrie, Boccaccini, Zapf, Warren, & Henderson, 2008), it is unlikely that clinicians can achieve pure objectivity because most human behavior is presumably affected to some degree by characteristics and preferences of the individual (Dietchman, 1991; Peshkin, 1988). The concern is, in what contexts or under what conditions do the characteristics of evaluators unduly influence and impede the ability to make reasonably objective decisions and arrive at reasonably objective opinions for the court (Dietchman, 1991)? Methodological objectivity, in which evaluators constantly strive to be aware of and check the potential influence of their biases on their decision-making processes, is therefore a more realistic goal toward which we can strive (Peshkin, 1988). Whether methodological objectivity is possible, and to what degree it is actually practiced in forensic decision-making, is an empirical question.

The Role of Cognitive Biases

In contrast with the occupational socialization psychologists likely go through to believe they can be and are “objective” in their work, a wealth of social psychological literature attests to the fact that human beings may have an impossible job in divorcing their cognitive decisions from a variety of cognitive and emotional biases (Aronson, 2008; Borum, Otto, & Golding, 1993; Forgas, 1995; Guthrie, Rachlinski, & Wistrich, 2001; Koriat, Lichtenstein, & Fischhoff, 1980; Lord, Ross, & Leper, 1979; Martindale, 2005; Nisbett & Ross, 1980; O’Connor, Sales, & Shuman, 1996; Otto, 1989; Redding & Reppucci, 1999).

Tversky and Kahneman (1971; 1973; 1974) demonstrated that people employ heuristic strategies or “mental shortcuts” to preserve mental resources, particularly when making decisions under conditions of uncertainty. These rules of thumb are adaptive in many ways, and help humans make fast decisions that are usually correct (McCammon, 2004; Tversky & Kahneman, 1971; 1973; 1974). However, these convenient shortcuts can lead to errors. Heuristics in forensic decision-making, particularly when an obvious conclusion is not apparent, can lead to bias. Confirmatory bias (analogous to the anchoring-and-adjustment heuristic and the consistency heuristic) is one heuristic that may influence the decisions an evaluator must make in an evaluation (Borum et al., 1993; Garb, 1998; Martindale, 2005). This confirmatory cognitive bias may be able to be empirically studied.

Confirmatory bias is the tendency to identify evidence supportive of an initial hypothesis and to ignore, or fail to seek, information not consistent with the initial hypothesis (Borum et al., 1993; Martindale, 2005; Nisbett & Ross, 1980). However, confirmatory bias can be difficult to identify because it is an internal process (Martindale, 2005). Martindale (2005) therefore argued that a more readily detectable pattern of professional behavior should be defined so it can be

effectively addressed. He distinguished confirmatory distortion from confirmatory bias, defining confirmatory distortion as “the process by which an evaluator, motivated by the desire to bolster a favored hypothesis, intentionally engages in selective reporting or skewed interpretation of the data, thereby producing a distorted picture” (p.33). If an evaluator is overconfident in their initial hypothesis and selects only supportive data to consider and report in their decision-making process, confirmatory distortion may result in a biased conclusion.

The initial hypothesis might be made based on the evaluator’s own personal and political beliefs, exposure to pretrial publicity (e.g., suggestibility and expectancy), comments from the referral party regarding their hypotheses about the defendant’s mental health, or even on adversarial allegiance (e.g., thinking about the case and a defendant through the lens and motivations of the referral party) (Borum et al., 1993; Cunningham & Reidy, 2001; Martindale, 2005; Murrie et al., 2009; Otto, 1989; van Gorp & Kalechstein, 2005; van Gorp & McMullen, 1997). It appears the prevalence and severity of these influences has been underestimated in forensic psychological evaluations (Arkes, 1989; Garb, 1998; Homant & Kennedy, 1986; Martindale, 2005; Murrie & Warren, 2005). The importance of examining these processes in a legal context in which examiner conclusions may have serious implications is thus heightened.

Explicit vs. Implicit Bias. An explicit response is one that is intended, controllable, made with awareness, and requires cognitive resources (Nosek, 2007). In contrast, implicit responses are those made with lack of intention, reduced controllability, reduced awareness of the meaning, origins, or occurrence of a response, and highly efficient cognitive processing (Nosek, 2007). A series of studies comparing explicit and implicit attitudes showed a median correlation between dozens of types of explicit and implicit attitudes ($r = 0.48$; Nosek, 2005; Nosek & Smyth, 2007). The correlation is imperfect because a person’s expressed explicit

attitude – the one they intend to hold (e.g., “I’m a republican” or “I’m not racist”), does not always match up with their implicit attitudes (Greenwald, McGhee, & Schwartz, 1998).

It is likely that forensic psychologists are occupationally socialized to avoid explicit bias in their work, with the hope that these values are internalized so that implicit bias is also avoided. Whether explicit or implicit attitudes influence the cognitions and behaviors of forensic psychologists is not well understood. Forensic psychologists likely hold the explicit belief that they can be objective in their work and are likely careful about expressing overt or explicit bias. However, building on research findings that people may still exhibit unintentional and unrecognized bias in subtle ways (see Crosby, Bromley, & Saxe, 1980; Dovidio & Gaertner, 1998; Hebl, Foster, Mannix, & Dovidio, 2002), this study intends to examine psychologists’ behaviors that may come across in subtle ways.

Evidence of Clinician Variation in Forensic Evaluations

Several studies have provided support for the notion that the decision-making processes of forensic evaluators can be affected by factors other than those related directly to the referral question. Factors that have been found to bias forensic decision-making include identification with the retaining side or litigant (Gorman, 1983; Murrie, Boccaccini, Johnson, & Janke, 2008; Murrie et al., 2009; Otto, 1987; Otto, 1989; Rogers, 1987), professional training (Beckham, Annis, & Gustafson, 1989; Homant & Kennedy, 1986, 1987a, 1987b; Murrie et al., 2008), political ideology (Homant & Kennedy, 1986, 1987a, 1987b), and the desire to support a particular viewpoint on a social issue (Homant & Kennedy, 1986, 1987a, 1987b). A substantial portion of the variance in forensic evaluations has been found to stem from idiosyncratic differences in evaluators themselves. For instance, Homant and Kennedy (1987) found that subjective personal variables accounted for 34% of the variance in hypothetical evaluations, and

Boccaccini, Turner, and Murrie (2008) found that up to 30% of the variance in psychological testing in actual forensic evaluations was attributable to evaluator idiosyncrasies.

In situations in which decision-making criteria are ambiguous, the potential for bias is thought to be enhanced (Brodsky, 1990; Dietchman, 1991; Murrie & Warren, 2005). Although some referral questions in forensic psychology are fairly well-defined (e.g., diagnostic evaluations, competency to stand trial) and have some decision-aids that can help the evaluator more easily answer the question (e.g., testing materials with explicit decision-rules), the nature of some referral questions are not so straightforward. In these types of evaluations, the potential for examiner bias may be greater. Mental state at the time of offense referrals are one type of common forensic referral in which the criteria for decision-making are more ambiguous than in other types of referrals.

Mental state at the time of offense evaluations. For a mental state at the time of offense (MSO) evaluation (also called “criminal responsibility” or “insanity” evaluations), an evaluator is tasked with reconstructing the thought processes and behaviors of the defendant before and during the occurrence of the alleged offense (Melton, Petrila, Poythress, & Slobogin, 2007; Murrie & Warren, 2005). This reconstructive examination requires the examiner to integrate past clinical information and collateral data, a process that often requires inference (Homant & Kennedy, 1987b; Murrie & Warren, 2005; Warren, Murrie, Chauhan, Dietz, & Morris, 2004). Further, there are currently no set standards for how these evaluations need be conducted or how the report need be structured (Melton et al., 2007).

What should be included in MSO evaluations? Although there are no set standards for how MSO evaluations need be conducted or structured, Borum and Grisso (1996) surveyed psychologists and psychiatrists to determine what examiners believed were important elements

for MSO evaluations. They found strong agreement by evaluators on a number of data sources that were rated as “essential” for inclusion in these evaluations: 1) information from past mental health records (including prior psychiatric diagnoses), 2) information about the presence or absence of substance abuse, 3) police information about the defendant’s behavior at time of the alleged offense, 4) the defendant’s description of events surrounding the time of the alleged offense, 5) clinical interview, 6) current mental status exam, and 7) information about current use of psychotropic medication. Although including information from witnesses or other collateral sources did not reach consensus as “essential,” it was rated highly by most evaluators.

In examining what evaluators actually do in MSO evaluations, Heilbrun & Collins (1995) compared reports completed by community examiners and by examiners at a forensic hospital. Regarding procedures and materials used in these evaluations, they found that clinical interviews were used in 98-100% of the evaluations, mental status exams in 67-69% of the evaluations, examination of the arrest report in 45-67%, examination of prior mental health records in 31-33%, interviews with jail staff in 17-33%, and other third party information was used in 33-46% of the evaluations. These findings generally map onto Borum and Grisso’s (1996) survey of examiners inquiring about what information is necessary in such evaluations, although the rates of examiners actually including what was rated as “essential” were not as high as would be ideal.

Base rates of insanity findings. A “base rate” refers to the prevalence of a given characteristic in a population (Arkes, 1989; Borum et al., 1993). To examine the content of reports for this study, it is important to examine the base rates of various characteristics in MSO reports. The first question is “what is the base rate of clinicians reaching an opinion supporting an insanity claim?” In their examination of the content of 4,498 MSO evaluations, Murrie and Warren (2005) found a base rate opinion supportive of insanity was about 11%. In their analysis

of 5,175 MSO evaluations, Warren and colleagues (2004) found that evaluators reached an opinion supportive of an insanity claim in an average of 12% of MSO evaluations. Cochrane, Grisso, and Frederick (2001) found that approximately 12% of the 719 federal defendants referred for MSO evaluations were found by the evaluator as having an eligible insanity claim. Warren, Fitch, Dietz, and Rosenfield (1991) examined 894 evaluations with MSO as a referral issue, finding that evaluators reached an opinion supporting an insanity claim in 8% of cases. Therefore, the consistent base rate of opinions supportive of an insanity defense claim for MSO referrals appears to be between 8-12%.

Base rates for individual examiners. Regarding base rates for individual clinicians' variation in rates of insanity opinions, Murrie and Warren (2005) examined 4,498 MSO evaluations that were completed by 59 clinicians (each clinician had conducted at least 10 of the evaluations). They examined the percentage of times each individual examiner found support for insanity claims. Although the range was between 0% and 50% overall, they found that most clinicians found 5% to 25% to meet criteria for legal insanity (85% found between 2% and 28%). They therefore concluded that individual evaluators could look to the typical range of 5% to 25% of insanity findings as a base rate to compare their own rates. If an examiner finds evidence for insanity claims in substantially more or fewer referrals, s/he may be biased in his/her decision-making processes.

What factors lead to opinions supporting an insanity claim? Diagnostic presentation is the main variable that affects psycholegal opinion about insanity in MSO cases, although five other factors are also significant predictors (Warren et al., 2004). These other factors include non-minority status, having no drug offense charges, having a prior conviction, previous psychiatric hospitalization, and not being under the influence of a substance at the time of the

alleged offense. In terms of diagnoses, psychotic, organic, or affective disorders without a personality disorder diagnosis were the strongest predictors of insanity opinions (Warren et al., 2004). Schizophrenia is the most frequently cited diagnosis among defendants opined to be insane (28%), followed by an affective disorder (15%), and mental retardation (11%) (Warren et al., 1991). Warren and colleagues (1991) found that diagnoses of personality and substance abuse disorders were least likely to be associated with a finding of insanity, and Warren and colleagues (2004) found an inverse relation between personality and substance abuse disorders and an associated insanity finding.

Potential indicators of bias in MSO evaluations.

Holistic Data. Ethical and practice guidelines for forensic reports in general mandate that examiners cite the sources of information that provide the bases for their reasoning and conclusions (Committee on Ethical Guidelines for Forensic Psychologists, 1991; Heilbrun et al., 2002). In addition to current psychological functioning (as may be evidenced by a clinical interview, mental status exam, and interviews with hospital staff), the use of third-party information is considered to be important in most MSO cases (Heilbrun & Collins, 1995). If examiners reach a conclusion as to the mental state of the defendant at the time of the alleged offense, s/he should have relied on data that would support their opinion. Such data may include examining arrest reports, prior mental health records, and interviews with people who were around at the time of the alleged offense (e.g., family members, law enforcement). If examiners come to a conclusion in an MSO evaluation without basing their conclusions on data, it may indicate bias on part of the examiner.

Evaluators should support their opinions with evidence throughout reports, but should also proffer data that are contrary to their offered opinions in the interest of objectivity (Garb,

1998; Otto, 2009; van Gorp & Kalechstein, 2005; Williams, 1990). Partiality may be suggested if psychologists do not include information that may shed doubt on their conclusions by indicating the examiner has an interest in a particular outcome of the case. This line of reasoning is consistent with Martindale's (2005) argument for examining confirmatory distortion as indicative of bias. Recall he distinguished the internal process of confirmatory bias from confirmatory distortion, defining confirmatory distortion as "the process by which an evaluator, motivated by the desire to bolster a favored hypothesis, intentionally engages in selective reporting or skewed interpretation of the data, thereby producing a distorted picture" (p.33). If an evaluator is overconfident in their initial hypothesis and selects only supportive data to consider and report, confirmatory distortion may result in a biased conclusion, which may evidence as only reporting information supportive of one's conclusion and not reporting information that sheds doubt on that conclusion.

Evidence of bias may also be reflected in the length of a report. Heilbrun and Collins (1995) indicated clinicians who write longer reports are generally documenting the bases of their opinions more thoroughly than clinicians who write shorter reports. Those who write shorter reports may simply be providing a conclusory opinion without relying on data to support their opinion. In their examination of reports, Heilbrun and Collins found a range of 1-14 pages, with a mean length of 3.9 pages. They concluded that the average of 3.9 pages was sufficient evidence that most examiners were providing more than just conclusions and opinions in their reports.

Use of Language. It has been recommended that forensic practitioners should avoid emotionally charged and exaggerated language in an effort to maintain impartiality when communicating results (e.g., words like "absolutely," "unquestionably," "totally," "incredibly,"

“unbelievably,” “everything,” “none whatsoever,” “brutal,” “lack of conscience,” “insensitive” etc.) (Heilbrun et al., 2002). Such “allness terms” have been identified as a strategy of inclusive generalization that may not yield a whole picture (Pace, 1992). These language patterns may indicate bias on part of the evaluator. Overconfidence may also indicate bias on part of the evaluator, because the literature shows higher confidence is not related to greater accuracy (see Arkes, 1989). For instance, statements like “I am certain” may indicate overconfidence, whereas statements like “I am reasonably confident” indicate a moderate and more reasonable level of confidence (Cramer, Brodsky, & DeCoster, 2009). Just as statements indicating reasonable confidence may indicate impartiality on part of the evaluator, the use of qualification terms, such as “however” or “nevertheless” (Wagner & Williams, 1961) may indicate the examiner is providing two sides of a story, and therefore may be less likely to have a vested interest in the outcome of the case.

The “Ultimate Issue Issue.” An “ultimate-issue issue” has been raised in forensic psychology (Heilbrun et al., 2002; Melton et al., 2007; Morse, 1978). Several authors argue that psychologists should not address the “ultimate legal issue” in writing forensic reports. That is, no categorical legal issue should be addressed (e.g., whether or not the defendant was “sane” at the time of offense in MSO evaluations). They argue there are strong philosophical differences between law and behavioral sciences, and that that behavioral scientists do not have the requisite expertise to make the ultimate legal decision (American Bar Association, 1989; Insanity Defense Work Group, 1983; Fed. R. Evid. 704(b); Homant & Kennedy, 1987; Melton et al., 2007). In addition to clinical information (inside the realm of psychological expertise), the ultimate legal issue must include an analysis of social and moral policy (outside the realm of psychological expertise) (American Bar Association, 1989; Insanity Defense Work Group, 1983; Fed. R. Evid.

704(b); Melton et al., 2007). Clinicians can thus provide useful clinical information about the mental health or abilities of a defendant that can serve to inform the legal decision the trier-of-fact must make.

Not all forensic psychologists agree with this reasoning. Some argue the ultimate legal question should be addressed by the forensic examiner (see e.g., Rogers & Ewing, 1989; 2003), because there is great pressure from the court system on examiners to reach the ultimate legal issue in many cases (Morse, 1982; Redding, Floyd, & Hawk, 2001; Zapf, Hubbard, Cooper, Wheelles, & Ronan, 2004). In a survey of psychologists and psychiatrists, Borum and Grisso (1996) found that for MSO evaluations, most respondents agreed it was important to provide an opinion about psychiatric diagnosis and its relation to the issue of mental state at the time of offense. However, there was no consensus regarding whether offering “ultimate opinions” was appropriate in MSO evaluations: less than half of the respondents considered offering an ultimate opinion as “essential” and about twenty percent felt offering an ultimate opinion was contraindicated. In an analysis of actual MSO report characteristics, Heilbrun and Collins (1995) reported that the ultimate legal issue was addressed in 41% of the MSO reports.

Regardless of the opinion a particular examiner holds on the issue, the Federal Rules of Evidence (FRE) and the American Bar Association prohibit experts from reporting an opinion on the ultimate legal issue in MSO evaluations in federal cases. FRE 704(b) states,

No expert witness testifying with respect to the mental state or condition of a defendant in a criminal case may state an opinion or inference as to whether the defendant did or did not have the mental state or condition constituting an element of the crime charged or of a defense thereto. Such ultimate issues are matters for the trier of fact alone.

Regarding the content of written reports by experts, the American Bar Association's *Criminal Justice Mental Health Standards* (1989) states that, "The evaluator should express an opinion on a specific legal criterion or standard only if the opinion is within the scope of the evaluator's specialized knowledge" (p. 109). In terms of expert testimony specifically in MSO cases, the *Standards* states,

Expert testimony, in the form of an opinion or otherwise, concerning a person's present mental competency or mental condition at some time in the past should be admissible whenever the testimony is based on and is within the specialized knowledge of the witness and will assist the trier of fact. However, the expert witness should not express, or be permitted to express, an opinion on any question requiring a conclusion of law or a moral or social value judgment properly reserved to the court or the jury (p. 117).

This issue is so important because even though the court is not obligated to follow the recommendations of the clinician, judges seldom disagree with clinicians' decisions (Greene & Heilbrun, 2010) and opposing attorneys often stipulate to the findings without further examination (Melton et al., 2007). Further, the legal decisions of judges or juries almost always follow clinicians' recommendations on various psycholegal issues (on average 90% of the time; Smith & Hall, 1992; Zapf et al., 2004), including criminal responsibility (Viljoen, Roesch, Ogloff, & Zapf, 2003).

To experimentally test whether ultimate issue testimony affects jurors' decisions, Fulero and Finkel (1991) exposed jurors to an insanity case in which experts testified at one of three levels. The first level was diagnostic only, with testimony about a patient's existing mental disorder or about the absence of a mental disorder relevant to the MSO issue. The second level was penultimate issue testimony, in which the expert diagnosed the patient with a mental

disorder and tied that diagnosis to the legally-relevant behavior. The experts testifying at this penultimate level used the language of the criminal responsibility statute, but they did not give a categorical opinion about sanity. The highest level, ultimate issue testimony, included a diagnosis, the expert tying that diagnosis to the legally-relevant behavior, and issuing a categorical opinion about “sanity” or “insanity” at the time of the crime.

Results indicated that level of testimony did not differentially affect verdict. Fulero and Finkel (1991) interpreted these findings to mean that jurors may infer (or mistakenly recall) higher levels of testimony than what was presented. In the current study, examiner opinions in actual reports were coded based on Fulero and Finkel’s (1991) three levels (as a possible indicator of “certainty”) to determine whether a relation existed between how far the ultimate legal question was addressed and indicators of potential bias as outlined above.

Redding and colleagues (2001) identified eight aspects of mental health expert opinions in MSO evaluations that successively address the ultimate legal issue, from descriptive clinical information (e.g., behavioral observations) to the ultimate legal issue (e.g., categorically confirming or disconfirming the defendant’s sanity at the time of offense). This study also utilized Redding and colleagues’ (2001) discussion to code the level at which the evaluator addressed the ultimate legal opinion in each report (as a second possible indicator of “certainty”).

Evidence of clinician variation in MSO evaluations. Rogers and Shuman (2000) stated that, “insanity evaluations have largely been an idiosyncratic process, reflecting the propensities and proclivities of the clinician” (p. 230). Because the potential for bias is enhanced in situations in which clinical and legal criteria for decision-making are ambiguous, (Brodsky, 1990; Dietzman, 1991; Murrie & Warren, 2005) and because the nature of an MSO evaluation is

largely reconstructive, the potential for bias in these evaluations may be greater than in other types of forensic evaluations (Homant & Kennedy, 1987b).

In a series of studies, Homant and Kennedy (1986, 1987a, 1987b) showed that a host of subjective factors on part of the evaluators biased their decision-making processes and conclusions. Most significantly, they showed that evaluators' political ideology and training were predictive of their attitude toward the insanity defense in general, and that this attitude toward the insanity defense was predictive of how subjects responded to fixed insanity case vignettes. Because the vignettes were fixed, the variance was attributed to factors that pertained to the clinicians themselves rather than to the facts of the case.

In addition to situations where clinical and legal criteria for decision-making are ambiguous, the potential for bias is thought to be heightened by the coercive environment of forensic assessment (Arcaya, 1987) and the adversarial nature of court processes (Diamond, 1959). Further, situations in which contextual factors elicit strong feelings are thought to increase the chances that biases may influence evaluations (Brodsky, 1990; Dietchman, 1991; Murrie & Warren, 2005). Empirical research investigating the impact of attitudes on social behavior indicates that situations in which strong feelings are aroused elicit the greatest effects (Cialdini, Petty, & Cacioppo, 1981; Cooper & Croyle, 1984).

Evaluator attitudes toward capital punishment. Capital punishment is one of the most fiercely debated issues in modern society. It is a powerful legal, ethical, and moral issue about which many people have strongly held opinions. It is important to examine the possibility that in emotionally intense capital case evaluations (i.e., for those examiners who feel strongly in either direction about capital punishment) that examiner interpretations and conclusions might be influenced by their attitudes toward capital punishment. This question is especially vital to

consider in the context of capital case work, where a possible sentence for a defendant found guilty is death.

The strength of an evaluator's opinions toward the death penalty has been found to impact capital case evaluations. For instance, evaluators who hold strong opinions opposing the death penalty are significantly less likely to accept a referral for Competency for Execution evaluation (Deitchman et al., 1991; Pirelli & Zapf, 2008; Susman, 1992). This finding suggests there are some self-selection factors in capital case evaluations, where the evaluators who take these referrals may be more supportive of the death penalty than evaluators who decline. Haney (2005) argued that death qualification of juries facilitates death sentencing because only people who support capital punishment are allowed to have a say in deciding whether any capital defendant lives or dies. He points out, "capital juries can only represent the conscience of one part of the community – the part that collectively tilts toward death" (p. 139). If death-qualified psychologists are the only (or primary) professionals who are evaluators in capital cases, it is possible the pool of potential examiners does not represent the variety of examiner attitudes toward capital punishment and therefore may be skewed toward death.

In addition to concern about the strength of an examiner's personal *support* for the death penalty, Cunningham and Reidy (2001) argue that the stronger one's *opposition* to the death penalty, the more concerns about objectivity are increased. They suggest that mental health professionals who are advocates against capital punishment might find themselves in an ethically compromised dual-role if they are hired as experts to apply that social policy. Further, they argue the stronger the opposition, the harder it might be to consider evidence that doesn't fit one's perspective.

Evidence of clinician variation in capital case evaluations. Implicit evaluator biases may be operating in capital case evaluations. Deitchman (1991) found that examiner attitude toward capital punishment was a significant source variance able to predict the outcome of a hypothetical Competence for Execution (CFE) evaluation. Specifically, examiners more favorable toward capital punishment were more likely to evaluate a hypothetical death row inmate as competent in a clinically ambiguous case.

Svec (1991) found evaluator attitudes toward capital punishment accounted for 8% of the variance in participants' judgments of competency for execution in fictitious inmates. Evaluators with negative attitudes toward the death penalty were less likely to judge the fictitious inmate as competent. Brown (1992) also found a significant relation between forensic psychologists' death penalty attitudes and competency for execution decisions: psychologists who found the mock defendant competent for execution were significantly more in favor of the death penalty than those who found the defendant incompetent for execution, $F(1, 308) = 6.35, p < 0.01$. Susman (1992) found a correlation that approached but did not reach statistical significance ($p = 0.06$) between evaluator support of the death penalty and their ratings of a mock defendant's competency to be executed.

This research suggests examiners' personal beliefs may influence at minimum their willingness to participate in capital evaluations. Other research suggests that examiner's personal death penalty attitudes could influence their interpretation of ambiguous defendant conduct based on a cluster of criminal justice belief structures in which death penalty attitudes are embedded (Goodman-Delahunty, Greene, & Hsiao 1998). These findings suggest that examiner beliefs may influence their opinions in the cases they take, which has the potential to

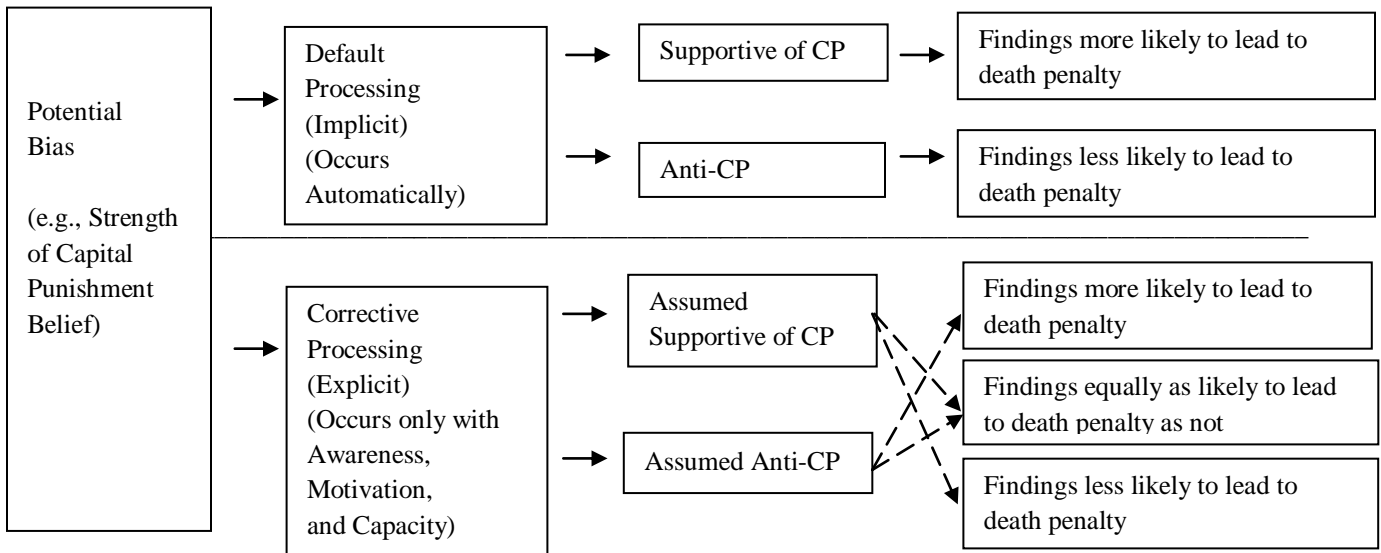
affect the outcome of the case – literally having potential life-or-death consequences (Cunningham & Reidy, 2001).

Although the literature yields some information on evaluator biases in hypothetical capital case situations, there is minimal research with examiners regarding possible bias and subjectivity in actual capital case evaluations. Additionally, there is very little research on how potential bias in such situations is handled, though there are a few non-empirical articles with suggestions for how to consider the impact of potential bias in capital case evaluations (e.g., Neal, 2010). No studies appear to have looked for potential bias in actual capital case reports.

A Proposed Decision Bias Model

DeCoster and Claypool (2004) proposed a General Model of Informational Biases based on their meta-analysis of the priming effects of impression formation. They propose that this model can help explain how general judgments can be biased. Their model describes the mental processes involved in anchoring, assimilation, and correction effects, in addition to how each are influenced by moderating variables. The model has two independent modes: the first is default processing and the second is corrective processing (see Figure 1, adapted from DeCoster & Claypool, 2004). Default processing occurs automatically and does not require much conscious attention. In this mode, implicit biases may operate and influence judgments without awareness. In contrast, the corrective mode can take place when people are aware of potential biases and have the motivation and capacity to correct for the potential bias (DeCoster & Claypool, 2004; Neuberg & Fiske, 1987).

Figure 1. A Proposed Model of Bias and Bias Correction in Capital Case Decision-Making



If evaluators hold strong personal beliefs about the societal, political, empirical, or moral value of capital punishment, the series of decisions they must make in capital case evaluations may be influenced (Cunningham & Reidy, 2001; Heilbrun et al., 2002). This model might help explain how these potential biases may influence the evaluation outcome and subsequently how legal decisions might be made. It should be noted that if this research is extended to examine other potential sources of bias in psychological assessments (i.e., attitudes about something other than capital punishment) this model could change to reflect whatever attitude is under examination in a variety of different settings (i.e., other than in a legal context).

According to the proposed model, if an evaluator holds very strong beliefs about the effectiveness and necessity of capital punishment (CP), s/he might by default allow those opinions to influence the evaluation process and outcome in a manner consistent with his/her beliefs (e.g., decide that the defendant does not have a valid mental state at time of offense claim). If the evaluator has strong anti-capital punishment beliefs, s/he might determine more often that the defendant does have a valid mental state claim, even in the face of the same evidence. Only if the evaluator is aware of, motivated to, and has the capacity to correct for the perceived bias will s/he be likely to work to be more “objective.” It is possible that when evaluators are aware of their own potential biases and have the capacity to correct for them that over-correction may occur, as described by Wegener and Petty’s (1995) Flexible Correction Model. However, it is also possible that an appropriate amount of bias correction may take place, leading to a more neutral and objective pattern of findings.

Statement of the Research Problem

The purpose of this study was to investigate how psychologists’ attitudes toward capital punishment might influence data interpretation and conclusions in psychological assessments of

capital defendants. This was a three-part mixed-method study, with a qualitative interview portion first (study one), followed by a national survey designed in part to test the hypotheses refined in study one as well as to extend study one (study two), and finally an analysis of actual capital case reports to see whether potential bias exists in the reports (study three). The mixed-method nature of this research is a strength of this design, as researchers have been encouraged to integrate quantitative and qualitative methods to investigate research questions interactively and interdependently (Auerbach & Silverstein, 2003; DeCoster & Lichtenstein, 2007).

Specific Aims:

- To integrate quantitative and qualitative methods in compiling descriptive information about forensic psychologists' occupational socialization processes, awareness of potential biases, attitudes toward capital punishment, and behaviors in capital case evaluations.
- To investigate how psychologists' personal attitudes toward capital punishment might influence data interpretation and conclusions in assessments of capital defendants.
- To compare evaluator awareness of bias to implicit bias in capital case evaluations.
- To generate hypotheses for future research on how psychologists can recognize and mitigate their own implicit biases, in addition to how the occupational socialization process in forensic psychology might need to change to teach psychologists to recognize and mitigate their own potential biases.

The purpose of study one was to explore forensic psychologists' thoughts about and experiences with potential biases and to generate hypotheses to investigate in the larger quantitative study that followed. Research concerns addressed in the scripted narrative interviews in study one included forensic psychologists' 1) occupational socialization

experiences, 2) understandings of objectivity in forensic work, 3) awareness and concern about their own potential biases, and 4) strategies to correct for perceived biases.

Study two extended study one by surveying a large national sample of forensic psychologists. Study two sought to address the following hypotheses:

1. Psychologists with a longer history of practice will have higher occupational socialization scores than will psychologists newer to the profession
2. Most psychologists will report that they practice objectively in their professional work
3. Psychologists with higher occupational socialization scores will believe they are more objective in their work
4. Psychologists who do capital casework will be more supportive of the death penalty than psychologists who refrain from working in capital cases
5. Psychologists who are more opposed to the death penalty but who do capital case evaluations will be more occupationally socialized and believe they can be more objective in their work than
 - a. Psychologists who are more supportive of the death penalty and do capital case evaluations
 - b. Psychologists who are more opposed to the death penalty and refuse to do capital case evaluations
6. Occupational socialization will be positively correlated with moral disengagement.
7. Moral disengagement will be positively correlated with belief in objectivity.
8. Evaluators who do capital evaluations will ascribe to higher rates of moral disengagement than evaluators who don't do capital evaluations.
9. Occupational socialization will be positively correlated with bias correction strategies.

10. Moral disengagement will be positively correlated with bias correction strategies.

11. Exploratory analysis: The occupational socialization and capital casework of psychologists who are not clearly opposed to or supportive of the death penalty will be explored (directions unspecified)

In study three, the content actual capital case reports were examined for indicators of potential bias. This is the first of its kind and was therefore be primarily exploratory in nature.

The exploratory hypotheses for this study included:

1. Determining if reports with higher rates of emotionally charged words or pejorative phrases were more likely to:
 - a. Not provide an axis I diagnosis
 - b. Provide an axis II diagnosis
 - c. Conclude that an NGRI defense is possible
 - d. Be shorter
 - e. Include fewer sources of information on which conclusions are based
 - f. Have a higher ratio of supporting than uncertain/non-supporting statements
 - g. Be more likely to address the ultimate legal question more fully

The sample size of evaluators conducting the reports for study three was small ($n=14$). Thus, the sample size for analyzing the content of the evaluations by individual examiner has low power. However, the innovative nature of this method and the exploratory nature of this study were considered valuable for testing this method to inform future investigations and for generating hypotheses to be tested in future research.

STUDY 1

Method

The qualitative research paradigm. Our literature review yielded surprisingly little in the way of explicit discussion of bias in forensic-clinical evaluations. The qualitative research paradigm is well-suited to investigate perspectives about which little is known (Auerbach & Silverstein, 2003); therefore, we decided to begin our exploration of bias in forensic evaluation from a qualitative research paradigm. The goal of qualitative research is to generate *thick description* (Geertz, 1973); that is, explicating a detailed description of the experiences of the people who live out the phenomenon one is investigating (see e.g., Auerbach, Silverstein, & Zizi, 1997). Qualitative research develops grounded theory – theoretical constructs derived from, and grounded in, participants’ own understandings (Auerbach & Silverstein, 2003; Glaser & Strauss, 1967). Specific hypotheses can then be generated from the grounded theory which can be tested quantitatively.

Qualitative research begins by interviewing a sample of the people who have experienced the phenomenon under study. The text generated by these interviews as the participants talk about and reflect on the phenomenon from their subjective perspectives constitutes the data of the qualitative analysis (Auerbach & Silverstein, 2003). The goal of the analysis is to limit the researcher’s subjectivity in a structured and disciplined way in order to interpret the world of the text (Auerbach & Silverstein, 2003). Although different methods of qualitative analysis exist, most share the same general procedure. Qualitative analysis generally includes analyzing the text at three levels: recognizing repeating ideas, conceptualizing themes, and developing theory-driven constructs (Auerbach & Silverstein, 2003; Glaser & Strauss, 1967; Miles & Huberman, 1994). Repeating ideas

are text-driven categories derived from the words and phrases of participants, which often are similar or overlapping in content. Once repeating ideas are organized, they often have some conceptual relation to one another and can be organized into higher-order themes. From there, the researcher can use theoretical concepts from the literature or from their own hypotheses to organize the themes into theory-driven constructs (Auerbach & Silverstein, 2003; Miles & Huberman, 1994).

Participants. An in-depth narrative interview with 20 forensic psychologists was conducted. Participants were randomly selected from a list of forensic psychologists certified through the American Board of Forensic Psychology (ABFP), a specialty organization within the American Board of Professional Psychology (ABPP). ABPP is a national organization that provides protection to consumers by certifying and making publicly available information about those psychologists who demonstrate competence in a specialty area of professional psychology (ABPP, n.d.). This population was chosen for this qualitative study because these psychologists theoretically represent some of the best forensic clinicians in the nation.

We aimed to obtain 20 participants because qualitative researchers have described this as a good number for initial theorizing in grounded theory analysis (Auerbach & Silverstein, 2003). We intended to continue recruiting participants if new information about the research concerns continued to be contributed after the initial 20 interviews in order to reach the theoretical saturation point (i.e., until new information was no longer being learned) (Auerbach & Silverstein, 2003; Glaser & Strauss, 1967). However, after concluding 20 interviews, we had reached the theoretical saturation point and stopped gathering data.

We attempted to contact participants by telephone ($N= 41$). We called and left a standard message up to two times in an attempt to reach participants. Fourteen people were not contacted further after two attempts (34.1% of our sample). Four numbers were either no longer in service or

no longer associated with the sought participant (9.8%). Three participants (7.3%) declined to participate (two declined immediately upon answering the telephone and one declined when asked if the interview could be digitally recorded). The remaining twenty participants completed the interview, resulting in a 48.8% completion rate.

Procedure. The names and contact information for ABFP-certified evaluators were randomly selected via a stratified random sample from the online ABFP directory. To randomly select the participants, a random sequence of 218 numbers (the total number of ABFP names available at the time of our search) was generated through a random sequence generator on the www.random.org website. We then contacted participants according to the random sequence generated, but limited by approximately equal numbers of people within three stratified groups. The purpose of the stratified sample was to capture the variability in occupational socialization changes over the last several years, as the field of forensic psychology has grown and changed greatly in the last few decades (Heilbrun & Collins, 1995; Melton et al., 2007). Due to the changes in the field, we thought the occupational socialization experiences of psychologists who obtained their degrees at different times may have different perspectives and may share information other groups could not. This stratification procedure was intended to enhance the holistic nature of the data obtained. The first group consisted of psychologists who obtained their terminal degrees within the previous 1-15 years ($n= 8$), the second group within the last 16-30 years ($n= 6$), and the third group the last 31+ years ($n= 6$; note: this information is available on the directory).

Upon being contacted by telephone, the purpose of the study was briefly described to the participants, they were informed about how their information was obtained, and their participation in a telephone interview was requested. Participants who agreed were read a participant information sheet prior to the start of the interview. Participants were then asked if they would allow the

interview to be recorded, and the recorder was turned on if allowed (an Olympus TP-7 Telephone Recording Device and Olympus WS-321M Digital Voice Recorder was used). The interview was terminated for participants who declined to be recorded ($n= 1$), because a transcript of each completed interview was considered necessary for the content to be adequately transcribed and analyzed.

Participants who agreed to the recording ($n= 20$) were asked a series of scripted narrative questions and were encouraged to elaborate on their answers and to discuss related issues not raised by the scripted questions. The interviews lasted on average 16:01 minutes ($SD= 8.41$; median = 14.00). A debriefing document was read to each participant at the conclusion of the interview. A professional transcriptionist (who was considered unlikely to recognize the voices in the interviews) was hired to transcribe the entire content of each interview. Immediately after the interviews were transcribed, the digital recordings of the interviews were erased for confidentiality purposes. The transcribed interviews formed the text for the data analysis

Materials. A scripted narrative interview consisted of six questions with optional probes (see Appendix A). Six questions has been recommended for qualitative interviewing: more than six questions may exhaust people, but fewer than six may not yield as much detail as is needed to generate sound hypotheses (Auerbach & Silverstein, 2003). The questions were designed to explore our research concerns, which included the participant's 1) occupational socialization experiences (questions 1 and 2), 2) understandings of objectivity in forensic work (questions 2 and 3), 3) awareness and concern about biases in general 4) as well their own potential biases (questions 4 and 5), and 5) strategies to correct for perceived biases (question 6). Participants were encouraged to discuss related issues that were not raised by the scripted questions to allow for the interview to be an iterative process.

Data Analysis. After the interviews were transcribed, the Constant Comparative Method of Grounded Theory Analysis (Glaser & Strauss, 1967) was used to examine the data. Four stages comprise the Constant Comparative Method: 1) Compare incidents applicable to each category (e.g., organize repeating ideas); 2) Integrate categories and their properties (e.g., conceptualize themes); 3) Delineate the theory (e.g., develop theory-driven constructs); and 4) Write the theory (Glaser & Strauss, 1967). To accomplish the first goal, two coders reduced the whole of the interview texts by organizing the relevant text into as many repeating idea categories as necessary to fit all the data. To ensure the data fit under the category, each incident (data point) was compared with the previous incidents already coded under that category, and data entered in that category was compared with the data entered into new categories. This procedure was to ensure each data point was “constantly compared” to other data points and categories so that each fit best under the applicable category, and so the data under each category “belonged together” (Glaser & Strauss, 1967; Harry, Sturges, & Klinger, 2005). The two coders initially worked independently on each step, but met and discussed analyses to share insights about each step and resolve discrepancies before moving to the subsequent step of the analysis.

To address the second goal of analysis, each coder looked for similar repeating idea categories and grouped those together (Auerbach & Silverstein, 2003). Once the repeating ideas were integrated, themes could be developed to capture each of the grouped repeating ideas. Then, to accomplish the third step in the analysis process, each of the themes was organized into larger and more abstract theory-driven constructs to integrate and capture the elements of the whole of the data (Auerbach & Silverstein, 2003; Glaser & Strauss, 1967). This is both a “bottom-up” and a “top-down” approach, because the themes are developed “bottom-up” from the repeating ideas; however, metatheory is used in a “top-down” manner to guide the higher organization of the themes

(Auerbach & Silverstein, 2003). Finally, to address the fourth goal of the analysis, the theoretical constructs were organized into a theoretical narrative (see Results section below) to summarize what was learned (Auerbach & Silverstein, 2003; Glaser & Strauss, 1967). This process was repeated five times – once for each of the research concerns (i.e., occupational socialization, objectivity definition, general bias awareness, personal bias awareness, and bias correction strategies; see Tables 1-5 below).

Reliability and Validity. It would be naive to think that the preconceived notions of the coders of the qualitative data would not affect their interpretations. Qualitative researchers necessarily use subjectivity when analyzing and interpreting data; however, the researcher's subjectivity should not be imposed in a manner unjustified by the data. We incorporated several safeguards in our analyses to assure the qualitative equivalents of reliability and validity (see e.g., Auerbach & Silverstein, 2003; Rubin & Rubin, 1995). Note that we did not calculate a numerical reliability rating, because our goal was consensus (see, e.g., Harry et al., 2005). Each point of difference was discussed and clarified until an agreement for coding was reached.

The steps we took included incorporating the ratings from two independent raters at each stage of the process (see Auerbach & Silverstein, 2003). Second, we aimed for *transparency* in our analyses. That is, we kept a clear record of the steps we took and sought to provide clear and justifiable descriptions of how we arrived at our interpretations. Instead of ignoring the influence of the coders' subjective perspectives, we aimed for transparency so it should be clear to any reader how we reached our interpretations based on the data. Third, we aimed for *communicability*. We strove to make our categories understandable to the participants themselves as well as other investigators who may choose to use them in future research. To determine the communicability of our interpretations, we sought to explain them to other researchers and a few participants after the

analyses were complete. The participants and researchers understood our descriptions. Finally, we aimed for *coherence*. We sought to create internally consistent categories reflecting individual differences as well as genuine inconsistencies in the field. Our theoretical constructs fit together in what we think is a coherent story. This story may not be the only possible story, but it is one justifiable way to organize and interpret the data (Auerbach & Silverstein, 2003).

Results. Our first research concern was investigating participants' occupational socialization experiences, which we discuss here first. We follow with a discussion of participants' definition of objectivity in forensic work. Then we turn to participants' awareness of bias in forensic work in general, followed by awareness and concern about personal biases. Finally, we discuss strategies to correct for perceived biases. Our research concerns are presented here as subsection headings.

In this section, we present our text-driven repeating ideas, conceptualizing themes, and theoretical constructs for each research concern. We provide examples of raw text here as well, although most of the raw text is not included in this write up.¹ Tables 1 through 5 below illustrate how the repeating ideas logically cluster into themes and themes cluster into theoretical constructs. Theoretical constructs are presented here as bolded capitalized paragraph headings, themes lowercase bolded paragraph headings, and repeating ideas as lowercase bolded and italicized sub-paragraph headings.

Research Concern 1: Occupational Socialization

Our first research concern was how forensic practitioners were socialized into the field (see Table 1). We discovered there are many different ways in which and reasons for people becoming involved in the field. These differences are reflected in the rapid changes and developments that have been occurring in the field in the last few decades. For this analysis, we were particularly interested in the ways in which socialization about objectivity occurred. As can be seen from Table

¹ Full transcripts are available for review upon request.

1, socialization about objectivity occurs in a variety of ways. We noted that socialization into moral disengagement appears to be one mechanism by which practitioners have mitigated bias in their own work and have socialized others into using this mechanism to mitigate bias as well. Developing a sense of professional pride appears to serve as a motivation for one to reduce the effects of bias in one's work. Of note, several participants described how bias develops, and how psychologists' socialization experiences themselves can introduce or reinforce biases.

Table 1. Occupational Socialization: **Theoretical Constructs**, *Themes*, and Repeating Ideas

I.	Varied pathways into the field	
	<i>Formal forensic psychology training is a relatively recent development</i>	65%
	Originally no specific training forensic psychologists	
	Pathways directly into forensic psychology	
	<i>Indirect pathways into forensic psychology</i>	70%
	Clinical psychologist first and serendipitously started forensics	
	Clinical psychologist first and planfully switched to forensics	
	<i>Varied reasons for becoming a forensic psychologist</i>	65%
	A niche needed to be filled in the community/ economic opportunities	
	Fascination	
	Attracted to the field due to emphasis on objectivity	
	Pursuit of knowledge	
II.	Debate about therapeutic skills in forensic work	
	<i>Tension about a clinician's role in a forensic case</i>	45%
	Therapeutic background is a strength	
	Therapeutic clinical stance is a liability	
III.	Socialization about objectivity	
	<i>Formal training about objectivity</i>	60%
	Didactic, seminars, workshops, readings, internship, and/or coursework	
	Hands-on experience with feedback	
	<i>Mentorship about objectivity</i>	25%
	Mentorship about objectivity in general	
	<i>Teaching objectivity is important for oneself and the field</i>	50%
	Teaching objectivity	
	Modeling objective behaviors	
	Teaching others can further develop own professional self	
	<i>Informal training about objectivity</i>	30%
	Observation of others	
	Consultation and discussion with others	
	The absence of pressure toward a particular conclusion is helpful for learning	
	Objectivity is expected	
	<i>Many people have received no explicit training about objectivity</i>	40%
	Denial of receiving any explicit training about objectivity	
IV.	Socialization into moral disengagement	
	<i>Moral disengagement is common</i>	30%
	Reminding oneself about diffusion of responsibility	
	<i>Desensitization</i>	25%
	Desensitization as a byproduct of exposure	
	Desensitization through emotional distancing	
V.	Professional pride bolsters objectivity	
	<i>Pride in professional identity</i>	30%
	Pride in ABPP membership	
	Professional identity	
	<i>Pride in good work</i>	20%
	Personal integrity in striving for objectivity	
	The more you know, the more expert you are	
VI.	Biases are influenced by external sources	
	<i>Psychologists may be shaped by others</i>	55%
	Our advocacy-based justice system can socialize bias	
	Politics can shape psychologists' socialization	
	Opinions may be influenced by other psychologists	
	<i>Psychologists may be shaped by experience</i>	15%
	Bias may be socialized by experience in the field.	

VARIED PATHWAYS INTO THE FIELD

It became clear while examining our data that participants had become involved in the field in many different ways. Whereas some people set out intentionally to become a psychologist working with justice-involved clientele, others unintentionally stumbled into the work. Many people were attracted to the field due to an inherent fascination with the work; several others described economic opportunities as the impetus for becoming involved. Of note, the field has changed a great deal over the last four decades, during which time our sample received their training. These changes emerged as a frequent topic of discussion, with descriptions of how specific training in psychology-law issues is a relatively recent development for the field.

Formal forensic psychology training is a relatively recent development

A majority of participants (65%) reflected on the recent emergence of forensic psychology as a defined field. Formal training programs for forensic psychology have been developed only in the last couple of decades. Before then, psychologists working in forensics described working without specific training in an undefined field that was significantly less evolved than it is now.

Approximately a third of participants described intentionally seeking forensic psychological training. Specialized graduate programs, forensic practicums, forensic internships, forensic post-doctoral positions, and the process of board certification as a forensic psychologist were described as pathways directly into the field of forensic psychology developed within the past four decades or so.

Originally no specific training for forensic psychologists.

- “I began with my first case knowing very little about the field, but we’re talking about 1972 so there wasn’t much to know about the field.”²
- “One of the realities is that I got into forensic psychology when it was just getting started, and so while there are lots of forensic programs right now, there weren’t any when I went

² Ellipses indicate raw material has been removed from the transcribed comment. Often, pieces of a response consistent with a theoretical construct were interspersed with less relevant detail. The less relevant detail was removed for simplicity’s sake here. The full text of the transcripts are available from the author upon request.

through school. There wasn't any licensing, there wasn't any acknowledgement of the field of forensic psychology...I wasn't trained at all in it."

Pathways directly into forensic psychology.

- "I went to graduate school...in psychology that had a forensic focus...I did my practicums and some clinical training in forensic psychology and did an internship and post-doc with forensic psychology before actually independently practicing forensic psychology and getting board certified in forensic psychology."
- "A lot of my socialization came during those two years working [as an intern and a post-doctoral fellow] in a forensic setting..."

Indirect pathways into forensic psychology

Most of the participants (70%) described becoming a forensic psychologist after their formal graduate training in psychology was complete. These participants received formal training in clinical psychology. After later exposure to forensic opportunities, they "retread" and decided to devote their practice to forensic psychology.

Clinical psychologist first and serendipitously started forensics.

- "Serendipity. I never meant to be a forensic psychologist, except I was unemployed for 6 months and I took the first job available...I didn't specialize in grad school or post-doc or anything...I went to a university and received my degree in clinical psychology."
- "As happenstance would have it, I lived fairly near a forensic state hospital that had forensic units...I got a job there and really enjoyed doing the work."

Clinical psychologist first and planfully switched to forensics.

- "My growth as a forensic psychologist was kind of incremental in terms of the share of my practice that has been involved. I decided when I was about twenty-five percent forensic in the early 90s to make a dedicated effort to retread as a forensic psychologist in terms of getting board-certified. I spent about 4 years working really intensively in that process."
- "I ended up being subpoenaed to testify at trial, and I was completely naïve. It was a very interesting and positive experience. I decided that this was something that I was going to pursue directly."

Varied reasons for becoming a forensic psychologist

Participants (65%) provided a variety of reasons for becoming forensic psychologists. A sizeable minority described getting involved in forensic psychology due to economic opportunities.

Courts needed psychologists to conduct psychological evaluations, and these participants realized their skill set was appropriate for the task. Approximately one-fourth described fascination with the work of forensic psychologists as their reason for becoming involved in the field. A few others described the field's emphasis on objectivity as particularly attractive, and still others decided after realizing how little they knew about the field to pursue more information about it, which led to practicing forensic psychology.

A niche needed to be filled in the community.

- “I felt that it was a niche in the community here that wasn't really filled... it seemed like there was a need and, at the same time, strictly healthcare psychology seemed to be struggling to survive. So, it seemed like a pretty good career move.”
- “I didn't train initially to be a forensic psychologist, so it was an actual evolution out of my clinical work...as a testing psychologist, because...everything I produce has my name on it and gradually it comes to peoples' attention that there's a testing psychologist in the community and pretty soon, lawyers start calling...”

Fascination.

- “I found the work fascinating doing the evaluations.”
- “From the very outset, I became fascinated by the field.”

Attracted to the field due to emphasis on objectivity.

- “That's probably one of the things that drew me to it, was the idea that you needed to be objective and impartial.”

Pursuit of knowledge.

- “I knew nothing about it, and I showed up one day and realized there was a wealth of stuff that I didn't know, and I started exploring the possibilities of learning more in the field and going to workshops and seminars and taking law school classes just to get up to speed.”
- “I knew nothing about forensic psychology including what the heck it was when I went for the job interview.”

DEBATE ABOUT THERAPEUTIC SKILLS IN FORENSIC WORK

Everyone in this sample had received formal training in clinical psychology. As part of this training, psychologists are taught about the value of empathy and rapport building in clinical work.

However, a tension exists regarding the use of empathy in forensic evaluations (see e.g., Shuman, 1993), because using empathy in these cases might be perceived as subtly coercive. Some of the participants in this study described the use of such clinical skills as a liability, whereas others described therapeutic clinical skills in forensic work as a strength.

Tension about a clinician's role in a forensic case

Nearly half (45%) of the sample discussed the tension between traditional clinical skills, including empathy and rapport, and forensic work, which requires skepticism and neutrality. Approximately even numbers of participants described traditional clinical skills as a strength and as a liability to forensic evaluations.

Therapeutic background is a strength.

- “I think there is tremendous benefit in the development in a forensic psychologist to have heavily been involved in the provision of clinical services. I think part of what that clinical background does, because the focus is on listening and on understanding and not on particularly judging, that it does a great deal to increase the tolerance of the psychologist and kind of stretches their own capacities to hear and tolerate that kind of thing it also gives them greater understanding.”
- “Some of my colleagues who went into forensic psychology from the beginning and didn't have those 10 or 15 years of heavy clinical counseling psychotherapy background is that they may have gone into forensic psychology was because they weren't that effective in establishing relationships with their clients and weren't that good of listeners. And maybe they were kind of judgmental in their responses.”

Therapeutic clinical stance is a liability.

- “You can't become real concerned about helping a specific person, and I think if folks can't buy into that, if they have that sort of strong need to nurture or to get feedback, I don't think forensics is the field for them to go into. And, most of forensic psychologist colleagues that I have, we admit we're not the warmest and fuzziest of guys. We may have been at one point, but we're not anymore.”
- “I've developed a lot of therapeutic relationships with individuals with severe mental illness, in particular individuals from disadvantaged socio-economic backgrounds, and I think that sometimes can create a challenge to being in an objective role...I often...have to watch out for having a bias towards, I mean basically forming a therapeutic-type feeling with someone, and feeling empathy towards them, and not allowing that to affect my objectivity.”

SOCIALIZATION ABOUT OBJECTIVITY

Most of the sample described ways in which they had been exposed to training about objectivity in forensic work. Although many participants described formal training, others described informal training or informal mentorship regarding objectivity. A substantial minority stated never having receiving training about objectivity in forensic work. Of note, objectivity socialization was described as important for the field, and the process of teaching others about objectivity was highlighted as having the additional benefit of further develop ones' own professional objectivity.

Formal training about objectivity

All participants discussed what kind of formal training about objectivity they had received with regard to forensic work. Sixty percent described ways in which objectivity training occurs, whereas 40% denied that explicit training in objectivity occurs in the field. Of those who described receiving training about objectivity, some indicated that formal education sources (e.g., graduate coursework, internship, continuing education, conferences) as well hands-on experience with feedback about their objectivity were methods by which objectivity training occurred.

Didactics, seminars, workshops, readings, internship, and/or coursework.

- “The training programs and the internship...hammered on the idea of objectivity and impartiality in general when it came to interpreting data and test results...”
- “Read the specialty guidelines for forensic psychology...[the necessity of objectivity] is pretty blatantly stated in there and also in the fundamental texts - pretty much anything you read during the beginning level emphasizes that and uses that to differentiate [forensic] from clinical work.”

Hands-on experience with feedback.

- “...another part of the training was being observed doing evaluations, and then our court reports were quite closely scrutinized, and again there was quite explicit discussion of issues [of objectivity].”
- “In supervision, it’s important to address with people what their emotional reaction is to cases that have emotionally difficult content...Whatever the case may be, we would want to encourage the trainee to really think about how this makes them feel so that they can make sure that that contact is as far removed from the final report as possible.”

Mentorship about objectivity

A quarter of participants discussed learning about objectivity through their mentoring relationships. Mentors attending to objectivity training explicitly discussed issues of bias with mentees, provided good examples of managing bias, and assigned specialized readings about objectivity to mentees.

Mentorship about objectivity in general.

- “The socialization was actually quite explicit, lots of didactic information about what it meant to be a forensic psychologist, lots of discussion of what the role entailed in forensic versus clinical issues, lots of observation of other people and, again, a lot of explicit discussion of transference and countertransference issues and how you maintain objectivity and so on...”

Teaching objectivity is important for oneself and the field

Half of this sample discussed ways in which teaching and modeling objectivity is important not only for training new psychologists, but also for continued personal growth throughout the course of one’s career.

Teaching objectivity.

- “I train interns and post-doctoral residents, and I really push them to think about where they are coming up with their opinion, in what data is that grounded, do they understand sometimes that conclusions might be counter-intuitive, and can they anchor - ground their opinion in research and other data sources. Have they for example, entertained alternate hypotheses about what was going on in a particular case?”
- “Some of it is also helping students develop a degree of humility about the fact that no matter how smart you think you are, no matter how thorough you are, that doesn’t necessarily mean you’re being objective on top of that.”

Modeling objective behaviors.

- “By example I did have a mentor, a forensic psychiatrist, who...provided good a example of doing objective evaluations and putting aside ... biases.”
- “I worked with...an insightful and skilled...psychiatrist...[during internship and my first three years] who was my primary supervisor. He did several things that were really important...he treated all of the folks that came into our office whether they were the lowest enlisted guy or an officer of some rank all the same...even though ...in an institutional

setting ... we could have really treated them anyway we wanted to. That was a critically important modeling because forensic psychology as it is practiced in the criminal arena often involves people that are captive...”

Teaching others can further develop own professional self.

- “Talking with other people about their own concerns about their own biases also kind of circles back in on itself, so then I’ll end up thinking about well, gee, is that an issue for me as well.”
- “I helped form a formal, academically-based, forensic training program with an interdisciplinary group in a medical school. We had those experiences of running our own...grand rounds, our own reading...actively consulting on and discussing cases. I think that actually helped to sharpen my thinking about forensic issues.”

Informal training about objectivity

Thirty percent of participants described informal ways in which objectivity training is conducted. Observing others and discussing issues of potential bias, learning how to do forensic evaluations without adversarial pressure, and the fact that objectivity is expected are ways in which informal training in objectivity is happening in the field.

Observation of others.

- “Sometimes...in a team approach [to an evaluation]...there would be some differences of opinion, which I think is really quite helpful to look at as a way of testing out and looking at issues of objectivity.”
- “Part of the training is observing other people do the evaluations, and the discussion afterward would be about why questions were asked in a certain way or how people responded emotionally...versus what you would do in an interview, and how to make sure that you weren’t just confirming one hypothesis but were testing hypotheses.”

Consultation and discussion with others.

- “I have had very good discussions with other colleagues about how they deal with their own biases with regards to forensic evaluations.”
- “We’ve had lots of conversations about what it would take to do capital evaluations objectively...We’ve also tried to foster here an environment in which people feel quite comfortable coming up and bouncing things off colleagues...”

The absence of pressure toward a particular conclusion is helpful for learning.

- “It was up to me to make my own judgment doing forensic evaluations on internship and I was never pressured in any way to come up with a different answer to the one I came up with. I think that was the most important part of my training there...”
- “I’m very aware that witnesses, especially expert witnesses, are supposed to be impartial... in my training, in my internship and beyond...that was emphasized, and since I worked at a state facility initially, we really did have that luxury of being completely neutral...wasn’t any pressure to go one way or another, so I think that was helpful as well along with the explicit messages.”

Objectivity is expected.

- “It was something that I recognized as part of ethics, that you could only have a career if you were credible, and the only way to be credible was to be thorough and objective. So, in some ways, it was self-serving without having been taught that way.”

Many people have received no explicit training about objectivity

Denial of receiving any explicit training about objectivity.

- “I was never taught about objectivity.”
- “I never had any training about countering bias.”

SOCIALIZATION INTO MORAL DISENGAGEMENT

Bandura (1999) argued that the disengagement of moral agency by an individual can allow one to perpetrate inhumanities that they otherwise might not. He described the mechanisms by which this might occur, including cognitive restructuring of the conduct, sanitizing language, advantageous comparison, diffusion or displacement of responsibility, minimizing the effects of one’s actions, and dehumanization of or attribution of blame to the victims. Osofsky, Bandura, and Zimbardo (2005) argue that moral disengagement plays a major role in enabling prison personnel to impose the death penalty on those who have been sentenced to die. They found that those personnel more intimately involved in carrying out the executions engaged in significantly higher moral disengagement than personnel who were less involved.

We found elements of moral disengagement in the responses of our participants regarding participating in forensic evaluations. Several people described cognitions consistent with diffusion or displacement of responsibility and minimizing the effects of one's actions. Others described ways in which desensitization to the issues in forensic cases had made working in forensics easier for them, which we thought was consistent with moral disengagement. What seems clear based on our interviews is that moral disengagement is present in many forensic evaluators, and may be a training mechanism through which new psychologists are informally introduced as a means of distancing oneself from an evaluation to preserve objectivity.

Moral disengagement is common

To deal with the pressure of responsibility in difficult forensic cases, about a third (30%) of the participants described thinking about the system as a whole rather than their own contribution to the outcome. This diffusion of responsibility is consistent with the theory of moral disengagement, a self-regulatory mechanism of moral conduct (Bandura, 1999). It is not clear from these results exactly how moral disengagement is related to the occupational socialization process, but it is clear that many forensic psychologists engage this mechanism, and that people share this strategy with one another. The sharing of this strategy with one another may be part of the occupational socialization process of forensic psychologists – particularly those who work in capital cases.

Reminding oneself about diffusion of responsibility.

- “I didn’t design and implement the legal system. I’m not making the judgment... I’m not trying to kill anybody, you know.”
- “I’m very, very aware of my job; it’s to provide information to the jury who makes the decision, and I really believe that to the core of my being, and so, I try very hard to keep that message in the forefront for myself.”

Desensitization

Twenty-five percent of this sample described desensitization as a method by which to maintain objectivity in forensic work. Desensitization may occur over time via exposure to crimes the courts deal with daily. It can also occur by intentional distancing oneself emotionally from the people involved in and the facts of a case.

Desensitization as a byproduct of exposure.

- “I would say, as I work more and more in the field, and I’ve been in the field now for 30 years, I actually find myself becoming more and more objective...the facts are horrendous, and I’ve just been desensitized to the issues. I think part of it is just the more one works in the field, the more one sees, the less one is surprised by, you know, what defendants have to say or prosecutors or whomever.”
- “When I worked at a maximum security hospital, most of the folks there (65-75%) were charged with murder or attempted murder, so I actually got kind of used to that, people killing people...so I think that’s less of an issue for me.”

Desensitization through emotional distancing.

- “I’ve had to learn that I’m there to give my opinion, but I have to put a certain degree of distance me and the outcome.”
- “I think as a forensic psychologist, you just have to buy into the notion that if you are making a contribution to the justice system and how that works, that that is helping people. But, you can’t become real concerned about helping a specific person.”

PROFESSIONAL PRIDE BOLSTERS OBJECTIVITY

Being around other professionals with pride in their profession and the quality of their work was a valuable formative experience for several psychologists in our sample. Rubbing elbows with respected others was perceived to be beneficial for enhancing one’s desire to do good work. Other psychologists internalized the value of personal integrity and striving for knowledge, which were also described as beneficial for objectivity.

Pride in professional identity

Various dimensions of pride in one’s work were mentioned by 30% of the sample. Pride in ABPP membership and professional identity in particular were discussed.

Pride in ABPP membership.

- “What really solidified it for me, though, in addition to that training during my internship, was going through the AAFP process of becoming a diplomate, going to the workshops, hanging around with people like that, rubbing shoulders with them, and you know, just absorbing the culture in some kind of sense.”
- “I went to all of the ABPP academy workshops all across the country...because that was such a arduous credential to obtain, because I had so much respect for the people who already had it, that when I signed a report and put ‘A.B.P.P.’ after my name, that I didn’t want that to be something that would cast a negative light on this group of individuals that were so capable. So, that had an additional aspect of excellence and wanting to be sure that this report was objective and sound and scientifically defensible because this had been created by an ABPP.”

Professional identity.

- “After a couple of years, I stopped referring to myself as a clinical psychologist who’s now working at this forensic place and started referring to myself as a forensic psychologist. And that really has been my identity since then.”

Pride in good work

Other dimensions of pride were mentioned by participants (20%). Pride in good work was discussed; specifically, personal integrity was described as a goal by some of the participants, and using the best and latest science to inform practice was highlighted as well.

Personal integrity in striving for objectivity.

- “It seemed to me that the referrals that were being made were asking for an objective opinion, and so there was some sense of personal integrity about trying to be objective.”
- “From the very outset I worked hard to make sure that I was not perceived as a hired gun.”

The more you know, the more expert you are.

- “I discovered that [doing research] is really fun, to be a scientist, and contribute to the literature, and to interact with colleagues. And the more you read, the more research you do, the more you know about this subject, the more expert you are. And the more systematically you think.”
- “My interests in forensic psychology grew out of trying to make sure the legal system shaped its power policies based on the psychological knowledge that was available. I also thought as a practitioner that I could do a better job than many other folks by having both knowledge of both the law and of psychological science and trying to do my best to answer the questions as accurately and scientifically as I could.”

BIASES ARE INFLUENCED BY EXTERNAL SOURCES

Attitudes and beliefs do not form in a vacuum. As such, the environment in which a psychologist is trained and works can influence that psychologist's attitudes and beliefs. Most of our sample described ways in which psychologists' biases may be shaped by the people around them, the system in which they work, and the previous experiences they have had in their work.

Psychologists may be shaped by others

Most of the participants in this sample (55%) described ways in which psychologists can be socialized by people around them. A quarter of the sample discussed how the subtle pressure of consistently working for one adversarial side or the other can affect a psychologist's thinking. Another quarter of the sample outlined how the individuals with which and the system in which psychologists work can influence the way they process cases. One participant described in detail how his opinions had been shaped by psychologist colleagues, until s/he learned to minimize the influence of others' opinions on his/her own opinions.

Our advocacy-based justice system can socialize bias.

- “If you're finding yourself being retained by the defense all the time in criminal cases... undoubtedly, you're starting to become socialized within the milieu of defense attorneys. That can't help but influence your thinking. So that if you're being retained by the prosecution, they have their own their own set of biases and they're very out there on both sides. Attorneys are, you know, their stated goal is to be an advocate for one side.”
- “If one works for a particular side, i.e., the prosecutor or the defense attorney, more often than the other side, by the very nature of the business, one takes on a bias. I think it's subtle, but I think it's undeniable.”

Politics can shape psychologists' socialization.

- “Who else is influencing you and the attorneys? Because we're in not just treatment team-based environments but in institutional facility-type environments where there are also external influences through forensic review boards and attorneys and judges in various counties and so forth.”
- “It's kind of difficult sometimes because it's also a political system wanting to process cases for various reasons, like they want certain people in and out of there at certain time frames for other medical and legal purposes.”

Opinions may be influenced by other psychologists.

- "...When I looked back I realized that I was probably being influenced by a lot of the writers in our field."

Psychologists may be shaped by experience

Three participants (15%) described how experience over time can shape a psychologist's attitudes about their work. Attitudes can become increasingly sympathetic or increasingly critical over time.

Bias may be socialized by experience in the field.

- "I think it also slips in due to lots of experience in the field, and this can go both ways. Either a very sort of increasingly sympathetic view, for example that there's certain subgroups of people that really never had a chance or in an increasingly critical view of people bringing things on themselves, whichever way it goes, the bias can sneak in there."
- "Before I started working in this, I figured it was mostly the defense that cheats. What's happened over time is that I've become quite skeptical of the state and their motives. (laughs)."

Research Concern 2: Objectivity Definition

Our second research concern was how forensic psychologists defined objectivity (see Table 2). The data suggest that objective work is independent of the influences of common pressures (e.g., allegiance with referral party, advocacy, and financial pressure). The moral disengagement theme arose again in regards to defining objectivity – participants described that being able to “disengage emotionally” and avoid investing oneself in the outcome of a case is consistent with objective practice. Objectivity was also defined by how data are used. Basing conclusions and opinions on all possibly relevant data –which are both confirming and disconfirming – is important. Following the data to its logical conclusion, without taking detour based on personal preference, further defines objectivity according to these participants.

The methods by which one gathers data was part of the definition of objectivity as well. Using standardized and structured methods in data collection reduces subjectivity in decision-

making. Communicating without pejorative or value-laden language is consistent with objective practice, as is systematic and honest introspection on a regular basis. Being aware of existing personal biases and effortfully controlling the impact of those biases on forensic work are essential for objectivity. If one's biases would preclude objective decision-making, referring the case to qualified others is necessary. Finally, several psychologists mentioned that objectivity is expected of forensic psychologists: objectivity is an element of the identity of forensic psychologists. Participants also shared, however, that pure objectivity is an aspirational goal rather than an enforceable standard.

Table 2. Objectivity Definition: **Theoretical Constructs**, *Themes*, and Repeating Ideas

I.	Independence of opinion from subtle influences	
	<i>Guarding against the allegiance effect</i>	25%
	Guarding against subtle influence	
	<i>Avoiding advocacy</i>	40%
	Recognizing the advocacy of lawyers	
	Avoiding advocacy	
	<i>Opinion is independent of referral source</i>	40%
	Emphasis is not on pleasing referral source	
	Avoiding hired gun perception	
II.	Moral Disengagement	
	<i>Being able to disengage oneself from the case emotionally</i>	45%
	Being disinvested and not identifying with the person	
III.	Basing opinions upon all relevant data	
	<i>Being thorough in seeking all relevant data</i>	50%
	Being thorough in data collection	
	Seeking confirming as well as disconfirming evidence	
	Seeking objective data	
	Incorporating all relevant information	
	<i>Being led by and basing opinions on objective data</i>	50%
	Being led by the data	
	Basing opinion on objective data	
	<i>Recognizing the limits of and not going beyond the data or the referral question</i>	55%
	Recognizing the limits of the data	
	Not going beyond the data	
	Answering the referral question and not going beyond that	
	<i>Avoiding pre-conceived notions and speculation</i>	60%
	Avoiding speculation and impressionism	
	Avoiding pre-conceived notions	
	Not starting the decision process until all data are in and weighed	
	<i>Considering the data from varying perspectives and generating competing hypotheses</i>	65%
	Considering the data from varying perspectives	
	Entertaining discrepant ideas and competing hypotheses	
IV.	Relying on objective methods	
	<i>Ensuring the evaluation process is structured and standardized</i>	25%
	The process of the evaluation should be objective	
	Using standardized instruments and structuring the evaluation	
	Using bottom-up instead of top-down instruments	
V.	Producing a credible product	
	<i>Producing a defensible report</i>	10%
	Ending up with a defensible product	
	<i>Communicating objectively</i>	25%
	Remove pejorative or value-laden language	
VI.	Systematic and honest self-reflection on a regular basis	
	<i>Being vigilant and aware of potential biases</i>	100%
	Being vigilantly aware of bias and using caution	
	Awareness of existing biases is important	
	Maintaining objectivity despite difficult cases	
	<i>Continual and systematic self-reflection</i>	55%
	Systematically examining oneself	
	Continual self-reflection is necessary	

VII. Effortfully controlling biases	
<i>Effortful control of biases</i>	65%
Controlling biases	
VIII. Referring cases out when objectivity is suspect or compromised	
<i>Avoiding cases when uncomfortable with role or responsibility</i>	35%
Avoiding cases when uncomfortable with role or responsibility	
Rejecting cases because personal biases would get in the way	
IX. Being objective is expected	
<i>Objectivity is an essential aspect of a psychologists' professional responsibility</i>	35%
Professional pride	
Part of ethics	
Part of the job	
<i>Objectivity is a corollary of being a scientist-practitioner</i>	25%
Part of being a scientist	
<i>Objectivity is aspirational</i>	35%
Pure objectivity is unattainable	
Striving for balance	

INDEPENDENCE OF OPINION FROM SUBTLE INFLUENCES

Psychologists defined objectivity as forming independent opinions in forensic evaluations, uninfluenced by the overt and subtle preferences of others (see Table 2). The allegiance effect, or finding oneself allied with or advocating for the retaining party, is one source against which objective psychologists guard. Recognizing the adversarial nature of the legal system while avoiding the temptation to advocate for a particular side is another piece of objectivity. Providing opinions that are independent of the referral source (and which might even upset the referral source) are described as necessary for objectivity's sake.

Guarding against the allegiance effect

A quarter of the participants described objectivity as guarding opinions from the influence of “team” allegiance. Forensic psychologists should not identify with the case outcome goals of the retaining party; rather, forensic psychologists should provide opinions based upon solid data independent of the adversarial goals of those within the legal system. Psychologists should come to the same opinion in a given case regardless of by whom they were hired.

Guarding against subtle influence.

- “My antennae are always out or I try to have an awareness of that potential, of how my opinions may be being shaped by the party that’s retained me or that kind of thing...”
- “You gotta kind of look at, especially if you’re in a team environment, who else is influencing you...”

Avoiding advocacy

Related to the notion of avoiding allegiance, forty percent of the sample described how objective forensic psychologists recognize the inherent advocacy of the legal system and yet abstain from advocating for a particular adversarial party during the proceedings.

Recognizing the advocacy of lawyers.

- “I started out as an attorney...I loved law school, enjoyed the law a lot, didn’t like the practice of law so much. I didn’t like the extreme advocacy that was required.”
- “I have also worked for attorneys who were always trying to swerve or push you in the direction of abdicating for their client rather than being objective.”

Avoiding advocacy.

- “I’m very aware that witnesses, especially expert witnesses, are supposed to be impartial. We’re there to provide information to the jury, not to advocate for one side or another.”
- “You kind of have to force yourself to not fall into more of a treatment advocate role...keep yourself at a distance from all of the other decision-making processes involving that person.”

Opinion is independent of referral source

Forty percent elaborated on the difficulty of being “objective” while working within an adversarial system. These psychologists noted how objective opinions may not please the referring party, and that pleasing the referral source is not the stated goal of forensic psychology. This sample described objective forensic psychologists as those willing to work for either adversarial side and who work to prevent the perception of being paid to give a particular opinion (e.g., a “hired gun”).

Emphasis is not on pleasing referral source.

- “I examined each case independently of who sent it to me, and would report back to the referral source whether or not I thought they had a case. And many times, I would wind up not being able to testify for the side that hired me.”
- “One of the reasons why my reputation is still intact is that they know that I’m going to give them a fair shot, whoever retains me, they know that I’m going to give them the opinion that is objective and not one that might just solve their case.”

Avoiding hired gun perception by working for both sides.

- “From the very outset...I worked hard to make sure that I was not perceived as a hired gun, that I took referrals from both prosecution and defense.”
- “I was very concerned with the way the field was portrayed as a bunch of hired guns...I try to make myself equally available to prosecution and defense.”

MORAL DISENGAGEMENT

Almost half of this sample described moral disengagement (see e.g., Bandura, 1999 and description above) as a central component of objectivity in forensic cases. Mechanisms including diffusion of responsibility and minimizing the effects of one's actions were aspirational goals described by our participants. We noted a strong element of emotional disengagement as a pillar of objectivity in the minds of our participants, which is consistent with the tenets of moral disengagement theory. Embracing these mechanisms of moral disengagement may be a way for forensic evaluators to counteract their natural biases.

Being able to disengage oneself from the case emotionally

Emotional disengagement was commonly mentioned by this sample of forensic evaluators as a behavior consistent with the goal of objectivity. Emotional engagement, in contrast, was described as interfering with objectivity.

Being disinvested and not identifying with the person.

- “Just letting the chips fall where they may... You can't become invested in the case, in the problem.”
- “You don't have to like somebody, you don't have to think they're a good person in order to provide good services. And in fact that identification with them can end up making it difficult to do your job.”

BASING OPINIONS UPON ALL RELEVANT DATA

The importance of sound data was an oft-discussed topic in regard to objectivity in forensic evaluations. Opinions and conclusions based upon *all* relevant data is the gold standard of practice. This requires thorough data collection, seeking disconfirmatory as well as confirmatory information, and seeking objective and scientific data in particular. Avoiding premature decision-making, following the data to its logical conclusion, entertaining competing explanations, and limiting conclusions to the state of the science and to the task at hand are additionally important.

Being thorough in seeking all relevant data

Half of the participants defined objectivity as thoroughly seeking all relevant data – both confirmatory and disconfirmatory. Objective and scientific data is preferred. Incorporating all of the relevant data into the evaluation – even if contradictory information is present – is necessary for preserving objectivity.

Being thorough in data collection.

- “Basing your opinions on multiple pieces of information about a particular question or person that you are evaluating...collateral information, psychological testing, and then you see how it all converges.”
- “Be very thorough and exhaustive in data collection.”

Seeking confirming as well as disconfirming evidence.

- “Making sure to seek information that is potentially disconfirmatory as well confirmatory.”

Seeking objective data.

- “Seeking specific data about what’s going on in a particular case. Seeking scientific data.”
- “Relying on as much objective information as possible.”

Incorporating all relevant data.

- “Conflicting info...needs to be effectively incorporated - Not ignored, but incorporated.”
- “If you have conflicting information you will need to figure out how to explain it but at the same time present both sides.”

Being led by and basing opinions on objective data

Here again, half of the sample described the importance of following the data and basing opinions and conclusions on sound data. Objectivity requires the use of solid and trustworthy data in answering the referral question(s).

Being led by the data.

- “The whole notion or training of it as a scientist is that you’ll be led by the data.”
- “Following the data...the data is what drives our conclusion, whatever the results are of our evaluations, you know, the results of testing, the results of the interviews, that’s what leads to our conclusions that we make...”

Basing opinions on objective data.

- “Anchor, ground their opinion in research and other data sources.”
- “Being true to the data...an attachment to the data rather than your instincts.”

Recognizing the limits of and not going beyond the data or the referral question

Just over half (55%) noted that objectivity requires limiting the scope of the evaluation, opinions, and conclusions to what is relevant to the task. Recognizing the limits of science and appropriately restricting conclusions is required. Taking the case data at face value and not interpreting further than is warranted is also required. Finally, focusing only on the referral question and not straying beyond that issue is considered an important element of objective practice.

Recognizing the limits of the data.

- “To recognize limitations to what you can actually answer based on that psychological knowledge.”
- “Being very upfront about your confidence limitations, don’t try to overstate something.”

Not going beyond the data.

- “Restrict conclusions or opinions to the data that you have.”
- “You’re really just trying to take the data at the face value at which you know it can be validly interpreted and not go beyond that.”

Answering the referral question and not going beyond that.

- “Think about what the actual question is they’re answering is and what data is relevant to that and what data isn’t relevant to it.”
- “To come up with the most accurate answer to the question that the legal system is asking.”

Avoiding pre-conceived notions and speculation

Sixty percent of the participants in this sample pointed to the value of being open to processing all case-related information and not jumping to conclusions prematurely. Speculation, rushing to judgment, and developing hypotheses before considering all the relevant data are inconsistent with the goal of objectivity.

Avoiding speculation and impressionism.

- “Trying to avoid being impressionistic.”
- “The less information you have the more it starts getting to be speculative, and when you’re speculative, it winds up being based in your, you know, personal experience, your own values, your own morals and emotional judgments.”

Avoiding pre-conceived notions.

- “You just gotta really watch yourself from pre-conceived notions.”
- “Not getting locked into a pre-conceived notion about something...don’t make a rush to judgment.”

Not starting the decision process until all data are in and weighed.

- “Developing no more than a tentative hypotheses until you’ve collected all the data you can collect and consider everything.”
- “To look at all the material, everything, before they draw the final decision.”

Considering the data from varying perspectives and generating competing hypotheses

Highlighting scientific values, sixty-five percent of this sample mentioned considering and testing alternative hypotheses. Considering the case and the available data from all reasonable points of view is thought to be a valid method by which to come to a fair and balanced conclusion.

Considering the data from varying perspectives.

- “Consider the issue from all reasonable points of view.”
- “Look at it from different perspectives so that you can come to a conclusion that’s as balanced and fair as you can make it.”

Entertaining discrepant ideas and competing hypotheses.

- “To examine things in terms of competing explanations.”
- “The issue of scientific admissibility and falsifiability of hypotheses - of testing alternate hypotheses...to always consider alternative hypotheses in any formulation.”

RELYING ON OBJECTIVE METHODS

The way to conduct objective evaluations is to use objective methods, according to the participants in this study. Objective methods described herein include planned and standardized

approaches to evaluations, relying on structured instruments, and choosing instruments that use bottom-up decision processes as opposed to top-down processes.

Ensuring the evaluation process is structured and standardized

Psychologists (25%) described objective evaluations as those that use structured and standardized methods. Using these methods minimize the influence of subjective bias.

The process of the evaluation should be objective.

- “Objectivity in the evaluation process, in the sources in which you obtained information, in the way in which you asked your questions.”

Using standardized instruments and structuring the evaluation.

- “Looking at things from a standardized perspective...like standardized instruments...in the absence of structure, there is a greater likelihood of bias.”

Using bottom-up instead of top-down instruments.

- “The PCL-R...is highly vulnerable to an allegiance effect, because as opposed to looking at it as a kind of top-down model, you ask these kind of general questions and then you complete the ratings after that based upon your whole experience of it. You should prefer to have it where it’s bottom-up, where for example, each question is answered and is recorded, hopefully, in a reliable way, and then the aggregate of scores actually helps you to make the determination.”

PRODUCING A CREDIBLE PRODUCT

A credible end product (e.g., forensic report and/or testimony) is the capstone of objectivity in forensic psychology. According to this sample, credible products are those that convey objectivity by being defensible and by being written in a non-judgmental manner.

Producing a defensible report

Ten percent of this sample mentioned “defensible products” as the end result of objective evaluations. Defensible opinions and conclusions are those that can credibly withstand the adversarial process. One produces a defensible product that would stand up under scrutiny by using

and identifying information sources and clearly specifying how that information supports the psychologists' opinions and conclusions.

Ending up with a defensible product.

- “Making sure the product [given] to the court is defensible.”
- “Ending up with a very defensible product.”

Communicating objectively

Carefully attending to wording and phrasing choices was considered synonymous with objectivity by 25% of this sample. Editing out biased, emotional, and judgmental words and phrases is essential for being perceived as an objective communicator.

Remove pejorative or value-laden language.

- “Keep[ing] a keen eye out for sort of pejorative or value-laden language in reports.”
- “Being very careful in word choice in writing reports.”

SYSTEMATIC AND HONEST SELF-REFLECTION ON A REGULAR BASIS

This is one area our entire sample agreed upon regarding objectivity in forensic work. Introspection to understand oneself and one's biases is a prerequisite to objective work. Both static and dynamic awareness of personal biases are components of objectivity. Systematic self-reflection, vigilance in considering bias, and being especially aware of bias in difficult cases are discussed.

Being vigilant and aware of potential biases

Every single person in our sample defined objectivity as developing and maintaining awareness of existing biases. Introspection to uncover sources of static existing bias, vigilance, and working hard at maintaining objectivity in the toughest cases we face are consistent with objectivity.

Being vigilantly aware of bias and using caution.

- “Always hav[ing] just a general concern or a general wariness. I try to check myself for biases in any interviews that I'm doing.”
- “To be fairly harsh on yourself introspectively to ferret out those biases if you have them and be aware of them...”

Awareness of existing biases is important.

- “I start with knowing the kinds of cases that I can take, and knowing basically what I can listen to and what I can hear and the kinds of cases I can handle.”
- “[Being] aware of what your own belief system is and your own biases and prejudices.”

Maintaining objectivity despite difficult cases.

- “To deal with personal issues in dealing with people who have done very difficult things.”
- “Rape and murder are horrible things, and so you have to be aware of that when you evaluate them because you have to so objectively, and the fact that you may find these acts despicable doesn’t mean you should draw any particular conclusions because of that.”

Continual and systematic self-reflection

Over half of the participants described the necessity of *ongoing* introspection as opposed to ever being “done” knowing one’s biases. Self-reflection throughout one’s career is important. Self-reflection done systematically (e.g., examining patterns of behavior across time and situation) is most consistent with objectivity. For instance, calculating how often you reach an opinion or conclusions consistent with what the referral party prefers may be an important element of self-reflection.

Systematically examining oneself.

- “It’s important when you’re doing evaluations to see if you’re finding yourself coming down one way more often than not, and then you have to look at why.”
- “The credibility index - what proportion of cases do you disagree with the person making the referral to you?”

Continual self-reflection is necessary.

- “If you find yourself beginning to have an emotional reaction to something that you stop, stand back from that and think about what that’s about – where’s that coming from.”
- “My antennae are always out or I try to have an awareness of that potential...”

EFFORTFULLY CONTROLLING BIASES

Objectivity is difficult. Participants emphasized the effortful input of time and energy into maintaining objectivity. Objectivity does not come naturally or easily, and instead must be worked at constantly.

Effortful control of biases

Striving to control or correct for known biases in one's work is synonymous with objectivity according to 65% of our sample. Controlling or correcting for bias requires constant effort to manage or minimize the effects of personal biases in one's work. Discipline and practice are required, with unceasing effort throughout the course of one's career.

Controlling biases.

- "Putting aside whatever biases I might have about certain situations and taking the defendant or the client as they are."
- "Controlling your bias and doing an unbiased evaluation."

REFERRING CASES OUT WHEN OBJECTIVITY IS SUSPECT OR COMPROMISED

Objective psychologists were described as those who maintain enough awareness into their personal biases to recognize when to decline a referral. Cases in which one is not comfortable with the referral task, or in which issues of personal bias would be starkly present, are cases that should be referred to colleagues.

Avoiding cases when uncomfortable with role or responsibility

Thirty-five percent discussed referring cases to others when one's role or responsibility is not sitting well or when personal bias would get in the way of conducting an objective evaluation. Thoughtful self-reflection is necessary for this to occur.

Avoiding when uncomfortable with role or responsibility.

- “Definitely knowing the legal criteria and sticking to them regardless of whether you think the criteria are the right criteria or not, you have to sort of determine whether or not you can follow those before you get into the work.”

Rejecting cases because personal biases would get in the way.

- “If it’s something that is too emotionally loaded for you, those are cases to avoid.”
- “If it was a case I didn’t believe I could be objective on, I would simply decline it from the outset.”

BEING OBJECTIVE IS EXPECTED

The expectation of objectivity is an implied element of its own definition. Being objective was defined as essential to the identity of a psychologist – in terms of pride, ethics, the nature of the work, and in being a scientist. However, the lofty goal of pure objectivity was recognized as unachievable by a sizable portion of this sample, who identified objectivity as an aspirational goal toward which one continually strives.

Objectivity is an essential aspect of a psychologists’ professional responsibility

Thirty-five percent of this sample defined objectivity as essentially part of the identity of a psychologist. Identifying oneself as a psychologist may activate the notion of objectivity as an element of professional pride, as part of the ethical responsibility of psychologists, and simply as “part of the job.”

Professional pride.

- “There’s also an element that I think is critically important for the psychologist to have a clear perception in his/her mind about who they are. That you’re trying to be objective or do professional work because of who you are. You know, it’s kind of like you have to look at yourself in the mirror. You have a perception of yourself as a professional.”
- “It seemed to me that the referrals that were being made were asking for an objective opinion, and so there was some sense of personal integrity about trying to be objective.”

Part of ethics.

- “Something that I recognized as part of ethics, that you could only have a career if you were credible, and the only way to be credible was to be thorough and objective.”
- “Ethically it was important to maintain objectivity.”

Part of the job.

- “If you spend any time doing the literature, it’s pretty blatant that that’s something you need to have down or you going to suck as a forensic psychologist.”

Objectivity is a corollary of being a scientist-practitioner

A quarter of the sample noted that psychologists are scientifically trained, and as such, objectivity is embraced as part of the nature of a psychologist.

Part of being a scientist.

- “Objectivity is a corollary of being a scientist-practitioner which is an evidence-based approach to clinical work.”
- “The whole notion or training of it as a scientist is that you’ll be led by the data.”

Objectivity is aspirational

Objectivity was defined as an aspirational standard toward which all psychologists should strive by 35% of the participants. As such, many of these participants noted that pure objectivity is impossible, and that the best we can do is limit the effects of personal bias by striving for balance and equity in the work we do.

Pure objectivity is unattainable.

- “I don’t think anybody can really be completely objective, I just think you can limit the amount of subjectivity that goes into it.”
- “Being the best you can, because of course, a blind spot is a blind spot.”

Striving for balance.

- “[Giving] a research-based, balanced opinion”
- “A tough balance... You have to maintain some empathy and rapport in order to do an evaluation or even get somebody to complete an evaluation. But at the same time, you have to let those feelings, to the best you can, not impact your objectivity in forming your opinion.”

Research Concern 3: General Bias Awareness

Our third research concern examined forensic psychologists' awareness of general bias within the field (e.g., were they concerned about their colleagues' biases? see Table 3). Every person in this sample described ways in which other psychologists evidenced bias. It was clear from the responses, however, that insight into potential biases varied. Some participants espoused the view that struggling with bias is common, whereas others thought that bias was relatively rare. In regards to specific ways in which bias may evince itself in others' work, participants described how using unstructured methods, personal investment in the outcome of a case, failing to strictly address the referral question, and allowing the attitudes and preferences of others to influence one's opinions can lead to bias. Finally, participants outlined how overconfidence and lack of humility can exaggerate bias in forensic work.

Table 3. General Bias Awareness: **Theoretical Constructs**, *Themes*, and Repeating Ideas

I.	Clinician insight into issues of bias varies	
	<i>Awareness that struggling with issues of bias is common</i>	80%
	Bias is inevitable	
	Biases may evolve over time and experience	
	<i>Bias may be present without awareness</i>	65%
	Unsophisticated awareness of bias	
	Unconscious biases exist that affect decision-making	
	Bias risks entering all steps of the evaluation process	
	<i>Imbalanced awareness of bias</i>	30%
	Concern about colleagues' objectivity but not self-objectivity	
	<i>Appreciation for vigilantly striving to control biases</i>	90%
	It takes effort to control bias	
	Lack of bias awareness may lead to inappropriate acceptance of referrals	
	<i>Striving for objectivity is self-serving</i>	10%
	Bias ruins credibility	
II.	Unstructured evaluation methods predisposes bias	
	<i>Non-objective testing instruments encourage subjective decision-making</i>	20%
	Not using objective testing instruments allows for subjectivity	
	<i>Unstructured evaluation procedures leave room for subjectivity</i>	35%
	Relying on memory instead of taking notes leads to subjective decision-making	
	Employing unstructured and unstandardized practices lead to bias	
	<i>Not grounding findings in sound and holistic data leads to bias</i>	45%
	Little information leads to emotional and value judgments	
	Going beyond the data is a problem	
	Selectively choosing data that supports opinion exaggerates bias	
III.	Lacking humility may exaggerate bias	
	<i>Egotism can lead to bias</i>	35%
	Assuming you are always right is an exercise in narcissism	
	Egotism can influence judgment	
	<i>Developing opinions too quickly may lead to bias</i>	15%
	Premature confidence is problematic	
	First impressions are often influenced by implicit biases	
	<i>Not taking advantage of collegial consultation may predispose bias</i>	35%
	Consultation is important to avoid bias	
	Those in solo practice are the most vulnerable to bias	
IV.	Personal investment in the outcome compromises objectivity	
	<i>Emotional engagement impairs credibility and limits objectivity</i>	100%
	Advocating is a problem in forensic evaluations	
	Becoming invested in the case or outcome is problematic	
	Emotional reactions lead to bias	
	Countertransference can bias evaluations	
	Balancing empathy and neutrality is tough but necessary	
	<i>Financial issues can cause biases</i>	45%
	Economic issues – money may affect opinion	
	Forensic psychologists can be perceived as hired guns	
	<i>Being involved in dual roles compromises objectivity</i>	10%
	Do not mix roles	
V.	Attitudes and preferences systematically influence decisions	
	<i>Attitudes, opinions, and preferences of others can influence decision-making</i>	90%
	Allegiance with the referral party compromises objectivity	
	Attitudes and opinions of other professionals might influence personal bias	

	<i>Personal preexisting attitudes and beliefs systematically influence decision processes</i>	80%
	Attitudes and beliefs can influence decisions	
VI.	Failing to strictly address the referral question may indicate bias	
	<i>Going beyond the referral question is not recommended</i>	15%
	Answer the referral question and go no further	
	<i>Failing to clarify referral questions allows for bias</i>	10%
	Unclear referral questions are more likely to lead to bias	

CLINICIAN INSIGHT INTO ISSUES OF BIAS VARIES

What emerged clearly in this analysis was that general awareness and concern about bias in the field varies widely (see Table 3). Some psychologists have no awareness or concern about bias whereas others think bias is quite common. Those who acknowledge bias describe ways in which bias may change over time, the continual effort one must exert to counteract bias, and how biases may exist unconsciously.

Awareness that struggling with issues of bias is common

The majority of the participants in this sample (80%) recognized that struggling with bias is a common issue for practitioners in the field. Furthermore, biases were described as malleable, sometimes changing over time and across experience.

Bias is inevitable.

- “We’re also not as objective as we’d like to think we are even when we’re trying to be.”
- “There are zillion different ways in which bias can sneak in, and I think all we can do is our best to stay on top of it.”

Biases may evolve over time and experience.

- “I think it also slips in due to lots of experience in the field, and this can go both ways. Either a very sort of increasingly sympathetic view, for example that there’s certain subgroups of people that really never had a chance or in an increasingly critical view of people bringing things on themselves...”
- “Most people my age, late 50s, got post-doctoral forensic training. They were originally clinical psychologists, and most people that went in to psychology had some kind of a need to help people, to see favorable outcomes. Most of forensic psychologist colleagues that I have, we admit we’re not the warmest and fuzziest of guys. We may have been at one point, but we’re not anymore.”

Bias may be present without awareness

Psychologists largely recognize (50%) that unintentional or unconscious biases can have an influence on an evaluation; however, 15% of this sample had no concern at all about the influence of personal bias in this field. Those who acknowledged the presence of unconscious biases noted that

these kinds of biases tend to color one's view of a case and may influence ultimate opinions. Others pointed out how the influence of bias can enter in at many different points during the evaluation process, sometimes unbeknownst to the evaluator.

Unsophisticated awareness of bias.

- “Being objective in my work, that’s just part of the work I do...I’m not sure why anybody would not be objective.”
- “I would say no, no concerns [about bias in the field in general].”

Unconscious biases exist that affect decision-making.

- “We don’t live in a vacuum, so things do interact with us on a daily basis that may, you know, either consciously or unconsciously prejudice us or have us prejudice certain situations as cases unfold.”
- “Some psychologists are not particularly objective or impartial, and they tend to color their view of cases based on their personal biases, and they may or may not really be aware of that consciously.”

Bias risks entering all steps of the evaluation process.

- “It could enter in from the outset to whether or not a person accepts a case through the initial impressions they had, the questions they ask, the tests they select, how they interpret their tests, and the ultimate opinions they find and how they relate those opinions. I think it has the risk of entering in to all steps of the process.”

Imbalanced awareness of bias

About a third (30%) of participants described their concern about the influence of other psychologists’ biases on forensic psychological cases; however, at the same time these participants denied any concern about their own potential biases.

Concern about colleagues’ objectivity but not self-objectivity.

- “I’m not concerned about my objectivity; I am concerned about some of my colleagues’ objectivity in those cases.”
- “I see case after case where, and these are not people who are board certified, but I see psychologists who are so biased.”

Appreciation for vigilantly striving to control biases

Almost everyone in this participant pool (90%) indicated that maintaining awareness of and trying to prevent bias from influencing evaluations is important. Maintaining insight into bias and controlling it takes a great deal of effort; however, this effort is seen as necessary for appropriately accepting and declining referrals based upon one's ability to practice objectively.

It takes effort to control bias.

- "I think of myself working very hard to try to be objective about cases."
- "Doing everything you can to report with as little bias as possible."

Lack of bias awareness may lead to inappropriate acceptance of referrals.

- "You always have to be aware of your own biases...and not take cases in which you think your biases are too strong and will affect you too much."
- "If they take a case where they have a strong feeling one way or another about the issue or about the defendant, they just should not do it...being aware enough of your strong feelings one way or another, so you know which referrals to turn down."

Striving for objectivity is self-serving

Some of the participants (10%) explained how objectivity is self-serving for forensic psychologists, because without it they only harm their own credibility. Credibility is the foundation upon which careers in forensic psychology are built; therefore, damaging credibility by being biased is bad for business.

Bias ruins credibility.

- "From a simply self-serving point of view, bias is not good for the career of the expert. Because it gives you a short shelf-life. And so, there's some degree of objectivity that can be maintained just from the self-serving perspective that I don't want to be caught with my pants down."
- "Something that I recognized as part of ethics, that you could only have a career if you were credible, and the only way to be credible was to be thorough and objective. So, in some ways, it was self-serving."

UNSTRUCTURED EVALUATION METHODS PREDISPOSES BIAS

Using unstructured and subjective methods in the course of an evaluation accentuates the effect of bias, because these methods exert less control of such biases. The freedom one has to reach an opinion influenced by one's biases is greater when such biases are not controlled for.

Non-objective testing instruments encourage subjective decision-making

Twenty percent of participants described ways in which objective instruments enhance objectivity. They pointed to higher rates of interrater reliability, structured professional judgments, and the benefit of relying on instruments that systematically build up to a conclusion.

Not using objective testing instruments allows for subjectivity.

- “They’re not really into doing a bunch of testing; they’re very subjective in general.”
- “An attempt to use what we would consider to be more objective measures that had higher degrees of interrater reliability, like using structured interviews.”

Unstructured evaluation procedures leave room for subjectivity

Implementing structure into evaluation procedures was described by over a third of the sample (35%) as important to reduce the effect of biases. Structure can be introduced via the use of structured clinical interviews, standardized tests, and systematic personal behaviors during evaluations. For instance, relying on memory instead of taking careful and detailed notes may exaggerate the effects of bias.

Relying on memory instead of taking notes leads to subjective decision-making.

- “Even just relying on memory alone and thinking that just using your memory is sufficient instead of writing down notes, that becomes almost a bias in itself, thinking that ‘I shouldn’t be taking notes because I need to look at them in the eye, I need to pay more attention, I don’t want to record it’ and so on.”

Employing unstructured and unstandardized practices lead to bias.

- “In the absence of structure, there is a greater likelihood of bias.”

- “...In terms of risk assessment, we do a lousy job of that...an area that is too open to one propensity in those particular cases and the measures which are out there are really pretty inadequate measures....”

Not grounding findings in sound and holistic data leads to bias

Almost half (45%) of this sample pointed to the importance of grounding conclusions in sound data. Not using enough information upon which to make decisions can lead to speculation and bias. Reaching conclusions that going beyond the limitations of the data may indicate bias on part of the examiner. Finally, selectively picking and choosing data that supports one’s opinions as opposed to presenting and incorporating the holistic information available is problematic for objectivity.

Little information leads to emotional and value judgments.

- “The less information you have the more it starts getting to be speculative, and when you’re speculative, it winds up being based in your, you know, personal experience, your own values, your own morals and emotional judgments.”
- “The more grounded you are in the research and in scholarly literature I think the more that insulates you from bias.”

Going beyond the data is a problem.

- “To recognize limitations to what you can actually answer based on that psychological knowledge.”
- “To reference your findings to specific data whether that’s like research data or your own observations and to sort of not go beyond that.”

Selectively choosing data that supports opinion is exaggerates bias.

- “If you have conflicting information you will need to figure out how to explain it but at the same time present both sides.”
- “...not simply picking and choosing instruments because you think they’re gonna support what you think.”

LACKING HUMILITY MAY EXAGGERATE BIAS

Thinking too highly of one’s ability to be objective was identified as a barrier to actual objectivity. A psychologist’s ego can lead to bias, if it prevents the psychologist from being willing

to revise early-formed opinions or if it precludes the psychologist from recognizing the need for professional consultation in difficult cases.

Egotism can lead to bias

Lacking humility was identified by 35% of this sample as inconsistent with objectivity. Assuming the conclusions one has reached in every case are correct was described as “an exercise in narcissism.” Participants pointed to the fact that experts testifying for opposing adversarial sides often reach opposing opinions. If an objective truth exists, one of the two experts must have reached an erroneous conclusion. Furthermore, some participants explained how a psychologist’s personal egotism can influence their cognitive processes and ultimately the conclusions they reach in forensic cases.

Assuming you are always right is an exercise in narcissism.

- “I really believe in what I do and of course, there’s oftentimes someone or several people on the other side who really believe in what they do, so really to answer your question, I have to be wrong some of the time, right?...it’s just the law of averages...to assume that you’re right all the time is just an exercise in narcissism.”
- “You can never get too confident. However objective you think you are, you’re probably wrong...no matter how smart you think you are, no matter how thorough you are, that doesn’t necessarily mean you’re being objective on top of that.”

Egotism can influence judgment.

- “When you’re hired for a high profile case, you kind of want to be seen as the expert and you want to be smarter than the other smart kids in the room, and I think that can influence your judgment as well.”
- “A desire to be famous influences your thinking.”

Developing opinions too quickly may lead to bias

Some of the people in this group (15%) explained how premature conclusions may be influenced by personal biases. Premature conclusions are particularly problematic for objectivity when psychologists resist altering them. This resistance to change premature conclusions may be evidenced through less-than-thorough evaluations or failing to seek disconfirmatory information.

Premature confidence is problematic.

- “Let’s say you are convinced that somebody is genuinely mentally ill and has a good defense, so not bothering to get records because you don’t particularly need them. Well, some people would say ‘Well, yeah, you don’t need them because it’s just seeking confirmatory information,’ but, in fact, there could be something disconfirmatory as well so maybe getting a little sloppy cutting things a little bit short out of some sort of misplaced confidence or whatever.”

First impressions are often influenced by implicit biases.

- “I learned not to trust my first impression...it was a rude awakening. [This case] taught me to not necessarily rely on my first impression.”

Not taking advantage of collegial consultation may predispose bias

On a related note, believing in one’s ability to reach objective conclusions without occasionally consulting trusted colleagues points to probable bias (35%). Psychologists practicing alone, with no easy access to colleagues with whom they can informally or formally discuss decision-making processes, may be the most vulnerable to bias.

Consultation is important to avoid bias.

- “In a team approach, there’d be more than one person involved, with a psychologist as the primary evaluator or the secondary evaluator. There would be some differences of opinion, which I think is really quite helpful to look at as a way of kind of testing out and looking at issues of objectivity.”
- “The discussion after [observing other people] is why questions have been asked in a certain way or how people responded emotionally when they read the police report versus what you would do in an interview, how to make sure that you weren’t just confirming one hypothesis but were hypothesis testing, and so on.”

Those in solo practice are the most vulnerable to bias.

- “Self-examination...only goes so far when you’re talking about your own biases...It’s important not to become isolated, and only talk to lawyers who have, you know, a very biased point of view.”
- “In solo practice...that gives you the greatest vulnerability.”

PERSONAL INVESTMENT IN THE OUTCOME COMPROMISES OBJECTIVITY

Personal investment in the outcome of cases was identified by this entire sample (100%) as compromising objectivity. Emotional engagement, which may present as over-empathizing with or being prejudiced against an evaluatee or advocating for a particular case outcome, may indicate that objectivity has been lost. Financial compensation has the potential to influence judgment, because “you gotta pay the rent like everybody else.” Being involved in more than one role in a case may lead to improper investment in the case outcome as well.

Emotional engagement impairs credibility and limits objectivity

Becoming emotionally engaged in cases was described by every person in this sample as poor practice. Being overly empathic or emotionally identifying with or against evaluatees limits objectivity. Countertransference in particular was noted as a potential problem. Advocating for a particular case outcome on behalf of or against an evaluatee implies bias.

Advocating is a problem in forensic evaluations.

- “The most problematic biases are the ones that are associated with an overidentification with the advocacy position of one side or the other, or an overidentification with that person...”
- “I have seen a few pretty heinous cases of misrepresentation of forensic data that was obviously contrived for the purpose of supporting or not supporting the defendant in a particular way.”

Becoming invested in the case or outcome is problematic.

- “You can’t become invested in the case, in the problem.”
- “Disengage yourself from the outcome so that you don’t lean one way or the other...”

Emotional reactions lead to bias.

- “Emotion or your personal feelings or value systems get in the way of how you’re going to make your decisions.”
- “You sometimes hear colleagues refer to a defendant as a sack of shit, you know this is an unlikeable person as he sits before you and he is, he’s antisocial he is narcissistic, he’s self serving, he doesn’t form relationships well, he’s explosive, he does all kinds of things that are repugnant...”

Countertransference can bias evaluations.

- “The basic therapeutic processes that can happen in therapeutic contexts can also transfer over to your forensic assessment process. So for example if you were evaluating someone who reminds you of somebody you had a bad experience with, that could potentially form a countertransference-type reaction even though it’s not supposed to be a therapeutic interaction. Those processes – or the process of countertransference – can exist and affect your work.”
- “I was a therapist before I solely did assessment work in the forensic arena, and so I do understand issues like countertransference.”

Balancing empathy and neutrality is tough but necessary.

- “Watch out for having a bias towards, I mean basically forming a therapeutic-type feeling with someone, and feeling empathy towards them, and not allowing that to affect my objectivity...a tough balance, you know, we hear in a lot of stories that are very difficult. We hear the histories and trauma they’ve experienced, things like that.”
- “There is an occupational hazard I think in forensic psychology that can drive from self selection, in other words, in individuals that are lower on empathy and higher on judgment and pejorative views my then gravitate towards forensic psychology because that is a more comfortable role to be in.”

Financial issues can cause biases

Economic effects on opinion formation were highlighted by roughly half of the sample (45%). These psychologists indicated that money can affect the way they process information and the conclusions they reach, especially if their livelihood depends upon a steady referral stream. Expert witnesses may be perceived as a “hired gun,” or receiving money for providing conclusions preferred by the paying party. “Hired guns” are not perceived as objective experts. Indeed, financial arrangements may cause common problems for expert objectivity.

Economic issues – money may affect opinions.

- “You know, the fact that a psychologist is being paid, and may perceive that they’re being paid by one party or the other. That can either consciously or unconsciously affect the perceptions of the psychologist.”
- “When you’re doing [disability evaluations] privately, it’s pretty hard [to stay unbiased] because if you do a disability evaluation and come out on the side of the person seeking disability, that may start to influence your flow of referrals.”

Forensic psychologists can be perceived as hired guns.

- “I was very concerned with the way the field was portrayed as a bunch of hired guns.”
- “At that time, the few people that were in the field were perceived as hired guns.”

Being involved in dual roles compromises objectivity

As is clearly delineated in various ethics codes for psychologists, having dual roles was identified as problematic for objectivity by 10% of this sample. Psychologists should not be involved both in treatment and evaluative assessment of the same individual in forensic cases.

Do not mix roles.

- “I have always evaluated the individuals I have never been involved in treatment of the same individuals. I think that’s where maybe some of the objectivity may be lost when a person does both.”

ATTITUDES AND PREFERENCES SYSTEMATICALLY INFLUENCE DECISIONS

The most widely recognized sources of bias in forensic evaluations were attitudes and preferences – of other people, as well as preexisting attitudes of evaluators themselves. These attitudes and preferences can exert systematic influences on decision processes.

Attitudes, opinions, and preferences of others can influence decision-making

The beliefs of other people exert an influence on the decision-making process of psychological evaluators (90% of the sample discussed this issue). The so-called allegiance effect, in which psychologists’ thinking may become loyally aligned with the adversarial team by whom they are hired, is a well-recognized source of potential bias. The attitudes, opinions, and preferences of other people with whom one works (e.g., psychologist colleagues and other colleagues within an institutional organization) may also influence the decision processes of psychologists.

Allegiance with the referral party compromises objectivity.

- “The psychologist may be retained by one party or the other. There is a tendency to become identified with that party and the prospectus or point of view or outcome that that party is seeking. That may occur unintentionally, simply by participating in the team that’s

organized around that side of the case, you know, the investigators, the attorneys, those kinds of things.”

- “There’s always a pull from the side that has retained you to see things their way. It can be very subtle sometimes, and I think most of us have some amount of desire to please, and so we would, maybe at some level, kind of like it if it came out the way they wanted it. So, there’s that very, very subtle pressure, and I think if you consistently work for one side or another, you become absorbed into their culture of seeing things a particular way.”

Attitudes and opinions of other professionals might influence personal bias.

- “When you’re involved in [forensic decision-making] at a state facility-type level there’s always people trying to influence your decision.”
- “When I looked back I realized that I was probably being influenced by a lot of the writers in our field.”

Personal preexisting attitudes and beliefs systematically influence decision processes

The preexisting attitudes and beliefs with which psychologists enter into cases certainly have an impact on their decision processes. Most of this sample (80%) described ways in which preexisting biases can impact evaluations.

Attitudes and beliefs can influence decisions.

- “The psychologist may have preexisting attitudes and reactions that come into play and then affect their perceptions of that case. We are all people who have political and ethical and moral and relationship histories and agendas and expectations, and those can end up coloring what we make of the case, of the person who’s before us.”
- “Biases that can operate in any other setting that people’s personal things like gender, race, age, religious affiliations may at some level unconsciously provide a lens through which they view things even if they attempt to be pretty intentional about not doing that.”

FAILING TO ADDRESS THE REFERRAL QUESTION MAY INDICATE BIAS

The question referred to the evaluating psychologist is important. Psychologists who fail to address the specific referred issue may allow more room for bias in evaluations. Stopping at the limit of a referral question is important, as is clarifying an unclear referral question.

Going beyond the referral question is not recommended

Attending to the actual referral request is considered an indicator of objectivity. Fifteen percent of the participants in this sample noted that going beyond the referral question may indicate advocacy or bias on part of the examiner.

Answer the referral question and go no further.

- “Think about what the actual question is they’re answering is and what data is relevant to that and what data isn’t relevant to it.”

Failing to clarify referral questions allows for bias

A few participants (10%) pointed out the fact that not all referral questions are clear. Evaluators who fail to clarify the requested purpose(s) of the evaluation leave room for their own preferences and biases to dictate what questions are answered. Specific referral questions are less likely to elicit bias than unclear questions.

Unclear referral questions are more likely to lead to bias.

- “To the extent that what you are being asked to address becomes specific, I think it gets easier, but sometimes I know these are asked in very broad stroke ways, when I think it would be very easy...without even meaning to, shove it in one direction or the other.”

Research Concern 4: Insight into Personal Bias

Our fourth research concern complemented the third. We asked open-ended questions about personal biases to compare what psychologists believed about their own objectivity compared to their professional peers’ objectivity. Whereas everyone described ways in which others can be biased, only 60% of the participants described concerns about their own potential biases. The data were clear that awareness of personal bias exists on a continuum: some psychologists defensively denied personal bias, others were unsure, and still others described conscious awareness of existing biases with exerted effort to compensate for them. Numerous specific biases were identified by

participants, including emotional reactions toward evaluatees and cases and preexisting personal, moral, and political values. Just as participants pointed to potential bias in the use of unsound data and methods by colleagues, several described how their own decisions might be biased were they to personally use nonstandardized methods. Finally, participants described how a vested interest in the case outcome can predispose bias, including becoming aligned with the goals of the referral party, being influenced by financial and economic pressures, and personal involvement in the case.

Table 4. Insight into Personal Bias: **Theoretical Constructs**, *Themes*, and Repeating Ideas

I.	Awareness of bias exists on a continuum	
	<i>Defensive denial of bias</i>	20%
	Resolute belief in objectivity without reflection	
	<i>No awareness of bias</i>	60%
	Belief in objectivity after superficial reflection	
	Concern about colleagues' objectivity but not personal objectivity	
	<i>Denial of bias after substantive reflection</i>	75%
	Belief in objectivity after substantive reflection	
	Belief in objectivity despite admitting probable bias	
	Doing the work because others are not objective	
	<i>Unsure of biases</i>	35%
	Active consideration of bias with unsure resolution	
	Openness to learning about own biases	
	<i>Active development of personal bias awareness</i>	55%
	Learning to avoid bias from previous mistakes	
	Trying to understand biases without help is problematic	
	<i>Conscious awareness of existing bias with effort to compensate</i>	100%
	Maintaining an awareness of bias takes effort	
	Maintaining insight to avoid cases in which bias may emerge	
	<i>Disagreement between professionals exists</i>	25%
	Legitimate differences of opinion can exist between professionals	
	Clinician decision thresholds may differ	
II.	Numerous specific biases identified	
	<i>Evoked cognitive and emotional reactions toward evaluatee</i>	90%
	Dislike of defendant can lead to bias	
	Being too sympathetic and empathic can lead to bias	
	Countertransference is a potential problem	
	Suspecting malingering at too low or high a threshold predisposes bias	
	Fear of litigious clients	
	<i>Evoked cognitive and emotional reactions toward the crime</i>	15%
	Extreme disgust toward sex offenses leads to bias	
	<i>Preexisting personal, moral and political values</i>	100%
	Personal values	
	Political ideologies	
	Death penalty attitudes	
	Child custody evaluations are difficult for many clinicians	
	Limited cultural competency can elicit bias	
	Reluctance to accept shifting social norms can lead to bias	
	<i>Personal beliefs about the law and the justice system</i>	20%
	Disagreeing with or disliking legal criteria can lead to bias	
	Distrusting the justice system can be problematic	
III.	Evaluations based on unsound data may not be objective	
	<i>Non-standardized methods and measures may lead to bias</i>	35%
	Using non-standardized evaluation methods may lead to bias	
	<i>Decisions not based on sound evidence are problematic</i>	25%
	Not following data may lead to bias	
	Being involved in cases in which the science is not strong may lead to bias	
	Lack of knowledge can lead to bias	
IV.	Having a vested interest in the case outcome leads to bias	
	<i>The Allegiance Effect</i>	45%
	Forming an alliance with the referral party is problematic	
	Being influenced by colleagues with an interest in the case outcome is problematic	

<i>Influence of Income</i>	15%
Economics: Money can easily influence thinking	
<i>Personal involvement in the case</i>	15%
Personal involvement can lead to bias	

AWARENESS OF BIAS EXISTS ON A CONTINUUM

Almost everyone in this sample believes that they are objective in their forensic work (see Table 4). Participants differed, however, in how much they are aware of potential threats to their objectivity. Everyone agreed that being objective requires time, effort, and attention – that is, objectivity does not come easily or naturally for anyone. The percentages of participants included in these answer categories totals more than 100%, because many of the answers provided fell into more than one category (e.g., a denial of subjectivity [coded under “defensive denial of personal bias”] was made in the context of describing an active personal bias [also coded under “belief in objectivity despite admitting probable bias”]).

Defensive denial of personal bias

A portion of forensic psychologists resolutely believes in their ability to be objective in conducting forensic evaluations (20% of this sample). For these psychologists, the requirement of objectivity in forensic work may be salient and accessible, and they quickly discounted any possibility of personal bias in their forensic work. Some of the responses were also tinged with an element of defensiveness.

Resolute belief in objectivity without reflection.

- “I really believe that I can evaluate someone, see them over the capital case, maybe 5 to 8 sessions and not be invested in the outcome...So, I don’t think you’re going to get any place with that question with me.”
- “When I deal with people or students I supervise, um, that’s the most important thing, is to teach objectivity, but I’m not sure why would anybody not be objective.

No awareness of bias

Over half of this sample claimed they were objective in forensic work after engaging in some superficial reflection about the issue (60%). One group of respondents highlighted their awareness

of bias in evaluations conducted by other clinicians while at the same time denying any potential personal issues with bias in forensic work.

Belief in objectivity after superficial reflection.

- “I would have to say no, nothing that comes to mind.”
- “I would say no, no concerns.”

Concern about colleagues’ objectivity but not personal objectivity.

- “I wasn’t concerned about my objectivity; I am concerned about some of my colleagues’ objectivity in those cases.”
- “I will work with mitigation specialists, typically social workers, who conflate that because they have some regard for the defendant as a human being and are working aggressively to tell his story, and that that story and this defendant are important that therefore the defendant must be good, must be a good person, he must even be innocent. (laughs).”

Denial of personal bias after substantive reflection

This group of participants (75%) claims objectivity in their work as well; however, they appear to have reflected more on the issue during the interview, and appear to have put more thought into the potential effects of their existing biases. Some of the people in this group admit to working in areas in which they have strong personal attitudes relevant to the circumstances of the referral (e.g., engaging in evaluations in death penalty cases despite strong opinions about the death penalty). Some participants explained their reason for engaging in this kind of behavior is because they know they will work hard at objectivity despite existing attitudes (which is more than they can say for colleagues who may not strive to counteract biases).

Belief in personal objectivity after substantive reflection.

- “There are some cases...where...it does become an issue and something I have to kind of struggle with a little bit in terms of my own head...to me, that was such a frustration...to report where I did not favor the defense who hired me. But I don’t really think you could say I was biased.”
- “There are cases that I wrestle with, but I haven’t wrestled with them specifically from a personal bias standpoint.”

Belief in objectivity despite admitting probable bias.

- “In an Atkins, or an MR evaluation, I’m aware that I feel a little sick to my stomach when the person is zipping along doing very well on the IQ test. I’m thinking to myself, ‘Oh, no,’ because there’s always a way in which that truly bothers me...I find that really troubling and I’ve asked myself if at some point, I need to stop doing that because it bothers me. I don’t enjoy the emotions, but then I also tell myself ‘Well, at least I know I’ll do it objectively.’”
- “I do a lot of capital cases...and, you know, I would prefer that the death penalty go away. I think we would be a better society and a better country if we didn’t have the death penalty...[but] I think I’m able to put aside my particular personal views about the death penalty and take the case as it is.”

Doing the work because others are not objective.

- “Just as death qualified jurors are more likely to convict, you’ve wondered if clinicians who are pro-death penalty would be biased in another way, so wouldn’t it be better to try to control your bias and do an unbiased evaluation”
- “I’ve actually, interestingly enough, kind of pushed myself to get involved in some cases that I probably would not have otherwise gotten involved with and simply because I thought it was the right thing to do. For example, I really have no particular interest in competency to be executed...but I’ve gotten involved in some cases over a period of time because of the quality of the work which was being done by others. At least I can try to bring something to the table in place of my own personal feelings.”

Unsure of biases

About a third of the sample (35%) was unsure about the effect of their biases on forensic work. These psychologists engaged in active consideration of their biases during this discussion. Some did not reach a conclusion about their objectivity. Others indicated their willingness to continue learning about their biases.

Active consideration of bias with unsure resolution.

- “Um, any other personal biases...gosh, it’s really hard for me to identify any that I believe I have. That’s sounds like an arrogant statement (laughs). This is really a hard question, I guess I have worked so hard at simply being detached and – well I shouldn’t say I worked so hard, maybe it just comes easy, I don’t know...Goodness, it really is a great question and I can’t think of any personal ones that get in the way of my, at this time, of doing my evaluations.”
- “Probably. The answer’s probably. I can’t think of anything right now, but I’m sure that’s been the case.”

Openness to learning about own biases.

- “I appreciate that you’re doing this type of research. I think it’s important that it be looked at because it’s definitely not looked at enough, other than people just out there saying ‘be objective.’ I’m curious to hear the results and find out sort of what other people do.”

Active development of personal bias awareness

Responses endorsing active effort to develop awareness about personal biases were provided by 55% of the participants. These psychologists described the value of learning from previous mistakes and reflected on the limitations of introspection about personal bias without help from others.

Learning to avoid bias from previous mistakes.

- “I believe that I learned some experiences through that process about the dangers of advocating too much in the work. I’ve had to learn that I’m there to give my opinion, but I have to put a certain degree of distance me and the outcome.”
- “There were some early experiences that I had that were instructive about not getting locked into a pre-conceived notion about something...early on in my forensic career...I would have the experience of talking to one party and getting a particular view of the situation...And then you talk to the other spouse, or other third parties, and you get a completely different perception than you had had initially.”

Trying to understand biases without help is problematic.

- “Well, this whole issue of bias, I guess it has to do with your own personal development, examination of countertransference feelings about the people that you’re working with...and the best way to get at that is to have your own personal, long-term psychotherapy...that process of self-examination is, I think, is invaluable in trying to be objective...It’s hard to do it on your own. You can introspect on your own but it’s easy, you know, for that to get colored by your own values, your own biases.”
- “What I did was I would have supervision where I would talk with people, and they would usually keep me focused on what the relevant issues were, I think you can reasonably do that as long as you have someone else helping you keep your thinking straight. It’s much harder if you don’t have someone to do that.”

Conscious awareness of existing bias with effort to compensate

Every person in this sample agreed that bias awareness takes effort, and that maintaining bias awareness is an important element of objective practice. Maintaining insight into biases can help examiners steer clear of cases in which the effects of their biases would be problematic.

Maintaining an awareness of bias takes effort.

- “I think I really try to be very vigilant in my own work around, kind of paying attention to what I’m thinking and feeling about something.”
- “I really work hard at this, and I’m not thinking of a case where I got in the middle of it and thought that I had a bias because, or I should say I’m maybe wondering if I had a bias, and I really working at directing, re-examining that so that, to try and keep it from happening.”

Maintaining insight to avoid cases in which bias may emerge.

- “You always have to be aware of your own biases and...not take cases in which you think your biases are too strong and will affect you too much.”
- “Like I said, there’s some cases I just don’t take. There’s some people that just rub me wrong, and so I just don’t take the work.”

Disagreement between professionals exists

A quarter of the participants described ways in which clinician opinion might differ. Instead of reflecting bias, differences of opinion may reflect legitimate differences in interpretations (of data, of criteria, of decision thresholds, and so forth).

Legitimate differences of opinion can exist between professionals.

- “Sometimes as a team approach, there’d be more than one person involved, with a psychologist as the primary or the secondary evaluator, that there would be some differences of opinion, which I think is really quite helpful to look at.”
- “The relevant psycho-legal standards are theoretically objective standards. As we all know, they’re not as objective as they would like to be...It can be written down in black and white but what it means can be different things to different people.”

Clinician decision thresholds may differ.

- “I really have to be convinced that the person really was insane at the time. Insanity is a very serious kind of decision, and I think a number of my colleagues might be much more [quick to reach that conclusion.] But, in my mind, to testify that someone’s not guilty by reason of

insanity is a bit of a burden. It's an affirmative defense that really needs to be demonstrated very clearly.”

NUMEROUS SPECIFIC BIASES IDENTIFIED

Most of the participants identified specific ways in which personal attitudes or beliefs of psychologist might bias their decision-making processes in forensic cases. First, the emotional and cognitive responses of the evaluator toward the evaluatee or the case might be problematic. For instance, disliking the evaluatee or feeling disgusted by the circumstances of the case could exert a negative influence on decisions about the evaluatee. In addition, the attitudes, beliefs, and values psychologists hold prior to beginning a case may encourage bias, if those attitudes, beliefs, or values are relevant to the case. Finally, psychologists' beliefs about the functioning of the justice system itself could also exert a systematic influence on decision-making.

Evoked cognitive and emotional reactions toward evaluatee

Reactions toward the evaluatee as a potential source of bias were mentioned by most of this sample (90%). Countertransference issues, general dislike of the evaluatee, or sympathizing too strongly with the evaluatee can lead to bias. Additionally, examiner-related variables, such as having a too-high or too-low threshold for suspecting malingering or having a general wariness of working with litigious clients, can negatively affect objectivity.

Dislike of defendant can lead to bias.

- “This particular defendant, I found nothing likeable at all; in fact, I found him despicable. And I choose that word carefully, because it's not a word I use often, I don't despise many people. Everything about him I disliked, and then his style of presentation was provocative and designed to shock, so that was one where there was a real personal reaction that I had to really guard against...that was troubling.”
- “I am dealing with a defendant that is doing a lot of interpersonally repelling things. He is trying to control the interview, he's being kind of rude, he's being a know-it-all or that kind of thing. [I have to] remain professional and neutral and engaged and ignore at least in terms of getting into a contest, ignore the interpersonally repelling things that might otherwise cause somebody to quit listening and quit looking.”

Being too sympathetic and empathic can lead to bias.

- “There are certain subgroups of people whose life experiences were horrific enough that it’s hard to imagine their life turning out particularly well. I don’t think that’s ever had an impact on a bottom line opinion, but I think I really have had to make sure that that belief isn’t making me too sympathetic or skewing the way I ask my questions or keeping me from going down a hard row.”
- “Some people are just more sympathetic than others, you feel more drawn to them than others. There are some personal characteristics there, so I try to be aware of that and know that that’s there.”

Countertransference is a potential problem.

- “I used to do a fair number of sexual predator determination evaluations, and I don’t that I had this kind of experience before I had children, but after I had children, I noticed that I had a different response to some of the individuals that I was evaluating, so I think the fact that I had young children that were similar in demographics to some of the alleged victims probably had an impact on me that wasn’t there before I had children.”
- “I’ve developed a lot of therapeutic relationships with individuals with severe mental illness, in particular individuals from disadvantaged socio-economic backgrounds, and I think that sometimes can create a problem being in an objective role. For example, when you’re working with somebody doing a forensic evaluation with someone who reminds you of one of the individual’s you’ve worked with...that’s one of the things that I often sort of have to watch out for is having a bias towards, I mean basically forming a therapeutic-type feeling with someone, and feeling empathy towards them, and not allowing that to affect my objectivity.”

Suspecting malingering at too low or high a threshold predisposes bias.

- “Well, since I deal with criminal defendants, better than 80% of the time, I always watch for exaggeration or feigning of symptoms. Um, whether that’s a bias, I think that’s a legitimate bias. Anybody that comes to my office who is on trial and I do an evaluation for the court I have to decide whether the person is making things up.”

Fear of litigious clients.

- “The biggest probably would be in cases where from the beginning I’ve been aware of particularly litigious client who’s maybe sued or brought actions against previous professionals, lawyers, other people involved in the case that might have made me more cautious.”

Evoked cognitive and emotional reactions toward the crime

Evaluator responses to the circumstances of the case can also affect objectivity. For instance, disgust toward sex offenses was specifically mentioned by several people in this sample (15%). This

notion might be extrapolated – the emotional and cognitive responses of evaluators toward the circumstances of any case might be problematic: for instance, gruesome murders, serial crimes, and crimes against children might also elicit strong reactions from evaluators.

Extreme disgust toward sex offenses leads to bias.

- “I don’t do criminal cases involving pedophiles either for the prosecution or the defense, because I’m not the least bit interested in finding something that can help them. Remember, as a forensic psychologist, I’m not interested in whether they’re guilty or not guilty, I’m just not interested in finding out anything about them that may be of value to help them, and consequently, also wouldn’t do an evaluation for the prosecutor, because I’d love to find something that will nail them.”
- “I just don’t want to deal with it...many people like working with sex offenders, doing sex offender evals. I have some probably extremely conservative views about sex offenders, and I couldn’t be objective working with them, so I don’t. You can’t not work with sex offenders, but the areas I work with them in, their sex offense is usually not the issue at hand. I also make it pretty clear to myself that some people just simply disgust me, and there are some cases where I need to hand it off to somebody else.”

Preexisting personal, moral, and political values

This entire sample identified existing attitudes and beliefs of psychologists as posing potential problems for objective practice. Political beliefs, death penalty attitudes, and other personal values might exert an influence on the evaluator’s decision-making processes. Other evaluator-related factors that might impact cases include limited cultural competency, resistance to accept shifting social norms over time, and personal attitudes toward the common circumstances of particular cases (child custody evaluations, capital cases, and sex offense cases appear to present the most problems).

Personal values.

- “It’s easy, you know, for even all that data to get colored by your own values, you know, your own biases...”

Political ideologies.

- “I’m probably somewhat liberal in my political viewpoints, although maybe becoming more conservative as I age. I think that that probably has an impact on the type of work I do, and I

think I'd be fooling myself if I didn't think that I had some impact on the work and how I think about things. So I think my political viewpoints and my just kind of liberal upbringing and that kind of thing probably has an impact."

Death penalty attitudes.

- "I would not do death penalty work because of my personal biases about the death penalty. It would be hard for me to control for that within the context of that work..."
- "I think I would have a hard time – I'm very personally opposed to the death penalty – and I think I would have a hard time doing those evaluations in an unbiased way. I think I would be looking for mitigating information without needing to..."

Child custody evaluations are difficult for many clinicians.

- "Well, I know there's a few areas I'm pretty biased in; I just don't do them. The whole child custody thing, I just don't do it. I don't want to get between somebody and their kids in a good way or a bad way."
- "I also don't tend to do child custody stuff – I think there are people out there that do it fabulously – but I'm not sure that's a type of forensic work that I would be very good at."

Limited cultural competency can elicit bias.

- "I mentioned the Arab American issue – I don't think I'm particularly racist, but I think I share stereotypes that a lot of Americans share, and that's a culture in which I've really educated myself and gone to lots of continuing education and looked up things on the internet and really worked closely with the interpreters to make sure that whatever bias I'm not aware of crept in there."

Reluctance to accept shifting social norms can lead to bias.

- "I think probably one that I've had to reckon with is, since I started practice 28 years ago, the notion that the normative family has shifted. At that point, single parent or artificial insemination, gay and lesbian families would be pretty rare. They've kind of become the norm, not the norm, but at least not outliers. And, I've kind of had to make the adjustments."

Personal beliefs about the law and the justice system

One-fifth of the sample mentioned how personal attitudes toward psycholegal criteria and attitudes about the functioning of the justice system in general could influence decision processes. For instance, examiners who disagree with the legal precedence of juvenile waiver to adult court might be tempted to reach more lenient opinions in cases waived to adult court.

Disagreeing with or disliking legal criteria can lead to bias.

- “There’s fairly specific psycho-legal standards that we’re asked to comment on...and like it or not, those are the questions that have to be answered.”
- “[The DA] started charging younger and younger adolescents and even kids as adults, and I was asked to do competency evaluations, and the temptations to announce that they’re incompetent because they shouldn’t be tried as adults was strong. But, I just kept reminding myself that it’s a functional evaluation, that if this young child is capable of understanding the nature and object of the proceedings and assisting in his own defense, that he’s competent even if I think it’s wrong, the proceedings that he’s involved in.”

Distrusting the justice system can be problematic.

- “As a defense expert, I have a natural suspicion of the government, and I’ve had plenty of experiences to support, to confirm that. I do a lot of police confession work, and so if I have any kind of bias at all, it is sort of to protect the constitutional rights of defendants. Again, that’s a potential bias which has to be counteracted.”
- “Before I started working in this, I figured it was mostly the defense that cheats. What’s happened over time is that I’ve become quite skeptical of the state and their motives. (laughs). I suppose that’s a sort of bias, that I am a little skeptical – I’m not only skeptical of what the defendant tells me, I’m skeptical of what the police tell me, what the correctional officers tell me. I’m certainly skeptical of how the prosecutors represent the situation and how they go about arguing or that kind of thing . . . and so that’s a source of bias to guard against, and to be vigilant about.”

EVALUATIONS BASED ON UNSOUND DATA MAY LACK OBJECTIVITY

Over half of the sample insisted that reaching objective conclusions depends upon using sound methods toward that end. Unstandardized tests or evaluation methods, a general lack of knowledge, and coming to psycholegal opinions about issues in which the psychological science is not strong all leave room for subjectivity and bias to have an effect on the outcome.

Non-standardized methods and measures may lead to bias

Basing decisions on unstructured and unstandardized methods is not recommended. Thirty-five percent of this sample described how using unstandardized methods and instruments encourage bias, because the lack of formal structure may allow more degrees of freedom for biased cognitions and conclusions.

Using non-standardized evaluation methods may lead to bias.

- “I tend to be pretty much of a person who really favors strongly looking at things from a standardized perspective...I think in the absence of structure, there is a greater likelihood of bias.”
- “I try to use measures which I think are the least vulnerable to change to whoever is using them, so I like structured interviews or structured formats.”

Decisions not based on sound evidence are problematic

Potentially even more problematic is making decisions and reaching conclusions without using valid or reliable data (25%). Failure to follow the data and lack of knowledge in general about relevant issues pose problems for objective processing of evidence. Some participants noted that accepting referrals for cases in which the relevant psychological science is not strong leaves room for individual examiner bias to exert itself in reaching conclusions.

Not following data may lead to bias.

- “The data is what drives our conclusion, whatever the results are of our evaluations, you know, the results of testing, the results of the interviews, that’s what leads to our conclusions. It is really nothing personal, in terms of personal experiences, it’s based on the results of the interviews and the testing...”

Being involved in cases in which the science is not strong may lead to bias.

- “There are areas in which I will not do work, largely because I believe that the law is so imperfect. I will not do sexual predator evaluations, for instance. I just turn them down because of the fact that I just don’t think the research is good enough in the area to reach any definitive conclusion.”
- “There are certain kinds of evaluations that I honestly think we shouldn’t be doing and I just stay away from them...I think in terms of risk assessment, we do a lousy job of that, so I’ve consulted occasionally with attorneys about how to address issues methodologically of another expert in terms of this, but I just stay away from those things because I think there is an area that is too open to its one propensity in those particular cases and the measures which are out there are really pretty inadequate measures.”

Lack of knowledge can lead to bias.

- “I knew nothing about it, and I showed up one day and realized there was a wealth of stuff that I didn’t know.”

HAVING A VESTED INTEREST IN THE CASE OUTCOME LEADS TO BIAS

Preferring in any way a particular case outcome over another causes problems for objectivity. Ways in which psychologists might come to prefer a particular outcome are through 1) forming an alliance with an adversarial referral party or working with other people who prefer a particular outcome in the case; 2) financial or economic effects; and 3) being personally involved in the case.

The Allegiance Effect

Almost half (45%) described how being influenced by interested others can impact decisions. Specifically, identifying with the goals of an adversarial party – such as an attorney – reduces one’s ability to process information objectively. Other colleagues, such as those involved in systems in which politics are important (e.g., the need for opening beds for newly admitted patients in hospital settings) may also exert an influence on forensic decision-making.

Forming an alliance with the referral party is problematic.

- “I do quite a lot of defense work, and I think defense-oriented forensic psychologists are different than prosecution-oriented psychologists...”
- “I’ve been here for 24 years, and there are attorneys both defense attorneys and prosecutors who I value as colleagues and who I want to think well of me, and I always have to be on the lookout for not getting too closely allied with them, either as I’m preparing something or as the case is unfolding...”

Being influenced by colleagues with an interest in the case outcome is problematic.

- “I think you gotta kind of look at, especially if you’re in a team environment, who else is influencing you and the attorneys, because we’re in not just treatment team-based environments but in institutional facility-type environments where there’s also external influences through forensic review boards, through attorneys and judges in various counties and so forth.”
- “I’m looking at people mostly who’ve been in facilities so there’s usually voluminous health-service notes or nursing notes or some form of notes, and you’ll invariably have one or two or three people who know you’re reviewing the stuff who come up to you and say: I put that in there because of this and let me tell you something else that’s not in the notes, or hey, you know the notes all seem to say this one thing but what you don’t know about this guy is something else. So, I think, it is that familiarity with some of the people involved in the facilities and the system and not letting them influence you. There’s certain people I have a more positive viewpoint of than others, both in terms of their intentions and in terms of their skill level and in terms of the way that they look at cases.”

Influence of Income

Money as a potential impediment to objective thinking was mentioned as well. Fifteen percent of this sample pointed out ways in which financial or economic interests can influence the opinions reached in forensic cases.

Economics: Money can easily influence thinking.

- “Being paid - the place where I think the greatest risk comes in. I was actually involved in a case like this where...they spent over a couple hundred thousand dollars on the case, and that’s where I felt like I was a bit vulnerable, you know, not because I intended to be vulnerable, but you know you go and spend 3 or 4 days and people take very good care of you, and there’s a lot more interaction with the attorneys than you would otherwise have.”
- “You always worry when you are doing an evaluation and they are paying money for it, they are going to be displeased when you say ‘Hey there is nothing psychological here that you can use in this particular case.’”

Personal involvement in the case

Being involved in the case itself clearly poses problems for objectivity (15%). Specifically, participants mentioned having a “history” with a case through previous involvement in another role, as well as becoming legally involved in the case themselves (e.g., potentially being sued).

Personal involvement can lead to bias.

- “An attorney sent me a case to look at and I consulted with him and gave an opinion, and a year later, that same case came back for custody evaluation. Well, I have a history with that case.”
- “I had become personally targeted in this, this was now about my practice, me going to jail, my money in hiring an attorney, and so now I could no longer function in this case as an objective expert...And so I withdrew.”

Research Concern 5: Bias Correction Strategies

Our fifth and final research concern was to explore strategies forensic psychologists use to correct for perceived biases. We were not sure what to expect, because the literature on this topic was sparse. The wealth of data obtained was surprising and rich. Participants provided a wide variety of strategies to prevent and mitigate the effects of bias on forensic work. These strategies

include developing a sense of professional pride to motivate good work, fostering a continuing commitment to strive for objectivity, and embracing empiricism in as many aspects of practice as possible. Other strategies include limiting investigations and conclusions appropriately based on available information, developing and relying on procedural safeguards in evaluations, and disengaging emotionally from cases. On a more systemic level, participants described how the field can better prepare developing psychologists to handle biases by making training in bias management an explicit component of the occupational socialization process. In fact, several participants described how supervisors and clinical instructors have a responsibility to provide didactic information about how to be objective as well as to model objectivity for their students.

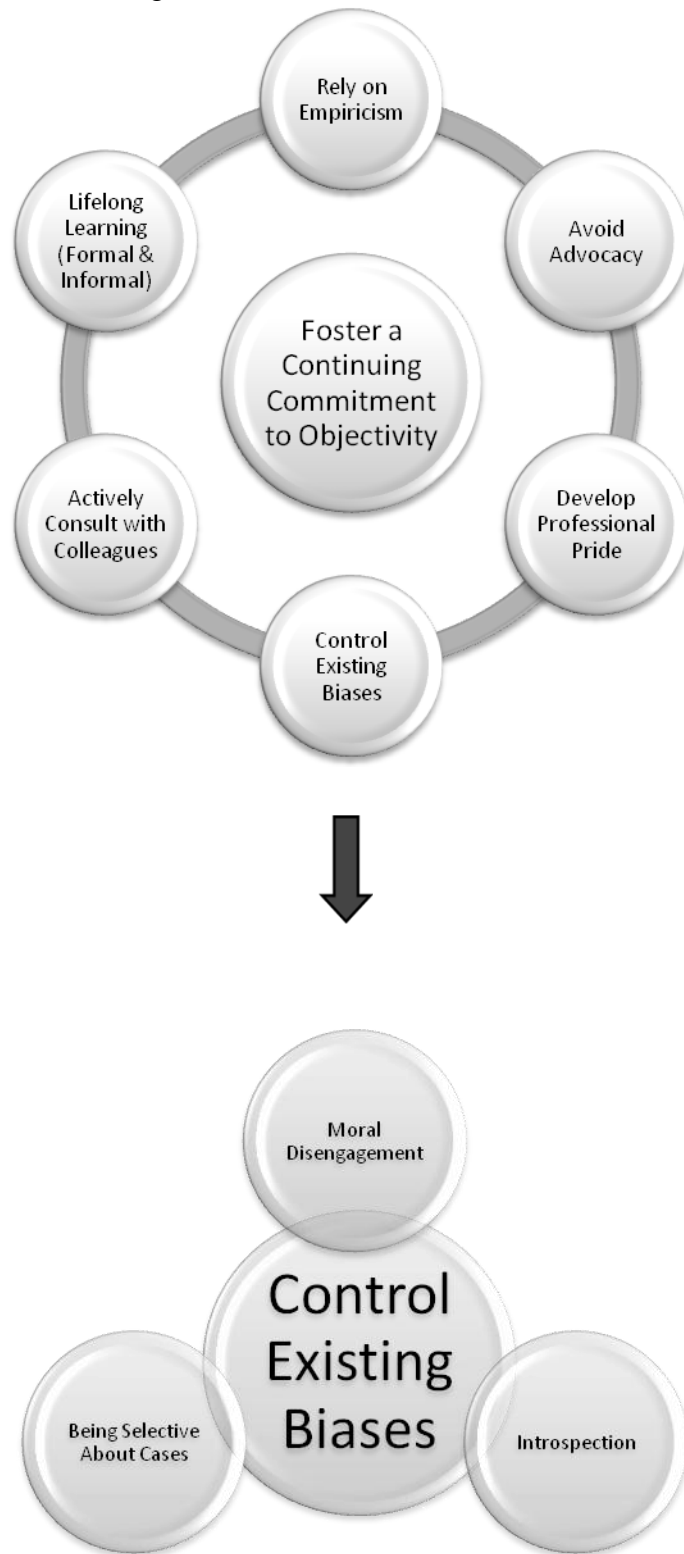
Table 5. Bias Correction Strategies: **Theoretical Constructs, Themes, and Repeating Ideas**

I. Develop a sense of professional pride	
<i>Professional organization membership may bolster objectivity</i>	40%
Heightened performance based on expectations of peers	
Respect for the enforcement of disciplinary standards for psychological work	
<i>Take ownership of and pride in professional identity</i>	35%
Pride in oneself as a professional	
Taking pride in professional work promotes defensible products	
Make an effort to counterbalance the bias of others	
Remind oneself that avoiding bias prevents embarrassment and promotes credibility	
II. Occupational socialization about objectivity	
<i>Explicit didactic training during formal education</i>	55%
Explicit didactic training about objectivity	
Explicit discussion of transference and countertransference	
<i>Supervisors have a responsibility to explicitly teach and model objectivity</i>	45%
Provide good supervision about managing biases during the course of clinical practice	
Supervisors have a preventative responsibility to teach and model objectivity	
Specific strategies to use in didactics regarding objectivity	
<i>Objectivity socialization through reading professional literature</i>	30%
Classic texts and readings in the field emphasize objectivity	
The ethics codes and forensic guidelines stress objectivity	
<i>Objectivity socialization via learning the scientific method</i>	10%
Objectivity taught through research (objectivity in the scientific method)	
Objectivity as part of the scientist-practitioner model	
<i>Objectivity socialization via observation</i>	30%
Observation of others	
Being observed and obtaining feedback	
<i>Clinical intervention experience prior to forensic work develops objectivity skills</i>	10%
Being a treating clinical psychologist before doing forensic work increases tolerance	
<i>Take responsibility to continue education after formal training</i>	80%
Seek continuing education for biases stemming from knowledge deficit	
Seek specialized training and mentorship	
Take personal responsibility for continuing education	
Push to get involved in slightly less familiar areas to gain new perspectives	
Continuously work to maintain cultural competence	
<i>Take advantage of opportunities to continue learning throughout clinical practice</i>	35%
Learn from mistakes	
Appreciate vicarious learning through discussions with supervisees and colleagues	
Experience can lead to objectivity	
<i>Foster a culture of openness to discussing issues of bias awareness</i>	40%
Openness to discussing bias encourages active consideration and action	
III. Foster a continuing commitment to objectivity	
<i>Appreciate the extraordinary challenge of being unbiased</i>	20%
Develop a degree of humility about your ability to be objective	
<i>Aspire to objectivity</i>	40%
Do the best to be unbiased	
Engage in a continuous pursuit of excellence	
<i>Continuously introspect to know biases</i>	100%
Introspect – become aware of potential biases	
Vigilance in guarding against visceral responses	
Be aware enough of reactions to address biases effectively	
Appreciate that continuous introspection is crucial	
Pay attention to unusual or strong reactions as they are happening	

	Examination of countertransference feelings is critical	
	Be careful about developing biased attitudes about the adversarial system	
	<i>Self-examination is difficult without help</i>	30%
	Introspection is difficult or impossible without help	
	Personal, long-term psychotherapy is valuable for introspection	
	<i>Be deliberate about controlling bias throughout the evaluation</i>	60%
	Conscientiously and actively counteract bias	
	Put aside biases and take the case as it is. Be detached.	
	<i>Be selective about accepting cases while considering the impact of bias(es)</i>	100%
	Explicitly write down concerns before cases begin	
	Consider how involvement might affect professional future	
	Anticipate to avoid bias: Know what referrals to turn down	
	Taking a case despite an existing bias requires special attention and effort	
	Compromised objectivity may require withdrawal from a case	
	Avoid dual roles	
	Refer cases not qualified to take, or work under supervision	
IV. Be an empiricist		
	<i>Be grounded in the science – as an active consumer and producer of knowledge</i>	60%
	Be grounded in the science – be scientific	
	Teaching others sharpens objectivity	
	Be aware of common sources of bias and monitor them	
	Be aware of available strategies to deal with bias and make use of them	
	<i>Systematically examine patterns of decision-making behavior</i>	15%
	Systematically examine rate of agreement with referral party's preference	
	<i>Base conclusions and opinions on sound data</i>	55%
	Ground opinions in research and data	
	Be true to the data	
	Don't selectively pick instruments to achieve a desired result	
	Incorporate all data, making sense of supporting and conflicting information	
	<i>Use structured objective measures with bottom-up methodology</i>	50%
	Use objective measures that do not require judgment	
	Use instruments with a bottom-up methodology to minimize bias	
	<i>Scrupulously investigate all relevant data before forming opinions</i>	100%
	Collect all available data	
	Actively consider what information might be missing and seek it out	
	Gather information from multiple parties	
	Seek disconfirming as well as confirming information	
	Conscientiously avoid rushing to judgment	
	<i>Critically examine conclusions</i>	100%
	Generate competing hypotheses	
	Critically examine whether conclusions are sound	
	Keep in mind cross-examination	
V. Appropriately limit investigations and conclusions		
	<i>Restrict conclusions or opinions to the available data</i>	30%
	Do not go beyond the data	
	If necessary information is not accessible, limit conclusions accordingly	
	<i>Do not go beyond the science</i>	20%
	Recognize the limitations of psychological knowledge	
	<i>Limit the scope of inquiry and report to answering the referral question</i>	35%
	Only include information relevant to the referral question	
	Understand the legal question and limit the scope of inquiry to that issue	
	Try to clarify vague referral questions.	
VI. Develop procedural safeguards to use throughout evaluations		
	<i>Use systematic and structured methods</i>	20%

Procedural safeguards are important to reduce bias	
Be objective in the data-gathering process	
Use a systematic model of decision-making and argument construction	
<i>Spread the evaluation out over time</i>	15%
Work on the case and meet with the evaluatee on more than one occasion	
Allow some time to pass during an evaluation for information processing.	
<i>Take careful notes and rely on them</i>	15%
Take careful notes (do not try to rely on memory)	
Carefully review notes	
<i>Attend to wording choice in reports to edit out value-laden language</i>	60%
Write the report so that no one can tell who hired you	
Present information in an unbiased way	
Ruthlessly edit reports and keep a keen eye out and for value-laden language	
<i>Actively consult on cases</i>	100%
Consult and discuss with others	
Seek peer review by having colleagues read de-identified reports	
VII. Disengage emotionally from cases	
<i>Moral disengagement</i>	100%
Moral disengagement as a strategy to disengage from bias	
Foster desensitization and emotional disengagement	
Develop strategies to compartmentalize work from personal attitudes	
Distance self from the case disposition	
<i>Limit therapeutic empathy and rapport</i>	30%
Approach with skepticism	
Don't be warm and fuzzy	
<i>Avoid advocacy</i>	65%
Avoid being perceived as a hired gun	
Be hired by the court instead of an adversarial side	
Avoid advocating and the temptation to persuade	
Advocate for your opinion rather than for the referral party	
<i>Resist allegiance effects</i>	100%
Protect self from subtle influence of colleagues	
Protect self from allegiance with the retaining party	
Develop financial referral-based independence	
Seek referrals from both plaintiff/prosecution and defense	
Evaluate and write report without extensive discussion with attorneys	
Practicing with no pressure to be partial is important	

Figure 2. Bias Correction Strategies Overview.



DEVELOP A SENSE OF PROFESSIONAL PRIDE

Embracing one's identity as a professional and accepting the accompanying ethical responsibility is good for objective work (see Table 5 and Figure 2). Fostering the internalization of those values through joining formal professional organization(s) and taking pride in one's professional identity can be a good thing for ethical practice.

Professional organization membership may bolster objectivity

Given that this sample was composed of members belonging to a well-respected professional organization, the finding that almost half (40%) pointed to belonging to just such an organization as beneficial for objectivity is not surprising. Specific ways in which formal organizational membership can minimize the effect of problematic biases were mentioned: striving to meet the high expectations of other members and respecting the standards governing the behavior of members.

Heightened performance based on expectations of peers.

- “Because that was such a arduous credential to obtain, because I had so much respect for the people who already had it, that when I signed a report and put ‘A.B.P.P.’ after my name, that I didn’t want that to be something that would cast a negative light on this group of individuals that were so capable. So, that had an additional aspect of excellence and wanting to be sure that this report was objective and sound and scientifically defensible because this had been created by an ABPP.”
- “...knowing your work would be highly scrutinized...understanding that it would be necessary for what we’re doing.”

Respect for the enforcement of disciplinary standards for psychological work.

- “The disciplinary aspects of performance of forensic psychological work are designed to control and attest for those.”

Take ownership of and pride in professional identity

Taking pride in oneself as a member of the profession and accepting the responsibility that comes with being a professional psychologist is beneficial for producing defensible work (35%).

Taking responsibility for the health of the field as a whole, by making an effort to counterbalance the

unethical or biased work of other professionals is one way in which this strategy works. Another is simply reminding oneself that one's identity as a well-respected professional is inconsistent with biased or unethical work can prevent professional embarrassment and promote good work.

Pride in oneself as a professional.

- “An element that I think is critically important for the psychologist to have a clear perception in his/her mind about who they are. That you're trying to be objective or do professional work because of who you are. It's kind of like you have to look at yourself in the mirror. You have a perception of yourself as a professional. That image of yourself as a professional and who you are is an important thing to guard. And the greater investment that you have in that – to ‘who are you and who are you becoming’ – I think that insulates it some.”
- “I would say that the primary foundation is my scientist-practitioner foundation. I'm a scientist-practitioner quite consciously, self-consciously, and I feel like objectivity is a corollary of being a scientist-practitioner which is an evidence-based approach to clinical work. Aside from the specialty guidelines and generally forensic ethics, I would say the scientific practitioner foundation is the basis of my commitment to objectivity.”

Taking pride in professional work promotes defensible products.

- “I've done a lot of criminal reports, a pile of them, and I hardly ever get called into court, and when I do get called in and the attorneys do things to assassinate my reasoning, you can say, ‘Well, look in the report; here's the stuff in favor of it, here's the stuff against it.’ And, if you do the model, it forces you to do better work. You end up with a very defensible product.”
- “It's important to keep out bias, but it's also important to submit, my reports are all done for the court, are court-ordered, so the court is my client, if you will. So I'm very, very invested in making sure that I'm giving a product to the court that is defensible.”

Make an effort to counterbalance the bias of others.

- “I've gotten involved in some cases over a period of time because of the quality of the work which was being done by others. At least I can try to bring something to the table in place of my own personal feelings.”
- “Just as death qualified jurors are more likely to convict, you've wondered if clinicians who are pro-death penalty would be biased in another way, so wouldn't it be better to try to control your bias and do an unbiased evaluation.”

Remind oneself that avoiding bias prevents embarrassment and promotes credibility.

- “From a simply self-serving point of view, bias is not good for the career of the expert. Because it gives you a short shelf-life. You end up saying things that are not defensible. And so, to some extent, there's some degree of objectivity that can be maintained just from the self-serving perspective that I don't want to be caught with my pants down.”

- “Something that I recognized as part of ethics, that you could only have a career if you were credible, and the only way to be credible was to be thorough and objective. So, in some ways, it was self-serving without having been taught that way.”

OCCUPATIONAL SOCIALIZATION ABOUT OBJECTIVITY

Being socialized into believing objectivity is important in forensic work is a crucial step toward objective practice. Objectivity socialization can take place through explicit formal training, through reading the “classic” texts and articles in the field, drawing parallels between the necessity of objectivity in science and application, from observation of others as well as from being observed, and by taking advantage of opportunities to learn throughout the course of experiences in clinical practice. Supervisors have a responsibility to explicitly teach and model objectivity, and all psychologists have a responsibility to continue seeking education about objectivity after formal training is complete.

Explicit didactic training during formal education

Over half (55%) of this sample indicated that explicit training devoted to the issue of objectivity is important during formal education. Although the necessity of being objective is commonly present in training organizations, specific attention toward how to maintain objectivity is not always offered.

Explicit didactic training about objectivity.

- “Training programs and the internship, they pretty much hammered on the idea of objectivity and impartiality in general when it came to interpreting data and test results...”
- “A lot of training provided...explicit, lots of didactic information about what it meant to be a forensic psychologist, lots of discussion of what the role entailed in forensic versus clinical issues, lots of observation of other people and a lot of explicit discussion of transference and countertransference issues and how you maintain objectivity.”

Specific strategies to use in didactics regarding objectivity.

- “[Emphasize] the Daubert approach, which goes to the issue of scientific admissibility and falsifiability of hypotheses. In other words, it’s an approach to objectivity which the courts use, and it’s an approach to objectivity that is easily taught to the psychology graduate

students and the issue of testing alternate hypotheses, in other words, to always consider alternative hypotheses in any formulation.”

Supervisors have a responsibility to explicitly teach and model objectivity

Forty-five percent of the participants described the onus on clinical supervisors to deliberately focus on objectivity in practice. Good supervision about how to manage biases, discussion of transference and countertransference, and simply being a role model in terms of objective practice are important.

Provide good supervision about managing biases during the course of clinical practice.

- “I think supervision is important to address with people what their emotional reaction is to cases that have emotionally difficult content, whether it’s a sex offender or pedophile. Whatever the case may be, would want to sort of encourage the trainee to really [consider] how this makes them feel so that they can make sure that that contact is far removed from the final report as possible.”
- “I received a lot of good supervision around how to deal with my own personal issues in dealing with people who have done very difficult things...”

Supervisors have a preventative responsibility to teach and model objectivity.

- “I did have a mentor, a forensic psychiatrist, who I worked with from day one when I started in the field, and I think he provided good a example of doing objective evaluations and putting aside whatever biases I might have about certain situations and taking the defendant or the client as they are...”
- “My primary supervisor who was really insightful and skilled guy and he did several things that were really important...he treated all of the folks that came into our office whether they were the lowest enlisted guy or an officer of some rank he treated them all...with the same courtesy regardless of rank and as if they were coming to his outpatient office and they were paying for the services. That was a very critically important modeling because forensic psychology as it is practiced in the criminal arena often involves people that are captive, and don’t really have anybody else to go to.”

Explicit discussion of transference and countertransference.

- “A lot of explicit discussion of transference and countertransference issues and how you maintain objectivity.”

Objectivity socialization through reading professional literature

Some participants (30%) pointed to the existing psychology-law literature, noting that the importance of objectivity is stressed in many of the “classic” texts and readings. They stated they had been socialized into valuing objectivity through reading these books and articles.

Classic texts and readings in the field emphasize objectivity.

- “Objectivity was very much emphasized in the readings.”
- “Reading several articles and books in forensic psychology talking about objectivity didactically in that the readings that I was assigned and the lectures that I attended stressed quite a lot about objectivity both in the evaluation process, in the sources in which you obtained information, in the way in which you asked your questions, and then also quite a lot about report writing.”

The ethics codes and forensic guidelines stress objectivity.

- “[Objectivity] is certainly a part of the specialty guidelines and the whole culture of it.”
- “Training stressed explicit study of the ethics code and the forensic specialty guidelines.”

Objectivity socialization via learning the scientific method

A few participants (10%) described being socialized into objectivity in forensic practice via their socialization into science. Indoctrination in the scientific method and the emphasis on evidence-based approaches to clinical work in particular were highlighted.

Objectivity taught through research (objectivity in the scientific method).

- “It probably got introduced to us in research, doing research, just the whole mindset of objectivity.”

Objectivity as part of the scientist-practitioner model.

- “I would say that the primary foundation is my scientist-practitioner foundation... I feel like objectivity is a corollary of being a scientist-practitioner which is an evidence-based approach to clinical work. Aside from the specialty guidelines and generally forensic ethics, I would say the scientific practitioner foundation is the basis of my commitment to objectivity.”

Objectivity socialization via observation

Thirty percent of the sample described observation as an important element of objectivity socialization. Both observing others and being observed are effective methods.

Observation of others.

- “Lots of observation of other people.”
- “I attended monthly seminars in the local town, so that I could, you know, see what other people were doing in the field and got a sense, both about how the fact that we’re not particularly objective about certain kinds of things, and we have to put that aside and take the cases as they are.”

Being observed and obtaining feedback.

- “Another part of the training was being observed doing evaluations, and then our court reports were quite closely scrutinized.”
- “Your work would be highly scrutinized... understanding that it would be necessary for what we’re doing.”

Clinical intervention experience prior to forensic work develops objectivity skills

Some of the participants in this sample (10%) expressed their belief that practicing as a clinical psychologist in a treatment setting prior to beginning work as a forensic evaluator is beneficial. These psychologists indicated that engaging in traditional clinical practice develops skills necessary for ethical and objective forensic practice, which might otherwise not develop fully. In particular, interview skills – especially listening well without judging – and first-hand familiarization with active psychological disorders will enhance forensic work.

Being a treating clinical psychologist before doing forensic work increases tolerance.

- “A clinical practice that can be helpful in developing interview skills and developing a first-hand understanding of lots of types of psychological disorders, of increasing the tolerance of the psychologist as it relates to not responding pejoratively to the histories that you hear...”
- “I think there is tremendous benefit in the development in a forensic psychologist to have heavily been involved in the provision of clinical services. Part of what that clinical background does because the focus is on listening and on understanding and not on particularly judging that does a great deal to increase the tolerance of the psychologist and

kind of stretches their own kind of capacities to hear and tolerate that kind of thing, and it also gives them greater understanding...”

Take responsibility to continue education after formal training

Most of this sample (80%) indicated the importance of accepting responsibility for one’s own continued professional development over the course of time. Continued development can minimize the effect of personal bias in forensic evaluations. For instance, seeking continuing education in knowledge-deficient areas and continuing to stay abreast of cultural competence issues for the populations with whom one works are important for objective work. Seeking specialized training and mentorship, and accepting cases in slightly less familiar areas in order to gain new perspectives, are also ways in which continual learning can heighten objectivity.

Seek continuing education for biases stemming from knowledge deficits.

- “Continuing education for areas in which you suspect there might be biases or suspect that there might be a bias that’s really based on a knowledge deficit, do continuing education whether it’s formal or informal via internet or reading.”
- “Obviously lots of attention paid in continuing education issues.”

Seek specialized training and mentorship.

- “I went through a process of being mentored, I attended a bunch of workshops at the American Academy of Forensic Psychology, and I ultimately got myself board certified as a forensic psychologist.”

Take personal responsibility for continuing education.

- “I got off my rear end and made an effort to educate myself as well, so I went to a lot of continuing ed, I read just a ton, and I tried to expose myself to stuff outside of my workplace, so I’d get a different perspective on the field.”
- “I received mentorship from some individuals in the field that I basically networked with at various conferences that provided mentorship as I was going through various processes.”

Push to get involved in slightly less familiar areas to gain new perspectives.

- “I also had a private practice concurrently with my state job, and so I’d have to say some of my socialization also came from having to be my own entity and work in areas that were slightly different from what I was doing from work.”

- “I’ve actually, interestingly enough, kind of pushed myself to get involved in some cases that I probably would not have otherwise gotten involved with and simply because I thought it was the right thing to do...”

Continuously work to maintain cultural competence.

- “Keep very clear that you need to keep being culturally competent.”
- “Arab American...I share stereotypes that a lot of Americans share, and that’s a culture in which I’ve really educated myself and gone to lots of continuing education and looked up things on the internet and really worked closely with the interpreters to make sure that whatever bias I’m not aware of crept in there...”

Take advantage of opportunities to continue learning throughout clinical practice

Throughout the course of clinical practice, opportunities for learning often arise. Taking advantage of those opportunities, such as learning from mistakes, learning vicariously via discussions with others, and experience over time in general, can sharpen objectivity (35%).

Learn from mistakes.

- “I think there were times early on in my career where I might have been an advocate for one side or the other, and that’s a mistake. And, I learned from that lesson.”
- “That was really a valuable experience in ‘don’t make a rush to judgment. ‘Always be open to the data,’ because the data that you get from one person or the hypotheses that you’re beginning with may not in fact be hypotheses that are supportable or most accurate when you have the rest of the data...”

Appreciate vicarious learning through discussions with supervisees and colleagues.

- “I guess again, talking with other people about their own concerns about their own biases also kind of circles back in on itself, so then I’ll end up thinking about well, gee, is that an issue for me as well.”
- “I take a lot of workshops, I present, I’m on the board of professional organizations, so I’m always interacting with new candidates and new forensic psychologists coming in to the field, and I read their work samples. So, I am inundated, if you will, at every moment, with new stuff and new results and new tests and ways in which that we can be as objective as possible...”

Experience can lead to objectivity.

- “As I work more and more in the field...I actually find myself becoming more and more objective.”
- “When I actually started working in forensic settings, I would say the general trend was to personalize cases to some extent although the more highly trained people were able to then

say wait a minute, you know, we need to be more objective about this. Here's what we should be doing, here's what the data say..."

Foster a culture of openness to discussing issues of bias awareness

A substantial portion (40%) of this sample described appreciating of a culture of openness to discussing issues of bias. Such discussions encourage active consideration of bias and promote counteractions to minimize bias. Fostering such a culture may enhance objective decision-making.

Openness to discussing bias encourages active consideration and action.

- "We try to maintain that as part of the culture here as well... You know, there's so many of us tuned into this, that there's always somebody that you feel comfortable with saying, 'I'm afraid that this comes across as too harsh,' or the flip side is, in an effort not to be too harsh, not being as straight forward as you need to be."
- "It's lucky to work in a place where you've got 30 doctoral level psychologists colleagues and then an equal number of psychiatry colleagues to bounce things off of."

FOSTER A CONTINUING COMMITMENT TO OBJECTIVITY

Being committed to striving for objectivity may be the most effective strategy. Simply accepting the fact that being objective is hard work, and that pure objectivity is not possible, is the first step toward aspiring consistently toward objectivity. Introspection, understanding, and deliberately controlling the effects of biases as they relate to forensic evaluations and forensic decision-making are crucial. Finally, being selective about accepting cases while considering the potential impact of bias is recommended.

Appreciate the extraordinary challenge of being unbiased

A first step toward being objective was described as simply admitting that bias is a potential problem (20%). Humility about one's ability to be objective is a precursor to putting in the necessary effort toward actual objectivity.

Develop a degree of humility about your ability to be objective.

- “I guess some of it is also helping students develop a degree of humility about the fact that no matter how smart you think you are, no matter how thorough you are, that doesn’t necessarily mean you’re being objective on top of that.”
- “To assume that you’re right all the time is just an exercise in narcissism.”

Aspire to objectivity

Objectivity as an aspirational standard for which to strive was described by 40% of the participants. These psychologists noted that pure objectivity may be unattainable, yet continuously pursuing the ideal is a good thing.

Do the best to be unbiased.

- “There’s a zillion different ways in which bias can sneak in, and I think all we can do is do our best to stay on top of it...”
- “I really want to be sure that my finished product is as free of emotional bias as possible.”

Engage in a continuous pursuit of excellence.

- “Continuing commitment to objectivity.”
- “...always involved in kind of a continuous pursuit of excellence and trying to increase his own knowledge base and so he had note cards that he had a subscription to that would have abstracts with search articles and that kind of thing...”

Continuously introspect to know biases

Every participant in this sample (100%) said that introspection into personal biases – on a regular basis – is crucial for objective practice. Becoming aware of potential biases and vigilantly guarding against the undue impact of said biases is important. Biases may change over time and across situations, so continuous introspection is necessary. Without awareness of existing biases, their influence may not be effectively mitigated. Paying attention to strong reactions as they are happening is recommended, as is examining transference and countertransference feelings about evaluatees and guarding against biased attitudes about the functioning of the adversarial system itself.

Introspect – become aware of potential biases.

- “The primary strategy is just to be aware of your own thoughts and feelings about the types of issues that you’re working with, the types of individuals that you’re working with, the kinds of crimes, criminal histories that your evaluating people with those particular histories.”
- “Be fairly harsh on yourself introspectively to ferret out those biases if you have them and be aware of them.”

Vigilance in guarding against visceral responses.

- “I really tried to be very vigilant in my own work around, kind of paying attention to what I’m thinking and feeling about something.”
- “Attending to those, being mindful of that and setting aside those sort of visceral responses in order to stay unbiased...”

Be aware enough of reactions to address biases effectively.

- “If I was aware that I was particularly biased, I think I would try to pull out or some kind of counter balance, consult with a colleague, something of that sort to help me sort my way through it.”
- “In cases where from the beginning I’ve been aware of [a potential bias]...that might have made me more cautious.”

Appreciate that continuous introspection is crucial.

- “I think it’s a field that requires a lot of introspection before you get into it and really throughout because I think your biases probably shift.”

Pay attention to unusual or strong reactions as they are happening.

- “If you find yourself beginning to have an emotional reaction to something you stop, stand back from that and think about what that’s about – where’s that coming from.”
- “If I find myself favoring one parent [in a custody evaluation], I really sit down and go through, ok why am I favoring this parent and examine it to make sure it’s not a bias.”

Examination of countertransference feelings is critical.

- “Examination of countertransference feelings about the people you’re working with.”
- “One of the things that I often sort of have to watch out for is having a bias towards, I mean basically forming a therapeutic-type feeling with someone, and feeling empathy towards them, and not allowing that to affect my objectivity. I think that’s probably a tough balance, you know, we hear in a lot of stories that are very difficult... You have to maintain some empathy and rapport in order to do an evaluation or even get somebody to complete an evaluation. But at the same time, you have to let those feelings, to the best you can, not impact your objectivity in forming your opinion.”

Be careful about developing biased attitudes about the adversarial system.

- “Before I started working in this, I figured it was mostly the defense that cheats. What’s happened over time is that I’ve become quite skeptical of the state and their motives. (laughs)...me being more skeptical and maybe even having some kind of antibodies about what I’m hearing from them. And, so that’s a source of bias to guard against, and to be vigilant about.”
- “I’m now, having been out here and practicing for a while, biased about attorneys, I think, more than about clients...there are some who that you know are going to try to push you around or are not competent.”

Self-examination is difficult without help

Although introspection and becoming aware of personal potential biases is important, some psychologists (30%) pointed out the difficulties inherent in introspection. Introspection without any outside help or feedback is difficult or impossible. Good supervision, with explicit discussion of these issues, or else personal psychotherapy, are recommended as ways to obtain help with introspection.

Introspection is difficult or impossible without help.

- “It’s hard to do it on your own. You can introspect on your own and just rely on all this data, but it’s still, it’s easy, you know, for even all that data to get colored by your own values, your own biases.”
- “Self-examination, but that only goes so far when you’re talking about your own biases.”

Personal, long-term psychotherapy is valuable for introspection.

- “Bias...has to do with...your own personal development, examination of countertransference feelings about the people that you’re working with...the best way to get at that is to have your own personal, long-term psychotherapy...because in that process you delve into your own biases and judgments, the way you view the world, how you’re different than others, and how you’re the same.”
- “You have to self-examine with the help of someone else. You really can’t just do that on your own...in that process, you wind up exploring in great detail all of your own personal experiences...It gives you a certain clarity in trying to describe what might have happened to somebody and why it happened in a more, you know, sensible balanced way if you already become very aware of what’s happened to you. And, again it’s hard to do that just alone, you really have to be in therapy for a while.”

Be deliberate about controlling bias throughout the evaluation

Simply controlling whatever existing bias one has that might affect a case was recommended by 60% of this sample. Putting biases aside deliberately and being “detached” was described as the way to be objective.

Conscientiously and actively counteract bias.

- “I’m always concerned about any potential bias and have attempted to counter it if I think it’s active.”
- “And just to, in your preparation, to cognitively, with discipline and professional practice, keep that from being a distraction or a distortion.”

Put aside biases and take the case as it is. Be detached.

- “One has to put aside whatever knowledge and prejudices, biases they might have and take the case as it is...I was able to put that aside, and that’s how I teach student how to put that aside...it doesn’t matter to me what the defendant did or didn’t do or whether he’s guilty or not, really that’s irrelevant to me. So, let’s start from that point in time.”
- “I have a lot of personal biases but professionally I will approach each individual in a very objective, non-emotional manner.”

Be selective about accepting cases while considering the impact of bias(es)

Here again, 100% of the sample agreed. Being selective about which cases to accept is one way to maintain objectivity in one’s forensic work. When a referred case presents an issue that has the potential to activate an examiner’s personal bias(es), that examiner should do what they can to mitigate the effect. At a minimum, the examiner might seriously consider how the case might affect them and pay special attention to their decision processes in the course of that evaluation. They might also seek supervision for cases in which they’re concerned about their ability to remain objective. Other suggestions are to refer to the case to qualified others and to turn down referrals or withdraw from cases when objectivity is (or would be) compromised. Of note, several people mentioned that turning down referrals may not always be possible. Nevertheless, these other

suggestions carry their own weight and may be used as strategies to combat bias when declining referrals is not an option.

Explicitly write down concerns before cases begin.

- “I think about what are the things that could actually bias me. What are the things in this evaluation that I should be particularly concerned with and write them down before hand.”
- “I really feel strongly one way, and I just made a list of all the things of 10 things I want to examine in this case because I think only one of them is really strongly the way that I’m finding my emotions feeling, and so I want to really separate it out and be objective, and I made a list of the 10 things I’m going to look at because of that.”

Consider how involvement might affect professional future.

- “There have been a couple of cases that I declined because I anticipated that I would be asked about them in the future. They were high enough profile and of sufficient notoriety and that kind of thing that I thought I would be kind of held up for ridicule if I participated in them.”

Anticipate to avoid bias: Know what referrals to turn down.

- “So maybe just being aware of things at the beginning so you can appropriately accept or deny referrals that you think would potentially bias you.”
- “I know there’s a few areas I’m pretty biased in; I just don’t do them...I also make it pretty clear to myself that some people just simply disgust me, and there are some cases where I need to hand it off to somebody else.”

Taking a case despite an existing bias requires special attention and effort.

- “In each of those, I continued the case, but what I did was I would have supervision where I would talk with people, and they would usually keep me focused on what the relevant issues were, I think you can reasonably do that as long as you have someone else helping you keep your thinking straight. It’s much harder if you don’t have someone to do that.”
- “I think of myself working very hard to try to be objective about cases...if I found myself repulsed by their actions...I try to monitor that...”

Compromised objectivity may require withdrawal from a case.

- “I realized I [could] no longer function as an objective expert in this case. And so I withdrew.”
- “Once I was retained, I started questioning my biases, my thoughts about whether I could maintain full objectivity. And basically what I did is I just called the attorney after I’d been retained and said, ‘I’m having some questions about how objective I can be.’ So I just withdrew myself from being part of the case...”

Avoid dual roles.

- “I have always evaluated the individuals I have never been involved in treatment of the same individuals. I think that’s where maybe some of the objectivity may be lost when a person does both. And it really should not be done.”
- “[Another psychologist was] involved in a dual relationship and should not have been giving any expert opinions.”

Refer cases not qualified to take, or work under supervision.

- “I don’t think I would participate in a capital case if I were asked to do so. I don’t think I should be learning how to do it as I do it. I think I would say this is not something I’m qualified to do, and I would refer to somebody.”

BE AN EMPIRICIST

As a whole, this sample agreed that sound data should be the heart of forensic assessments. Grounding methods, conclusions, and opinions in defensible data is essential. Using empirically supported methods and instruments is recommended, as is using instruments that minimize subjectivity in decision-making. Critically examining one’s work is also key. Specifically, systematically examining the pattern of one’s decision-making across various cases, being scrupulous about investigating all relevant data (especially potentially disconfirming data), and purposefully considering the evaluation data from competing perspectives prior to reaching conclusions are important.

Be grounded in the science – as an active consumer and producer of knowledge

Making use of science, as an attentive consumer as well as a producer of scientific knowledge, was recommended by 60% of the sample. Clinicians were urged to remain current on scientific issues relevant to their areas of practice, and to use state-of-the-art methods and instruments whenever possible. Using known base rates relevant to the population or issue under study can assist clinician decision-making. Paying attention to the science identifying common areas of clinician bias (see e.g., Murrie et al., 2008; Murrie et al., 2009) as well as the science identifying

strategies for managing bias were described as important. Contributing to the scientific literature is another method identified that may sharpen one's objectivity in evaluations, presumably because writing for others requires effortful and systematic thought processes about these issues.

Be grounded in the science – be scientific.

- “The more grounded you are in the research and in scholarly literature I think the more that insulates you from bias. So as I encounter testimony or colleagues that I find to be biased in nature, at the core of that it's just not very scientific.”
- “The more you read, the more research you do, the more you know about this subject, the more expert you are. And the more systematically you think.”
- “Also, consider base rates.”

Teaching others sharpens objectivity.

- “I take a lot of workshops, I present, I'm on the board of professional organizations, so I'm always interacting with new candidates and new forensic psychologists coming in to the field, and I read their work samples. So, I am inundated, if you will, at every moment, with new stuff and new results and new tests and ways in which that we can be as objective as possible.”

Be aware of common sources of bias and monitor them.

- “Doing everything you can to report with as little bias as possible, you know, being aware of your own biases and how they can influence your own decisions, uh, and not just your own necessarily, but just those that research identifies as potential sources of bias.”
- “I try to be aware of a lot of the clinicians' biases that can come into play.”

Be aware of available strategies to deal with bias and make use of them.

- “A great paper by Borum and Golding that gets into this a little bit, a 93 paper that they identify 10 or 15 strategies. I read that paper very early in my training and so I just built it into my evaluations. So, I have interview templates that I'll use for certain kinds of evaluations and actually had those principles in mind when I came up with those templates.”
- “I worked so hard at simply being detached...I just make such an effort at “I'm gonna be detached, I'm not going to let anything influence me one way or the other, I'm just gonna follow what the literature tells me is the right thing to do.”

Systematically examine patterns of decision-making behavior

Some of the participants (15%) noted that systematically examining one's own decision-making pattern over time may yield insight into potential bias. For instance, always agreeing with

the position an adversarial referral party prefers may be a problem. One participant referred to the use of base rates here as well, explaining how he compares his opinions in MSO cases to the existing literature about what percentage of defendants pleading NGRI are subsequently acquitted as NGRI. Because the pattern of his conclusions numerically parallels the population base rates, he feels confident in his objectivity.

Systematically examine rate of agreement with referral party's preference.

- “I always look to see in all cases that I do, in terms of putting them in categories of cases, do I always find what the attorney hopes I’m going to find...I do a lot of insanity cases, most of them for defense attorneys, and I would say probably no more than 25% of the time do I come up with an opinion that would be helpful for the defense in the case. And, that’s pretty much what the literature shows that if my percentage of finding insanity is pretty close to what a jury finds, I consider that to be pretty much a check on objectivity.”
- “I think it’s important when you’re doing evaluations to see if you’re finding yourself coming down one way more often than not, and then you have to look at why. And do you have a good reason, is it really all these cases that the evidence that you’ve been presented with makes it come this way or not?”

Base conclusions and opinions on sound data

Over half (55%) of the sample pointed to the necessity of grounding conclusions and opinions in valid and reliable data. Not only should these conclusions be clearly tied to the relevant data, but the data should be followed to their logical conclusion. That is, one starts with a “blank slate” and collects and weighs all relevant data before coming to a conclusion. An important element in the data collection process is choosing the best instruments to answer a question – not selectively choosing an instrument more likely to end in a desired result. Finally, incorporating all the data is crucial for objectivity. One must make sense of both confirmatory and conflicting information. Simply including the data that confirms one’s opinion and ignoring disconfirming evidence points to the likelihood of examiner partiality.

Ground opinions in research and data.

- “I do train interns and post-doctoral residents, and I really kind of push them to think about where they are coming up with their opinion, in what data is that grounded so they can anchor, ground their opinion in research and other data sources.”
- “Always questioning one’s opinions and conclusions and are they grounded in data versus feeling or emotion.”

Be true to the data.

- “You go where the data takes you, as opposed to what your instincts are.”
- “I don’t think I really recall anything in particular other than just following the data. You know, the data is what drives our conclusion, whatever the results are of our evaluations, that is the, you know, the results of testing, the results of the interviews, that’s what leads to our conclusions that we make. . .not personal in terms of based on my own personal experiences, it’s based on the results of the interviews and the testing.”

Don’t selectively pick instruments to achieve a desired result.

- “Not simply picking and choosing instruments because you think they’re gonna support what you think.”

Incorporate all data, making sense of supporting and conflicting information.

- “If you have conflicting information you will need to figure out how to explain it but at the same time present both sides.”
- “Spell out all the data, the things that lend toward your conclusion, the things that take away from it and so by the time in a report that you’ve given your conclusion, it’s pretty transparent of what’s supporting your opinion and what’s detracting from it. When I get called [to court] and the attorneys do things to assassinate my reasoning, I can say, ‘Well, look in the report; here’s the stuff in favor of it, here’s the stuff against it.’ You end up with a very defensible product.”

Use structured objective measures with bottom-up methodology

Half of the participants noted that using structured instruments enhances objectivity, especially when the measures are constructed to be used in a bottom-up manner. Objective instruments are designed to minimize error due to individual examiner differences, thereby reducing the effects of any systematic examiner bias. Bottom-up methods are those that incrementally build *up* toward an eventual conclusion (e.g., the Wechsler Adult Intelligence Scale works this way – individual items are scored and the total scaled score yields interpretive value; Wechsler, 2008).

Top-down methods allow more room for bias, because aggregate scores on these measures are not associated with particular interpretations. The Historical Clinical Risk Management Scheme (HCR-20) works this way (Webster & Douglas, 2001). Individual items are designed only to structure professional judgment. Regardless of the endorsement of individual items, examiners weigh the evidence and use subjective clinical judgment to decide whether an evaluatee is a “low” “moderate” or “high” risk for future violence (Webster & Douglas, 2001).

Use objective measures that do not require judgment.

- “I think I can demonstrate that by the objectivity of the tests that I use and the information that I gather so it isn’t just my opinion, but I gather together the opinions and the information that’s available to make it as objective as possible.”
- “I try to use measures which I think are the least vulnerable to change to whoever is using them, so I like structured interviews or structured formats.”

Use instruments with a bottom-up methodology to minimize bias.

- “The PCL-R... is highly vulnerable to an allegiance effect, because as opposed to looking at it as a kind of top-down model, you ask these kind of general questions and then you complete the ratings after that based upon your whole experience of it. You should prefer to have it where it’s bottom-up, where for example, each question is answered and is recorded, hopefully, in a reliable way, and then the aggregate of scores actually helps you to make the determination.”

Scrupulously investigate all relevant data before forming opinions

One hundred percent stated that being thorough in considering data prior to reaching conclusions is vital for objective practice. Deliberately seeking information from multiple sources, seeking out missing information – both confirmatory and especially disconfirmatory, and conscientiously avoiding premature judgments are strategies to rely upon.

Collect all available data.

- “Collect all available data.”
- “Developing no more than a tentative hypothesis until you’ve collected all the data you can collect and to be very thorough and exhaustive in data collection and consider everything.”

Actively consider what information might be missing and seek it out.

- “When I get a look at the data, I just sort of lay out all the data in front of me to see areas that are potentially missing, that seem to be important to me, and I will then contact attorneys and say I need this, that, and the other thing.”
- “I was scrupulous about requesting every piece of information.”

Gather information from multiple parties.

- “I try to rely on as much objective information as I can...in a criminal case, police reports, documentation from hospitals, psychological testing, what the defendant says to me, any other, and that’s really the best way to guard against bias to have broad sources of information...”
- “It’s important to do a lot of third-party interviewing especially with people with whom you are not familiar, to talk to, on both sides of the case, the people involved in the history of the patient or defendant...”

Seek disconfirming as well as confirming information.

- “Actively seeking out disconfirming evidence and trying to find an answer to a referral question, not necessarily trying to support one side or the other.”
- “Seeking disconfirmatory information...let’s say you are convinced that somebody is genuinely mentally ill and has a good defense, so not bothering to get records because you don’t particularly need them. Well, some people would say ‘Well, yeah, you don’t need them because it’s just seeking confirmatory information,’ but, in fact, there could be something disconfirmatory as well so maybe getting a little sloppy cutting things a little bit short out of some sort of misplaced confidence or whatever.”

Conscientiously avoid rushing to judgment.

- “You just gotta really watch yourself from pre-conceived notions about the way defendants are or people are in certain cases.”
- “Don’t make a rush to judgment. Always be open to the data, because the data that you get from one person or the hypotheses that you’re beginning with may not in fact be hypotheses that are supportable or most accurate when you have the rest of the data.”

Critically examine conclusions

Every person in this sample agreed that examining conclusions with a critical eye is important for ensuring the effects of bias are minimized. Actively considering the evidence from other points of view and generating alternative explanations is encouraged. One way to do this is to

generate the kinds of questions cross-examining attorneys might ask. In fact, simply reminding oneself that cross-examination is impending is offered as a strategy for minimizing bias.

Generate competing hypotheses.

- “Consider alternative hypotheses, actively...look at it from different perspectives so that you can, hopefully, come to a conclusion that’s as balanced and fair as you can make it.”
- “Potential bias has to be counteracted by testing alternative hypotheses, critical thinking.”

Critically examine whether conclusions are sound.

- “Are my conclusions sound, am I pushing the limit of what is understood about mental illness in terms of my conclusions...”
- “I try to distinguish between the data that I gather, the inferences that I develop from the data, and then my final opinion. At some point, it does kind of come down to your judgment even though you might have a lot of data. At that point when you’re making your own judgment, after gathering all this data, that’s the point at which I think pretty hard about how objective it is, how it fits in with the person, how it fits in with the question that I’m being asked by the courts, you know, any other biases.”

Keep in mind cross-examination.

- “I testify a lot, so what I have to do is constantly think about have I entertained rival hypotheses, did I kind of set upon a road kind of single-mindedly without entertaining another possible hypotheses and so, with an eye toward cross-examination and those kinds of things. So that, in and of itself, kind of keeps you as grounded in defensible work as possible.”
- “Making sure that I’m thinking along the mindset of, I mean it’s helpful for me to, even if I’m not going to testify, to think along the lines of how would I be cross-examined about this, can I defend my opinions in research and literature and best practice and valid diagnostic considerations, have I entertained rival hypotheses.”

APPROPRIATELY LIMIT INVESTIGATIONS AND CONCLUSIONS

Reaching conclusions and opinions that are not supported by case-related data or the state of psychological science itself raises the specter of examiner bias. To promote objectivity, it is recommended that forensic examiner restrict their conclusions to the data and science available, and that unclear referral questions be clarified.

Restrict conclusions or opinions to the available data

Roughly one third (30%) discussed how limiting conclusions to the data available is an essential piece of objectivity. Going “beyond the data” leads to speculativeness, which doubtless is influenced by subjective cognitions and attitudes.

Do not go beyond the data.

- “Restrict conclusions or opinions to the data that you have and be very upfront about your confidence limitations, that you don’t try to overstate something.”

If necessary information is not accessible, limit conclusions accordingly.

- “If somebody puts one over on me, says all the data is in and it isn’t, and I get on the witness stand, I will concede that my opinion could well be different if I had this different data that I didn’t have.”
- “If attorneys refuse to give information to me or say it’s not available, then I basically say then I can’t give an opinion, or I can give an opinion that’s very limited, and I’ll qualify my opinion by saying I can’t be sure of this because the following pieces of data were missing and then it turns out that they don’t use me because they don’t want those kinds of qualifications in the report.”

Do not go beyond the science

Similar to the previous issue is restricting conclusions based on the state of the science. Recognizing the limitations of psychological knowledge is an important step in providing objective opinions. Reaching “scientifically-supported” opinions in cases in which the science is not far enough along to support reaching any such opinion leaves room for examiner bias to evidence itself.

Recognize the limitations of psychological knowledge.

- “There are areas in which I will not do work, largely because I believe that the law is so imperfect...sexual predator evaluations...I just turn them down because of the fact that I just don’t think the research is good enough in the area to reach any definitive conclusion.”

Limit the scope of inquiry and report to answering the referral question

Paying attention to the reason for the referral and addressing only that reason in the evaluation and report are consistent with objectivity (35%). Including information irrelevant to the

referral issue may indicate bias (e.g., reporting on the details of grisly criminal behavior is probably irrelevant to an adjudicative competence evaluation). Limiting the scope of inquiry to the referral issue may be a skill that develops – understanding the legal question and criteria related to most referrals is a first step. Another element is knowing when referrals need clarification. Failing to clarify vague referrals leaves room for examiner subjectivity to dictate the course of the evaluation.

Only include information relevant to the referral issue.

- “Think about what the actual question is they’re answering is and what data is relevant to that and what data isn’t relevant to it.”
- “[A supervisor thought I] lacked objectivity in a case because I was reporting information or putting information in the report that she believed didn’t bear directly on the issue...”

Understand the legal question and limit the scope of inquiry to that issue.

- “First understanding the legal criteria that you’re asked to address... Definitely knowing the legal criteria and sticking to them regardless of whether you think the criteria are the right criteria or not.”

Try to clarify vague referral questions.

- “To the extent that what you are being asked to address becomes specific, I think it gets easier, but sometimes I know these are asked in very broad stroke ways, when I think it would be very easy, without meaning to, to oh, gloss over evidence... without even meaning to shove it in one direction or the other.”

DEVELOP PROCEDURAL SAFEGUARDS TO USE THROUGHOUT EVALUATIONS

Relying on standard strategies for bias reduction can enhance objectivity. Using systematic and structured methods in data collection and report-writing, taking time to think about the case before writing the final draft of a report, taking careful notes, editing reports for judgmental language, and consulting with professional colleagues regarding potential problems are strategies that can be used as standardized procedures in forensic work.

Use systematic and structured methods

The methods employed to reach conclusions in forensic evaluations are important. Twenty percent of this sample indicated that objective conclusions follow systematic and structured methods, which are designed to minimize the effect of bias.

Procedural safeguards are important to reduce bias.

- “And they kind of need to have procedural safeguards in place to help you perceive that.”

Be objective in the data-gathering process.

- “Remain objective in the data gathering.”

Use a systematic model of decision-making and argument construction.

- “I have a pretty well thought out and articulated reasoning approach that I use to kind of correct my thinking. It comes out of this one specific book that I read in graduate school that I tend to rely on that. I pretty much employ it in the thousands of reports I’ve written over the years...And, I kind of like relying on a model rather than just going off the top of my head... it kind of forces me to go through a process of thinking things through and thinking about how my thinking might be incorrect.”
- “I read [a particular] paper very early in my training and so I just built [its suggestions] into my evaluations. So, I have interview templates that I’ll use for certain kinds of evaluations and actually had those principles in mind when I came up with those templates.”

Spread the evaluation out over time

Spending inadequate time thinking about a case and reaching conclusions prematurely was discouraged by 15% of this sample. These participants argued that seeing the evaluatee on more than one occasion is important for holistic data, and that taking time to think through the essential issues before putting words on paper allows for better information processing and may reduce the effects of bias on conclusions.

Work on the case and meet with the evaluatee on more than one occasion.

- “Looking at the case on more than one occasion is key, I never want to look at a case less on two occasions and interview [or test] the person on less than two occasions, but the more times the better.”

Allow some time to pass during an evaluation for information processing.

- “And I think, too, just letting some time pass. There’s a number of people we have who will dictate a report the last day that they see someone. I think if you can, it’s important to start the report while things are fresh in your mind, but then not really finalize it until you’ve kind of let it gel a little bit more, just see some other people, in the meanwhile and then go back and look at it again, and at that time, maybe even go through some of the key notes and testing and findings...”
- “Ensuring that when you’re writing the report that you are doing the evaluation that you are arriving at your decisions *later* in the course of the evaluation to reduce any forms of bias.”

Take careful notes and rely on them

Documenting the evaluation process by taking detailed notes was suggested by 15% of the sample. These participants described how trying to rely on memory rather than relying on notes written in-the-moment poses problems for objectivity, because it is likely easier to remember pieces of information consistent with developing opinions. It might be harder to recall disconfirming information, and therefore bias may have a chance to creep in.

Take careful notes (do not try to rely on memory).

- “I be sure to be writing everything down instead of trying to rely on memory.”
- “Relying on memory alone and thinking that just using your memory is sufficient instead of writing down notes, that becomes almost a bias in itself, thinking that ‘I shouldn’t be taking notes because I need to look at them in the eye, I need to pay more attention, I don’t want to record it’ and so on.”

Carefully review notes.

- “Reviewed my notes quite carefully to make sure I hadn’t missed something.”

Attend to wording choice in reports to edit out value-laden language

Most participants (60%) discussed the importance of communicating information in an objective manner. Specific strategies toward this end include 1) aiming to write a report not easily identifiable as being commissioned by an adversarial party and 2) deliberately choosing words that do not convey judgment.

Write the report so that no one can tell who hired you.

- “I would define it as when you read the report you can’t tell who hired you. I mean that’s really what it comes down to, when you read the report, you can’t tell which side hired you because you have presented it so objectively. And actually when I do my reports, I try to go back over them with that in mind.”
- “Sit back and read your report. If someone can sit back and read your report, and they can’t tell who wrote it, then that’s good.”

Present information in an unbiased way.

- “I make very certain that if I use a word like ‘claimed’ that I’m not inadvertently selecting a word that’s going to call some question into what the person said and really trying to use neutral language, ‘said,’ ‘stated.’ And on the flip side, if I say ‘reported,’ do I really mean to imply that this was an accurate report, and I need to be very careful about that. So, all the things that go into both trying to collect the information in an unbiased and then to present it in an unbiased way as well.”
- “I thought that I was being quite objective and especially in the way that I reported it. It was a very neutral tone and kind of sterile...And so I used the minimal number of lines necessary to explain what his history was...things that I’m going to say I think they don’t need to include this or this is too much information that it becomes prejudicial at this point and has no probative value and so on...it differs depending on the type of evaluation...”

Ruthlessly edit reports and keep a keen eye out and for value-laden language.

- “I also keep a keen eye out for sort of pejorative or value-laden language in reports and really try to completely make sure that that gets edited out.”
- “Taking out those words or phrases that might demonstrate a bias or reveal a bias. You know, how you described a person who wore a low-cut top or something. You can do it matter of factly or you can do it kind of like they were really seductive and leading it that way.”

Actively consult on cases

Consulting with trusted colleagues was recommended as a way to encourage objectivity by every participant in this sample. Discussing difficult issues with professional peers is encouraged as a way to resolve ethical quandaries (APA, 2002). If the ethical issue is one of potential bias, seeking peer-review of de-identified reports is suggested as a method by which to counteract bias.

Consult and discuss with others.

- “I try to do a fair amount of consulting with colleagues so that I try to provide them, as much as I can, information that is not tainted by my own impressions, and I try not to lead on as to what my thoughts are so that I can get some of their impressions independent of mine.”
- “So I do a lot of consulting with other professionals that have a lot of experience. I generally consult with people who have more experience than me when I have any questions about how to resolve any kind of bias I may be dealing with, or ethical conflicts, I’d say consultation is the primary thing.”

Seek peer-review by having colleagues read de-identified reports.

- “I ran my report past a couple of different people and took their suggestions very seriously about ways in which I should edit, and actually in both directions; you know, times when I thought I was walking on eggshells and then other times when I’d think I was a little too harsh, for lack of a better word.”
- “Then having colleagues read or at least see my final report without names attached to it. That’s one of the best things you could do.”

DISENGAGE EMOTIONALLY FROM CASES

Emotional disengagement was recognized by everyone in this sample as an important element of objectivity. Developing ways to compartmentalize one’s work, fostering desensitization, limiting empathy and rapport, and distancing oneself from the outcome of cases were discussed. Avoiding advocacy and protecting oneself from the subtle influence of others interested in a particular case disposition (e.g., retaining attorneys) were recommended. Specific strategies for resisting allegiance effects include developing financial referral-based independence, seeking referrals from various parties, and conducting evaluations and writing reports without extensive discussion with others interested in the outcome of the case.

Moral disengagement

Disengaging emotionally from the case and from the evaluatee was described as a strategy to distance oneself from potential bias (100%). Fostering this desensitization was encouraged, by developing ways to compartmentalize work from personal attitudes and by distancing oneself from following the outcome of the case. Emotional disengagement and distancing are consistent with the

tenets of moral disengagement theory, a descriptive theory of how people dissociate themselves from their moral agency in order to participate in difficult activities, including inhumanities, that they otherwise might not (Bandura, 1999).

Moral disengagement as a strategy to disengage from bias.

- “I’m very, very aware of my job; it’s to provide information to the jury who makes the decision, not decide a case, and I really believe that to the core of my being, and so, I try very hard to keep that message in the forefront for myself.”
- “We’re trying to apply behavioral science theory, practice, and literature to specific points of law, and we’re not really responsible for outcomes. We are just part of the process of conflict resolution without an ax to grind, say as a clinician when you want somebody to get better, you want to help them, that in forensic practice, not that you want people to get worse or be unhelpful, but that the real objective is to be part of the process of how justice is administered.”

Foster desensitization and emotional disengagement.

- “Don’t care about the outcome, or be detached.”
- “I tap into my own psychopathic background in which I just don’t have any empathy for one side or the other...I’ve just been desensitized to the issues. I think part of it is just the more one works in the field, the more one sees, the less one is surprised by, you know, what defendants have to say or prosecutors or whomever.”

Develop strategies to compartmentalize work from personal attitudes.

- “So, it’s just the ability to compartmentalize one’s own biases and be able to hold them at bay and not be guided by that when doing evaluations.”
- “I do not watch any reality shows or any dramas on television that have anything to do with any type of work that I do professionally...I’m not at all interested in any made-up crime dramas or CSI or whatever other shows are on television dealing with a similar type of individuals that I evaluate professionally...I cringe at some of the ways they portray some of these situations, certainly when it comes to any dramatizations or documentation of things like child abuse or child death [or rape]. I have no difficulty evaluating/interviewing individuals who have engaged in this, whether they’re shackled or however they are sitting in front of me but I have great difficulty watching it on a show. I think if it’s done for entertainment purposes I absolutely refuse to watch it. Because to me it’s not entertainment. That’s a way of compartmentalizing it.”

Distance self from the case disposition.

- “I’ve had to learn that I’m there to give my opinion, but I have to put a certain degree of distance me and the outcome.”

- “Part of how I try to level of common safeguard is to not know the outcomes. I mean, if it was a high profile case, if it was going to be in the newspapers or something, I would find out about it, but otherwise, I don’t know how it turns out. So, I’m still there to answer the questions in the same way that I would if it was testamentary competency or any other issue.”

Limit therapeutic empathy and rapport

Related to the notion of disengaging emotionally from the case and the evaluatee is the suggestion to limit therapeutic empathy and rapport in forensic evaluations (30%). These participants recommended that forensic evaluators approach evaluatees’ verbal reports with skepticism. Further, being “warm and fuzzy” was discouraged. Instead, these psychologists believe that neutrality and emotional distancing preserves objectivity.

Approach with skepticism.

- “I always watch for exaggeration or feigning of symptoms...”

Don’t be warm and fuzzy.

- “As a forensic psychologist, you just have to buy into the notion that if you are making a contribution to the justice system and how that works, that that is helping people. But, you can’t become real concerned about helping a specific person, and I think if folks can’t buy into that, if they have that sort of strong need to nurture or to get feedback, I don’t think forensics is the field for them to go into. And, most of forensic psychologist colleagues that I have, we admit we’re not the warmest and fuzziest of guys. We may have been at one point, but we’re not anymore.”
- “You have to maintain some empathy and rapport in order to do an evaluation or even get somebody to complete an evaluation. But at the same time, you have to let those feelings, to the best you can, not impact your objectivity in forming your opinion. I think that’s one of the difficult things that I find interfere with the work.”

Avoid advocacy

Advocacy was largely perceived as problematic for objectivity (65%). Psychologists who unabashedly advocate for the preferred opinion of an adversarial referral party risk being perceived as a hired gun; that is, they risk being perceived as if their objectivity were compromised. To avoid that perception (and perhaps that reality), seeking to be hired by the court as opposed to an

adversarial party was suggested. If one is hired by an adversarial party, advocating and attempting to persuade was described as a problem by several psychologists; however, a few respondents took a nuanced approach to the advocacy issue. These participants suggest that psychologists can advocate for their opinion (and try to persuade), so long as their opinion developed independent of the advocacy position of the evaluatee. This position is consistent with the argument by Greenfield and Witt (2005) that the advocacy position of an evaluator is to his/her professional forensic opinion rather than to the evaluatee.

Avoid being perceived as a hired gun.

- “I worked hard to make sure that I was not perceived as a hired gun.”

Be hired by the court instead of an adversarial side.

- “I do believe that court appointments heighten objectivity, because there certainly is, and there’s been quite a lot of writing lately about so-called allegiance bias.”
- “I try to be appointed directly by the judge and not be appointed through one side or the other. I think that reduces any pull you feel towards one side, potentially, you know, whether conscious or unconscious.”

Avoid advocating and the temptation to persuade.

- “Don’t try to persuade, even as an expert witness – if you do so, you aren’t detached from the case.”
- “Avoid having an ultimate opinion so you won’t be tempted to try to persuade.”

Advocate for your opinion rather than for the referral party.

- “I’m always an advocate for my own opinion, but I think there were times early on in my career where I might have been an advocate for one side or the other, and that’s a mistake.”
- “I’m very aware that witnesses, especially expert witnesses, are supposed to be impartial. We’re there to provide information to the jury, not to advocate for one side or another.”

Resist allegiance effects

Finding oneself in allegiance with other(s) who have a special interest in the outcome of a case poses problems for objective decision-making (100%). Thus, it was recommended by everyone in this sample that psychologists take care to protect themselves against the subtle influence of

outside pressure on their decisions. This pressure can come from colleagues within an institution, from finding oneself allied with an adversarial attorney, and even from discussing the case at length with the retaining party. Specific strategies include seeking referrals from both the prosecution and defense (or the court), conducting the evaluation and writing the report without extensive discussion with the referral party, and developing financial referral-based independence. Being financially dependent upon a particular referral stream may make one less able to resist the subtle pressure to “please” the referral source, in order to obtain additional future referrals.

Protect self from subtle influences of colleagues.

- “Familiarity with some of the people involved in the facilities and of the system and not letting their influence, there’s certain people I have a more positive viewpoint of than others, in terms of their intentions and skill level and the way that they look at cases.”
- “You gotta kind of look at, especially if you’re in a team environment, who else is influencing you and the attorneys, because we’re in not just treatment team-based environments but in institutional facility-type environments where there’s also external influences through forensic review boards, through attorneys and judges in various counties and so forth.”

Protect self from allegiance with the retaining party.

- “I have also worked for attorneys who were always trying to swerve or push you in the direction of abdicating for their client rather than being objective.”
- “Defense attorneys and prosecutors who I value as colleagues and who I want to think well of me – I always have to be on the lookout for not getting too closely allied with them, either as I’m preparing something or as the case is unfolding...”

Develop financial referral-based independence.

- “I have the good fortune of having a tremendous amount of work to do, and the good part about that is that if my opinion is not particularly favorable to somebody, I’m not particularly worried about it. That’s an advantage of having a lot of work to do and having a practice that’s national in scope. Even if a jurisdiction gets unhappy with me, there’s so many other jurisdictions I work in it doesn’t impact me. That gives me a degree of financial referral-based independence that many psychologists don’t have.”
- “You know I work in a college so I only do one or two forensic evaluations or three or four a year so I get to choose a little bit better than people who have to base their economic survival on the forensic evaluations they do.”

Seek referrals from both plaintiff/prosecution and defense.

- “Go out of our way to get referrals from both prosecution and defense.”
- “I try to make myself equally available to prosecution and defense.”

Evaluate and write report without extensive discussion with attorneys.

- “Evaluate and try to write the report without extensive discussion with the attorney.”

Practicing with no pressure to be partial is important.

- “It was up to me to make my own judgment and I was never pressured in any way to come up with a different answer to the one I came up with. I think that was the most important part of my training there. I have been in other situations where I feel like the objectivity has not been viewed as positively with the people I have worked with.”
- “Since I worked at a state facility initially, we really did have that luxury of being completely neutral, and there was, you know, no fall-out from however we thought things went, so there wasn’t any pressure to go one way or another. I think that was helpful as well along with the explicit messages.”

Discussion

The occupational socialization processes of psychologists working in forensics varied widely across time and situation. As the field has developed and grown, the “typical” psychologist working in the field has received increasing amounts of specialized training related to forensic decision-making. Socialization specific to objectivity also varied quite a bit. Most psychologists described receiving either formal or informal training about objectivity; however, fewer people were able to describe specific strategies learned didactically about *how* to manage biases. Training about objectivity and how to mitigate bias were considered important by these psychologists, and several of them stated that supervisors and teachers have a responsibility to encourage bias consideration and incorporate lessons about how to manage bias.

The debate about the value of using clinical therapeutic skills in forensic work (e.g., developing rapport, conveying empathy) emerged several times and was relevant to most of our research concerns. The field appears to be somewhat split on this issue: some psychologists

think that using these skills is appropriate and even necessary in forensic work, and others think using these techniques are manipulative and unethical.

It was clear from these data that clinician insight into bias varies – both intraindividually and interindividually. Everyone believed they themselves practiced objectively; and almost everyone believed colleagues were more biased than themselves. Perceptions about the difficulty of being objective varied. Some indicated being objective is relatively easy, once one understands one’s biases. Most others described how “pure” objectivity is an aspirational goal – one that is unattainable – but one that should be constantly striven for anyway.

Several heuristics can trap psychologists and allow biases to influence their decision processes. We saw evidence that the confirmatory bias (Borum et al., 1993; Martindale, 2005; Nisbett & Ross, 1980) was recognized as a problem by these participants. In addition, what McCammon (2004) calls the “acceptance” heuristic was also recognized as a problem for objective forensic work. The acceptance heuristic is the tendency to engage in activities we think will get us accepted or at least noticed by people we like or respect, or by people who we want to like and respect us. Discussion of this acceptance heuristic revealed both positive and negative effects on objectivity. On the positive side, participants who described joining professional organizations and taking pride in one’s profession can bolster objectivity by making salient the high expectations of professional peers often present in these groups. However, the acceptance heuristic also parallels the warnings issued by participants to resist the subtle pressure to reach opinions preferred by the referral party (e.g., the allegiance effect).

Several procedural safeguards were recommended as ways to minimize the effects of bias. Some of these included basing opinions upon all relevant data, relying on objective and standardized methods, relying on sound and scientific data, spreading the evaluation out over

time, taking careful notes, editing out pejorative language in reports, strictly addressing the referral question, critically examining conclusions, and avoiding dual roles. Other strategies offered to enhance objectivity include developing a degree of humility about one's ability to be objective and consulting with trusted colleagues about issues of bias when they arise.

Knowing oneself and having insight into one's biases is a major step toward mitigating the effects of bias(es). Systematic and honest introspection – on a regular basis – and preferably with the help of others (e.g., collegial consultation and/or personal therapy) can help one develop insight into potential objectivity barriers. A second major way to mitigate bias is to effortfully control any existing bias or to refer the case to another qualified psychologist.

One thing that emerged as quite clear from these data is that other people have an influence over psychologists' attitudes and behaviors in forensic work. Several ways in which psychologists thinking can be “shaped” by interested others include developing an allegiance with an adversarial retaining party, as well as the preferences of colleagues and superiors within a mental health system. However, other people can also help mitigate the effects of biases. Consultation with trusted colleagues was described as an important safeguard against bias. Asking for feedback on reports from colleagues can reduce biased language and conclusions. Even simply being around and “rubbing shoulders” with respected others (e.g., at conferences, in organization membership meetings) can heighten one's motivation to do objective work.

The psychologists in this sample were acutely aware that the advocacy position of forensic psychologists is not to the evaluatee (who is not the evaluator's patient and thus the protections of the doctor-patient, or therapist-patient relationship do not apply; Greenfield & Witt, 2005). Further, this sample was also acutely aware that the advocacy position of forensic psychologists is not to the retaining party (i.e., this is the so-called “allegiance effect”). Rather,

the advocacy position of the psychologist is to his/her professional forensic opinion concerning the forensic issue under consideration (Greenfield & Witt, 2005).

One of the most compelling findings of this study was what we term “The Economic Effect.” This effect was frequently discussed as a serious impediment to objectivity. Money can influence one’s thinking processes and can skew conclusions and opinions. Psychologists who described this effect pointed to the business aspect of practice. Forensic psychologists “have bills to pay,” just like any other business. As such, reaching conclusions and opinions that negatively affect one’s referral stream may have an adverse impact on one’s bottom line – the financial stability of one’s practice.

After completing an evaluation, the mental health professional communicates his/her findings, conclusions, and opinions to retaining counsel or to the Court (Greenfield & Witt, 2005). In civil evaluations, retaining counsel (representing plaintiff or defendant) has the choice to use that opinion or not – functioning as a gatekeeper of the psychologist’s work product. In criminal cases, the defense has the discretion to “bury” the retained mental health professional’s findings, but the prosecution does not: the prosecution is obliged to disclose the psychologist’s findings and opinions, whether they are consistent with their expectations and wishes or not (Greenfield & Witt, 2005; Gutheil & Appelbaum, 2000).

Being financially dependent upon a particular referral stream may enhance the effects of advocacy, through subtle pressure to “please” the referral source and secure additional future referrals. Thus, this “Economic Effect” might be strongest for psychologists who are routinely hired by the prosecution in criminal cases. Several psychologists reflected on their good fortune to not be financially dependent on forensic evaluations or having a large enough practice that displeasing a particular jurisdiction or referral body would not adversely affect business. Thus,

developing financial referral-based independence was offered as a strategic solution for enhancing ability to do objective work.

Limitations. This study suffers from the limitation of all self-report studies in that social desirability may have influenced the participants' responses. This effect may be exacerbated by the interview format of the study – the interviewer knew the identities of the respondents, and the interview was conducted in vivo (by telephone). These pressures (lack of anonymity, live interview format) may have enhanced self-serving responses and motivated some participants to withhold important information. The self-serving bias makes it likely that our data has missing links between the attitudes and behaviors we discussed. Reported attitudes may differ from actual attitudes, and likewise, reported behaviors may not correspond to actual behaviors. Further, the responses were potentially shaped by the interview questions. With different phrasing of questions, other data may have emerged.

The sample for this study was a group of ABPP certified clinical psychologists specializing in forensic-clinical work. ABPP certification is an arduous credential to obtain, and ABPP-certified psychologists are often perceived as some of the most qualified and respected forensic clinicians in practice. As such, the responses of our participants may not generalize to all clinicians working in forensics, or even all ABPP certified forensic clinicians, as these are the people who volunteered to participate. Thus, they may represent a self-selected sample of psychologists willing to discuss their experiences with objectivity – a fairly sensitive topic. These participants may differ in important ways from other clinical-forensic psychologists, or even from other ABPP-certified forensic psychologists who were not comfortable sharing their personal experiences.

Implications for future research. Based on these results, several questions became more focused and lent themselves to quantitative analyses for the follow-up study. Most compelling (and

unexpected) was the richness and originality of the bias correction strategies offered by participants. That research concern generated far more text to qualitatively analyze than any other research concern (see Table 5). The wealth of data allowed us to create a scale, and we examined the psychometric properties of this new ‘Bias Correction Strategies’ scale in study 2. We developed two specific hypotheses about the relation of this scale to other measures (Study 2 Hypotheses 9-10).

Moral disengagement (Bandura, 1999) was discussed by most of the people in this sample, although this term was never used. This mechanism may be what psychologists use to “effortfully control” existing biases. Disengaging oneself from the emotional and personal elements of cases as well as the outcome of cases, and diffusing responsibility for the case outcome to justice-system functioning were common strategies described for objective work. Socialization into the tenets of moral disengagement by professional colleagues appears to be common. The frequency with which this concept emerged prompted us to add a measure of moral disengagement (Osofsky, Bandura, & Zimbardo 2005) to study 2, in order to examine quantitatively how this measure related to other variables (Study 2 Hypotheses 8 and 10). Study two was designed to address some of the limitations of this first study and to quantitatively investigate these newly identified research questions.

STUDY 2

Method

This second study was built on and extended study one by including additional measures in a large national survey. Hypotheses about assessment biases and attempts to correct for them were refined from the qualitative analyses of study one. Several scales were included to measure quantitatively occupational socialization experiences, death penalty support, moral disengagement, bias correction strategies, and demographic characteristics (including whether or not respondents do capital case work). The measurement of moral disengagement and endorsement of bias correction strategies was included based on the findings from study 1.

Participants. A mailed survey was sent to 962 forensic psychologists. The American Psychological Association (APA) website directory was utilized in an attempt to generate 1000 randomly selected participants who were clinical forensic psychologists. To search the directory, “Division 41” (American Psychology-Law Society [AP-LS]) was entered into the appropriate field, and “Clinical Psychology” was selected from the “current major field” pull-down menu. This search yielded 878 names and addresses. To obtain additional participants, the “current major field” was reset and instead a different search was conducted, in which “clinical” was selected from the “area of interest” pull-down menu. This second search produced 10 additional unique names and addresses. Third, the area of interest menu was deselected and in the certification field, “ABPP-Forensic” was entered, which yielded 65 additional unique participants. Finally, the certification field was deleted and in the Degree Major Field, “Forensic Psychology” was selected, which provided 9 additional unique participants. Thus, 962

participants with clinical-forensic interests were identified through the APA directory and became the sample for this study.

Of the 962 surveys mailed, 489 responses were received (including completed surveys, refusals, and undeliverable returns). Of the 489 responses, 342 were completed and are included in these analyses. The completion rate was 40.28% (962 mailed – 113 returned as undeliverable = 342/ 849). Roughly one-tenth (113) unopened surveys were returned by the post office citing various reasons (e.g., forwarding order expired, person no longer at the address, undeliverable as addressed). One uncompleted survey was sent back by the recipient, as it was a duplicate. Another uncompleted survey was returned by the intended recipient's secretary, who made note that her employer had died and she requested his name be removed from this mailing list. Thirty-three people refused to complete the survey, for various reasons. Five of these people indicated they were retired and too far removed from practice to respond meaningfully. Eight respondents stated they were not "forensic psychologists" and thought the questions were not relevant to their work. Three indicated they never complete surveys. One person stated the survey was "too long to complete." Two surveys were marked "refused" with no further information provided. Ten people sent the enclosed dollar bill back in the self-addressed stamped envelope, with no further information provided.

Five people responded negatively in their written refusals: 1) "Sorry – I do not agree that this is doctoral level research. I disagree with your faculty on this," 2) "Nonsense," 3) "The questions on the survey I received are not consistent with the study's stated purpose. The \$1 is returned herewith," 4) "Before sending anyone a questionnaire task you should secure a prior agreement for such. The enclosing of a dollar bill might be expected from a high school student or an unguided undergraduate," and 5) "I am returning these materials to you, because I have no

interest in completing your survey. I am not required to complete your survey, and being sent a dollar does not change mind. Please do not make any further requests of me of any kind.”

The sample of respondents completing the survey was largely Caucasian (90.6%). Other ethnicities reported included 4.8% Hispanic, 1.2% African-American, 0.8% Asian, and 2.4% Other. Most of the respondents were male (69.9%; 30.1% female). The average age of participants was 59.27 ($SD= 9.50$). The majority of participants reported their highest degree earned was a Ph.D. (81.9%), followed by Psy.D. (13.6%), Joint J.D./Ph.D. (2.4%), and Other (2.1%; including Ed.D., J.D., Master’s Degree, and “CBSO”). Participants in this sample evidenced a number of years of experience, with a mean of 22.45 years conducting forensic evaluations ($SD = 9.67$). Almost thirty percent (28.8%) reported being certified by a specialty board (71.2% did not).

Previous research with both APA members and those who are not APA members indicate APA membership is representative of all doctoral-level clinicians with respect to demographic characteristics, education, and employment (Center for Mental Health Services, 1996; Howard et al., 1986, Stapp, Tucker, & VandenBos, 1985). Stapp, Tucker, and VandenBos concluded that the APA membership database is sufficiently representative of licensed clinicians to use the member database for policy research.

Materials

Forensic Psychologist Questionnaire (FPQ). The FPQ was designed specifically for use in this study (see Appendix B). Questions inquired about type of employment, highest degree earned, where and how participants received their training, years of experience (general and forensic), professional focus, percent of practice in forensic evaluation, forensic board certification, the primary state in which they practice (and other states in which they are

licensed), whether any state in which they practice administers capital punishment, whether they do capital case evaluations (and why or why not), whether they are usually hired by the state or the defense (and opportunities to be hired by each side), in what types of cases they are usually involved (i.e., civil or criminal), experiences in capital case evaluations, willingness to accept specific referrals in capital cases, and gender, age, and race. Questions regarding participants' beliefs about objectivity and bias management were included based on the results of study one., Items inquiring about one's ability to practice objectively, thoughts about the use of empathy and rapport in forensic work, training received regarding objectivity, and strategies for bias management were specifically added.

Occupational Socialization Scale (OSS). The OSS is a 20-item scale designed specifically for use in this study (see Appendix C). Most items were adapted or drawn from three different scales, and the original version of this scale contained 27 items. Six items were adapted from Haueter, Macan, and Winter's (2003) Measurement of Newcomer Socialization Scale, which was originally designed to measure the socialization of newcomers to an organization. For the purposes of this study, the items were reworded to reflect socialization of psychologists who do forensic evaluations. Eleven items were drawn or adapted from Chao and colleagues' (1994) Socialization Content Questionnaire. These items tap into the degree to which the respondent holds values similar to the profession; is familiar with the history, language, and politics of the profession; feels proficient in his/her performance; and the degree to which he/she socializes with the people in his/her profession. Seven items were drawn from Gould's Career Planner Scale (1979). The items were designed to measure the degree of career planning, involvement, and satisfaction. The remaining three items were developed to capture constructs unrepresented by the items available in other scales (e.g., testifying self-efficacy and

training in objectivity). Items are answered on a seven-point Likert-type scale (1, *strongly disagree*, to 7, *strongly agree*) with higher scores indicating greater occupational socialization.

Prior to being used in the full survey, this scale was pretested with a group of 21 forensic psychologists to determine the reliability of the scale (Cronbach, 1951; DeCoster, 2000). The initial validation allowed examination of the scale's reliability. An internal consistency alpha coefficient was estimated for the 27-item scale, which yielded an acceptable value of 0.8 (Cronbach, 1951). After examining the initial item pool, 7 weak items were deleted. The resulting 20-item scale had good reliability, with an alpha of 0.85.

The pilot study explored other psychometric properties of this 20-item scale as well: its construct validity was explored by comparing its performance to the three other occupational socialization scales described above (Chao et al., 1994; Gould, 1979; Haueter et al., 2003). Zero-order correlations for the total score with each of the other three socialization scales were calculated. Criterion-related validity was demonstrated in that the correlations between the Occupational Socialization scale and the other three socialization scales ranged from 0.51 to 0.71. The direction of these correlations was positive, and the magnitude was strong, indicating that the new socialization scale tapped into a closely related construct of the established scales.

The pattern of correlations between this new socialization scale and the subscales of the other measures yielded interpretive insight regarding the convergent and discriminant validity of this new occupational socialization scale – indicating this new scale does indeed tap into areas the existing scales could not. Higher correlations were observed between those subscales of the existing measures theoretically more related to the new socialization scale, and those subscales theoretically less similar to the new scale are lower.

The new scale had a strong positive correlation with task socialization (e.g., “learning the ropes”) on both the Newcomer Socialization Questionnaire – Task subscale (Hauter et al, 2003, $r = 0.58$) and Socialization Content Questionnaire – Performance Proficiency subscale (Chao et al., 1994; $r = 0.72$). The new scale also had a strong positive correlation with a subscale measuring strength of career involvement (Career Planner Scale – Career Involvement subscale, Gould, 1979, $r = 0.67$). Much lower correlations were obtained between subscales less relevant to the purpose of the new scale. For instance, the new scale’s correlation with Hauter and colleagues (2003) Group socialization subscale was 0.34, is 0.36 with Chao and colleagues (1994) Politics subscale, and -0.20 with Gould’s (1979) Adaptability subscale, which taps into how people adjust to changes in their job. These issues (“group” socialization, political issues in the field, and adaptability to change in job tasks) appear to be less relevant to the socialization processes of forensic psychologists than learning how to do one’s work and becoming thoroughly involved in one’s work.

These patterns of correlations showed sufficient construct validity to move forward and use the new scale in the large survey for study two. The new scale was positively related to other existing occupational socialization scales (evidencing construct validity). It was differentially related to subscales theoretically more consistent with the purpose of the new scale (demonstrating convergent validity) and subscales less consistent with the purpose of the new scale (demonstrating divergent validity). The magnitude of the differences in correlations between similar subscales and dissimilar subscales suggested this new scale was sufficiently valid to use it for the purposes proposed.

Internal consistency estimates of reliability were examined for the new Occupational Socialization Scale for study two. The coefficient alpha value (0.85) fell into the acceptable

range of > 0.70 (Cronbach, 1951). Because alpha coefficients have been criticized as imperfect indicators of internal consistency due to their reliance on the number of items and to inter-correlations among the items (see e.g., Cortina, 1993), the average inter-item correlations were calculated to establish internal consistency values. Average inter-item correlations are not dependent on number of items (Clark & Watson, 1995; Cortina, 1993). The average inter-item correlation value for the Occupational Socialization Scale was 0.25, well within the recommended benchmarks of 0.15 to 0.50 (Clark & Watson, 1995). For this sample, the Occupational Socialization Scale mean was 121.34 and the standard deviation was 9.24.

Death Penalty Attitudes Scale (DPAS). O'Neil, Patry, and Penrod (2004) constructed and validated the 15-item 5-factor DPAS to measure jurors' attitudes toward the death penalty (see Appendix D). This scale has been found in multiple studies to have a large effect of general support for the death penalty on sentencing verdicts (mean total effect = 0.39). The scale has also been found to highly correlate ($r > 0.85$) with other measures of death penalty support. The five factors are: General Support, Retribution and Revenge, Death Penalty as a Deterrent, Death Penalty is Cheaper, and Life Without Parole Allows Parole. Items are answered on a nine-point Likert-type scale (1, *strongly disagree*, to 9, *strongly agree*) with higher scores indicating greater death penalty support. Because the scale was designed for use with jurors to predict their capital sentencing verdicts, it is an imperfect fit for this study. However, using this well-validated scale with a related population and purpose was preferable to asking a few simpler and less researched questions regarding participant attitudes toward the death penalty. Results were used to obtain quantitative data regarding the relative strength of the participants' attitudes toward the death penalty.

In this sample, Cronbach's alpha for the individual scales and total score ranged from 0.66 (LWOP Allows Parole) to 0.84 (General Support and total score). One of the five subscales had Cronbach's alpha coefficients that fell below the acceptable range of > 0.70 (0.66 for LWOP; Cronbach, 1951). These coefficient values are consistent with those reported by O'Neil and colleagues (2004). The average inter-item correlation values ranged from 0.27 (total score) to 0.70 (Death Penalty Is Cheaper). No scales fell below the recommended benchmark of 0.15, but 3 scales fell above the recommended benchmark of 0.50 (General Support, Death Penalty is a Deterrent, and Death Penalty is Cheaper; Clark & Watson, 1995). The high correlations may be due to scales with so few items – each scale only has between two and four items. However, we moved forward with them and used them in our analyses because these scales have been subject to solid construct validation (e.g., O'Neil et al., 2004). The mean for the total score in this sample was 47.66 ($SD = 18.86$).

Moral Disengagement Scale. The Moral Disengagement Scale (Osofsky, Bandura, & Zimbardo 2005) is a 19-item self-report inventory with items anchored on a 5-point scale ranging from strongly disagree (-2) to uncertainty (0) to strongly agree (+2; see Appendix E). It was developed to measure the various forms of disengagement from moral self-sanctions regarding executions. The items assess eight mechanisms Osofsky and colleagues (2005) outlined thorough which moral self-sanctions are disengaged from involvement in the lethal death penalty process. For this study, aggregate scores on the measure were used in the analyses. In this sample, Cronbach's alpha for scale was 0.86, and the average inter-item correlation was 0.25, demonstrating good reliability. The mean of the scale in this sample was -12.81 ($SD = 10.21$). Higher scores indicated greater moral disengagement; therefore, the average psychologist in this sample denied strong moral disengagement. Nevertheless, relative differences in moral

disengagement between psychologists were evident, and our analyses took into account these relative differences.

Bias Correction Strategies Scale. The Bias Correction Strategies Scale was developed based on the qualitative results from study one (see Appendix F). The data that emerged from our research concern about bias correction strategies was rich and plentiful. As such, we developed a measure with 27 items inquiring about the perceived usefulness of various bias management strategies. The items were anchored on a 5-point scale (*Very Useless, Useless, Not Certain, Useful, and Very Useful*). There was no existing measure like this with which to demonstrate criterion-related or convergent validity. This scale therefore had unique utility – it was the first to measure the construct of bias management.

Although traditional validity indices were not tested here, there were indications that the scale was valid for its stated purpose. First, the scale had face validity – the items composing this scale were logically related to the underlying construct of bias management. The argument that this measure was face valid lent support to the assertion that this measure was consistent with the construct motivating responses (DeCoster, 2000). Additional evidence that this measure tapped into the construct of effective bias management was the positive correlation that emerged between belief in one's ability to be objective and endorsement of bias correction strategies on this scale, $r = 0.33, p < 0.001$ (two-tailed). Finally, this scale evidenced good reliability. Cronbach's alpha for the scale in this sample was 0.85, and the average inter-item correlation was 0.21. The mean for this scale was 116.22 ($SD = 8.56$). The possible range of scores was 27 to 135; thus, an average score of 116.22 suggests individual strategies represented by items were largely endorsed as useful by this sample.

Procedure

We decided to send the survey packets by mail instead of electronically because surveys conducted via postal mail produce higher response rates (McMahon et al., 2003; Raziano, Jayadevappa, Valenzula, Weiner, & Lavizzo-Mourey, 2001). The mailed packet included a cover letter indicating the research was being conducted by a university student and the set of questionnaires printed on green paper. Enclosed were a self-addressed stamped envelope with first-class outgoing postage and a one-dollar bill as gesture of appreciation for participation. A follow-up postcard was sent two weeks after the initial mailings to express appreciation to those who had responded and to remind those who had not responded about the survey. Each of these methods (university sponsorship, green paper, first-class postage, one-dollar bill, and follow-up postcard) has independent effects on increasing response rates in postal surveys (Erwin & Wheelright, 2002; Fox, Crask, & Kim, 1988; Jobber, Saunders, & Mitchell, 2004; King & Vaughan, 2004; Pirelli & Zapf, 2008; Snyder & Lapovsky, 1984).

The first page of the questionnaire packet was an Institutional Review Board-approved participant information sheet, which included information about how their information was obtained and the purposes of the study. A separate debriefing form page was also included, which was trifolded with only the words “Please open only AFTER survey is complete” visible until unfolded. This debriefing form included contact information for the researcher and faculty supervisor, informed participants how results could be obtained once the study was complete, and described the purposes of the study.

Results

Parametric assumptions, including equal variance, normal distribution, and independence were checked prior to data analysis to ensure that the assumptions were not violated. The α

priori hypotheses for study two were then analyzed. The first hypothesis was that psychologists who had been practicing longer would have higher occupational socialization scores than psychologists newer to the profession. A simple linear regression was conducted to examine the relation between years as a forensic examiner and occupational socialization scores. Results revealed that the standardized β coefficient for years conducting forensic evaluations was 0.21, meaning that a one-year increase in years as a forensic examiner was associated with a 0.21 raw score increase on the Occupational Socialization Scale. This β coefficient is significantly different from zero, $t(284) = 3.63, p < 0.001, 95\% \text{ CI} = 0.05 - 0.16$. Thus, hypothesis one was supported by the data.

Hypothesis two predicted that most psychologists would report they practice objectively in their professional work. In the preliminary examination document, this prediction was based on the assumption that a categorical “objective/ not objective” question would be included in the stimulus materials. However, qualitative data from survey one suggested this question would yield no variability (e.g., 100% of the psychologists in study 1 reported they were objective). Therefore, instead of including a categorical item about objectivity, a continuous item was included in the survey: “I know how to be objective and keep my personal beliefs from influencing my professional work.” This item was rated on a 7-point Likert-type scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Three hundred and twenty-two participants answered this item, with a mean response of 6.04 ($SD = 0.81$). Based on this average rating well above the midpoint on the scale, we concluded that the second hypothesis was supported.

The third hypothesis predicted that psychologists with higher occupational socialization scores would believe they are more objective in their work. To test this prediction, a simple linear regression was conducted to examine the relation between occupational socialization

scores and degree of one's ability to be objective in forensic work. The standardized β coefficient for Occupational Socialization Scale score was 0.50, indicating that a one-unit increase in Occupational Socialization Score was associated with a half-point higher rating on the objectivity item. This β coefficient is significantly different from zero, $t(296) = 9.90$, $p < 0.001$, 95% CI = 0.69 – 1.03. Based on these results, hypothesis three was supported.

Hypothesis four was that psychologists who do capital casework would be more supportive of the death penalty than psychologists who refrain from working in capital cases. Hypothesis eight was related to hypothesis four, and one analysis was conducted to test both hypotheses. Hypothesis eight predicted that evaluators who conduct capital evaluations would ascribe to higher rates of moral disengagement than evaluators who do not. The results for these two hypotheses are reported together.

A Multivariate Analysis of Variance (MANOVA) was conducted to test the main effects of six independent variables regarding capital casework on two dependent variables: death penalty attitudes and moral disengagement. The overall single model was built to calculate mean differences between the groups for each of the six independent variables on each dependent variable at once, instead of conducting multiple separate t -tests. The larger model was chosen instead of separate analyses because 1) it automatically controls for the other variables in the model to determine the extent to which each factor can explain unique variability in the dependent variable, and most importantly, 2) it takes into account the number of tests performed and conservatively estimates an omnibus statistic, reducing alpha inflation and the probability of finding a Type I error (DeCoster, 2006).

These six independent variables were: 1) willingness to accept capital case referrals; willingness to conduct forensic evaluation in a capital cases 2) for the prosecution, 3) for the

defense, and 4) for the court; 5) willingness to conduct Competency for Execution evaluations; and 6) having ever declined or considered declining a capital case referral due to personal convictions about the death penalty. The dependent variables were capital punishment support and moral disengagement.

Significant multivariate main effects emerged for willingness to accept capital case referrals from the prosecution, $Wilks' \Lambda = 0.88$, $F(2, 189) = 12.55$, $p < 0.001$, $\eta_p^2 = 0.12$, from the defense, $Wilks' \Lambda = 0.94$, $F(2, 189) = 6.36$, $p = 0.002$, $\eta_p^2 = 0.06$, for Competence for Execution evaluations, $Wilks' \Lambda = 0.95$, $F(2, 189) = 4.72$, $p = 0.01$, $\eta_p^2 = 0.05$, and for declining capital case referrals due to capital punishment convictions, $Wilks' \Lambda = 0.95$, $F(2, 189) = 5.00$, $p = 0.008$, $\eta_p^2 = 0.05$. These multivariate findings indicate that these four independent variables were each significantly related to at least one of the two dependent variables, which we explore further below. The main effects of openness to conducting capital case evaluations and willingness to accept capital case referrals from the court were not significant, $Wilks' \Lambda = 0.98$, $F(2, 189) = 1.65$, $p = 0.20$, $\eta_p^2 = 0.02$, $Wilks' \Lambda = 0.99$, $F(2, 189) = 0.86$, $p = 0.43$, $\eta_p^2 = 0.01$, respectively.

The two nonsignificant multivariate findings indicate that hypotheses four and eight were not supported – there were no systematic differences in capital punishment attitudes or disengagement of moral agency between evaluators willing and unwilling to do capital casework in general. However, these findings mask the underlying pattern of results regarding what specific *kinds* of capital evaluations psychologists are willing to do. The pattern of the remaining results provides partial support for the hypotheses. There *are* systematic differences in capital punishment and moral disengagement between evaluators who are willing to do specific kinds of capital casework (see Table 6).

Table 6. Psychologists' Death Penalty Support and Moral Disengagement in Capital Casework

	<u>Death Penalty Support</u>				<u>Moral Disengagement</u>			
	Yes		No		Yes		No	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Willing to accept any capital referral	3.65	1.22	2.27	1.29	-0.51	0.52	-0.95	0.54
Willing to accept capital prosecution referral	3.64*	1.18	2.28*	1.27	-0.45 [†]	0.52	-1.00 [†]	0.52
Willing to accept capital defense referral	2.13*	1.25	3.79*	1.26	-1.06 [†]	0.55	-0.40 [†]	0.50
Willing to accept capital court referral	2.56	1.22	3.36	1.31	-0.86	0.54	-0.60	0.53
Willing to accept CFE referral	3.20*	1.28	2.72*	1.15	-0.60 [†]	0.53	-0.85 [†]	0.51
Declined capital referral due to DP attitudes	2.60*	0.96	3.31*	1.25	-0.85 [†]	0.47	-0.61 [†]	0.55

Note: For moral disengagement mean values, higher values (e.g., less negative values) correspond with more moral disengagement.

*Means between psychologists' death penalty support are significantly different at $p < 0.05$. [†]Means between psychologists' levels of moral disengagement are significantly different at $p < 0.05$.

In regards to death penalty attitudes, psychologists willing to accept referrals in capital cases from the prosecution had significantly stronger capital punishment attitudes than those unwilling to accept referrals from the prosecution, $F(1, 188) = 20.36, p < 0.001, \eta_p^2 = 0.10$ (see Table 6 for descriptive statistics). The opposite pattern emerged for referrals from the defense in capital cases. Psychologists willing to accept capital case referrals from the defense evidenced significantly *lower* capital punishment support than those unwilling to accept defense referrals, $F(1, 188) = 10.05, p = 0.002, \eta_p^2 = 0.05$. Psychologists willing to accept Competency for Execution referrals were more in favor of the death penalty than those unwilling to accept the referrals, $F(1, 188) = 9.37, p = 0.003, \eta_p^2 = 0.05$. Finally, psychologists who reported having ever declined or considered declining a capital case referral due to personal convictions about capital punishment were significantly less in favor of the death penalty than those who did not endorse this item, $F(1, 188) = 6.31, p = 0.013, \eta_p^2 = 0.03$.

The pattern of results for disengagement of moral agency paralleled those of the capital punishment findings. Psychologists willing to accept referrals in capital cases from the prosecution reported engaging in significantly more moral disengagement than those unwilling to accept referrals from the prosecution, $F(1, 188) = 22.81, p < 0.001, \eta_p^2 = 0.11$. Psychologists willing to accept capital case referrals from the defense evidenced significantly lower moral disengagement than those unwilling to accept defense referrals, $F(1, 188) = 11.73, p = 0.001, \eta_p^2 = 0.06$. Psychologists willing to accept Competency for Execution referrals engaged in more moral disengagement than those unwilling to accept the referrals, $F(1, 188) = 5.96, p = 0.02, \eta_p^2 = 0.03$. Lastly, psychologists who had ever declined a capital case referral due to personal convictions about capital punishment engaged in significantly less moral disengagement than those who did not endorse this item, $F(1, 188) = 9.92, p = 0.002, \eta_p^2 = 0.05$.

Hypothesis five predicted interactions between death penalty support and capital casework on occupational socialization and belief in objectivity. We hypothesized that psychologists more opposed to the death penalty but who do capital case evaluations would be more occupationally socialized and believe they could be more objective in their work than 1) psychologists more supportive of the death penalty and do capital case evaluations and 2) psychologists more opposed to the death penalty and who refuse to do capital case evaluations.

A multivariate analysis of covariance (MANCOVA) was utilized to examine this set of hypotheses. Capital case participation (yes/no) served as a categorical independent variable and death penalty support score served as a continuous independent variable (using the covariate function in the SPSS MANOVA procedure). The model was specified to include the interaction between these independent variables. Occupational socialization and degree of ability to be objective served as the dependent variables.

The omnibus MANCOVA test was not significant for any of the three effects; thus, hypothesis five was not supported. The multivariate main effect of whether psychologists choose to conduct capital cases was not related to occupational socialization or belief in objectivity, $Wilks' Lambda = 1.00$, $F(2, 228) = 0.54$, $p = 0.59$, $\eta_p^2 = 0.01$. Likewise, no significant multivariate finding emerged for death penalty support on the dependent variables, $Wilks' Lambda = 0.98$, $F(2, 228) = 2.88$, $p = 0.06$, $\eta_p^2 = 0.03$. Finally, the multivariate interaction between capital casework and death penalty attitudes was not significant, $Wilks' Lambda = 0.99$, $F(2, 228) = 1.64$, $p = 0.23$, $\eta_p^2 = 0.01$.

Hypothesis six was that occupational socialization would be positively correlated with moral disengagement. This hypothesis was not supported. The correlation between Occupational Socialization Scale score and Moral Disengagement Scale score was not

significant, $r = 0.07$, $p = 0.12$ (one-tailed). The seventh hypothesis predicted a positive correlation between moral disengagement and personal objectivity rating. This hypothesis was also not supported, as the correlation between these variables was $r = 0.07$, $p = 0.12$ (one-tailed). Hypothesis eight is reported above with hypothesis four, within one analysis.

The ninth hypothesis predicted that occupational socialization would be positively correlated with endorsement of bias correction strategies. Results reveal support for this hypothesis. As occupational socialization scores increase, so does endorsing the usefulness of various correction strategies for managing potential biases, $r = 0.38$ ($p < .001$, one-tailed). Hypothesis ten, however, was not supported. This prediction was that moral disengagement would be positively correlated with bias correction strategies. No relation was observed ($r = -0.03$, $p = 0.32$, one-tailed).

An exploratory analysis was conducted, in which the occupational socialization and capital casework of psychologists not clearly opposed to or supportive of the death penalty would be explored (directions unspecified). No findings emerged from this analysis, which was incorporated into the MANOVA conducted to test hypothesis five (discussed above).

Discussion

The primary purposes of this study were to compile descriptive information about forensic psychologists' occupational socialization processes, attitudes toward capital punishment, and disengagement of moral agency. This study was additionally designed to investigate practicing forensic psychologists' beliefs about their objectivity in forensic work as well as to investigate various strategies psychologists might use to mitigate potential biases in their work.

Consistent with study one, most psychologists report that they are objective in their professional work. Findings from the use of a continuous rather than a categorical question

about objectivity in study two evidenced an interesting result. The average rating of personal objectivity on a seven-point Likert-type scale was close to but did not reach the highest value (6.04 out of 7). Thus, psychologists did not report “pure” objectivity, but included a little room for error in their estimations, consistent with the notion of methodological objectivity. As found in study one, psychologists have modest insight into and appreciate the difficulty of practicing objectively in forensic work.

Most of the predictions made about occupational socialization were supported in this study. Evidence suggests that occupational socialization increases the longer one has been practicing. People who have been practicing forensic psychology longer identify more with their career, are more familiar with the nuances of the profession, and report greater satisfaction in their work. Of particular interest to this project was the finding that higher occupational socialization predicted greater belief in objectivity. This finding is encouraging, suggesting that socialization into objective practice is part of the occupational socialization process of forensic psychologists, and, further, that psychologists can likely continue improving their objectivity the longer they work in the field. What remains to be investigated, however, is whether belief in objectivity is related to actual objectivity. Perhaps these two variables correspond with one another. Alternatively, perhaps socialization into the importance objectivity increases psychologists’ belief in their objectivity, without an actual increase in true objective work.

An encouraging finding was that occupational socialization was positively related to endorsement of bias correction strategies. The perceived usefulness of various bias management strategies increases as occupational socialization increases. This finding lends credence to the assertion that psychologists may actually become more objective as they are socialized into the

profession. Believing in the utility of various bias correction strategies and using such strategies should increase one's objectivity in practice.

We expected that willingness to conduct capital case evaluations and death penalty attitudes would be related to occupational socialization. We thought that psychologists opposed to the death penalty but who chose to work in capital cases would report the greatest amount occupational socialization and belief in objectivity. This hypothesis was based on cognitive dissonance theory (Festinger, 1957). Psychologists supportive of the death penalty who conducted capital case evaluations evidenced consistency between their attitude and behavior. Psychologists opposed to the death penalty who refused capital case referrals also evidenced consistency between attitude and behavior. We thought those opposed to capital punishment and chose to do capital work would experience the greatest dissonance, due to the inconsistency between attitude and behavior. To reduce the dissonance, we expected a stronger reliance on occupational socialization and belief in objectivity. However, these predictions were not supported by the data. It may be that occupational socialization and belief in objectivity are not the variables to use to measure the cognitive dissonance. Future research may be able to clarify these null findings.

Although specific hypotheses about the relation between moral disengagement and objectivity were formulated, they did not emerge in the findings. Moral disengagement was not systematically related to belief in objectivity, nor was it related to perceived utility of bias correction strategies. These null findings reflect positively on forensic psychologists. Psychologists appear to be striving for objective work by trying to manage their biases, and they do not appear to be disengaging moral agency in order to convince themselves of their objectivity.

Moral disengagement was not systematically related to occupational socialization. Although the qualitative results from study one provided support for this hypothesis, these quantitative results suggest that occupational socialization does not increase psychologists' tendencies to disengage moral agency. Psychologists are not being trained to do this. Quantitative results do indicate some psychologists engage in this practice more than others, but doing so is unrelated to the process of occupational socialization. Instead, it appears moral disengagement may be more of a personality construct or general tendency than a product of training.

A novel pattern of findings emerged in this research that has not been previously documented. We expected to find that psychologists working in capital cases would ascribe to stronger capital punishment support and moral disengagement. The finding averaging all capital work together did not support the hypothesis. Psychologists willing to work in capital cases, in general, did not evidence systematically different capital punishment or moral disengagement scores. However, these results mask the underlying pattern of results, which do partially support the hypothesis. Psychologists' death penalty attitudes and disengagement of moral agency do indeed systematically differ depending on what *kind* of capital evaluations they are willing to conduct.

Evidence of the allegiance effect was uncovered in the pattern of psychologists' willingness to accept referrals in capital cases from the prosecution or the defense. Previous research has shown that an allegiance effect exists in which psychologists may reach conclusions and opinions consistent with the goals of their adversarial retaining party (Boccaccini et al., 2008; Murrie et al., 2009). What has not been documented is evidence of the allegiance effect before referrals are even accepted. The results of this study suggest differences in capital

punishment attitudes and moral disengagement predict psychologists' willingness to accept various referrals, which appear to be consistent with their existing attitudes. This finding may help explain why the allegiance effect – the tendency to reach conclusions helpful to one's retaining party – exists. If preexisting differences in the evaluators themselves predicts from whom they are willing to accept referrals, information processing and decision-making may be skewed by those preexisting attitudes and evaluation results may end up supporting the goals of the referral party.

Limitations. This study was conducted in a self-report format with a sample of volunteers willing to spend the time to complete and return the survey. As with all survey research, the possibility exists that those respondents who chose to participate may be systematically different than the people who chose not to respond. Perhaps the topic – objectivity in forensic work – was sensitive enough to preclude some people from participating. Further, the self-report nature of this study may limit the validity of the findings. For instance, some of the items may have elicited socially desirable responding (e.g., “I know how to be objective and keep my personal beliefs from influencing my professional work”). The limitations inherent in this study were anticipated, and we sought to address these limitations by conducting study three, designed to examine the actual behaviors of psychologists in regard to their objectivity in forensic work.

STUDY 3

The third study sought to supplement the first two studies by exploring what forensic psychologists actually do and how their attitudes may leak through in writing capital case reports. One hundred and twenty-two redacted Mental State at the Time of Offense (MSO) evaluations completed by psychologists in capital cases were obtained from the Alabama Department of Mental Health and Mental Retardation (DMH/MR). These reports were analyzed for content suggestive of potential bias by three independent coders. MSO evaluations were chosen as the subject of study because they are one of the most frequent referrals in capital case evaluations, and because there is no well-defined standard structure of how the evaluation should be conducted or how the report should be written (Melton et al., 2007). There is therefore more room for subjectivity and potential bias to influence the evaluation and evidence itself in the report than in many other types of evaluations.

Procedure

The Alabama DMH/MR maintains a copy of each forensic evaluation conducted by DMH/MR psychologists and other regional examiners who have completed the Alabama Certified Forensic Examiner (CFE) training. After obtaining institutional review board approval from both The University of Alabama and Taylor Hardin Secure Medical Facility, the DMH/MR allowed us to make a copy of the 122 capital case MSO evaluations conducted within the five year period from 2004 – 2009. A redaction procedure was conducted by our research team prior to coding. Two independent redactors, students placed on a clinical externship at Taylor Hardin

Secure Medical Facility, were hired to redact the reports (note: the redactors were not the same people as those who coded the reports).

The original reports were located in the main office of Taylor Hardin Secure Medical Facility, and copies were made on the copy machine in that office. The original reports were immediately refiled. The copies were taken to the private office of the redactors, a room accessible only by these students and their clinical supervisors. The redactors used a thick black permanent marker to obscure all identifying information on each page of each report. The name of the evaluatee and any collateral sources, all dates (minus the year of the report), details of the alleged offense, and social security and patient identification number of the evaluatee were blacked out by the redactors. Other blacked-out details included the county in which charges were filed, the name of the judge overseeing the case, case number, and any other identifying information (including details of the alleged offense). Several procedures were put in place to maintain confidentiality of the records during redaction. The redactors completed all their work in a private room with limited access at Taylor Hardin Secure Medical Facility. No identifiable information was taken from that room. Once the redaction was complete, a photocopy of the blacked-out reports was made on site (to further obscure any identifiable information, that might have been visible through the marker), and the marked copy was shredded on-site. No identifiable information was removed from the Taylor Hardin premises.

After redaction, three independent coders analyzed the reports for the following characteristics (see Appendix I): 1) a code that corresponded with the name of the evaluator, 2) what the evaluator concluded (e.g., NGRI defense possible or not possible), 3) diagnoses provided, 4) length of report, 5) sources of information, 6) ratings of language valence and

dominance, 7) a rating of the evaluator's consideration of disconfirmatory evidence, and 8) how fully the ultimate legal question was addressed.

The coders were trained in the rating procedures and together rated 10% of the reports with discussion (reports 1-12). Disagreement between coders on any of the variables in these first 12 reports were discussed, clarified, and a consensus was reached. Because the initial reports were coded together with discussion, interrater reliability coefficients were not calculated. Next, each of the coders independently rated 20% of the reports, with 10% overlap (24 reports total each, two coders overlapping on each report). For this batch of ratings, two evaluators independently rated the same 12 reports (i.e., evaluators 1 and 2 rated reports 13-25, evaluators 1 and 3 rated 26-38, and evaluators 2 and 3 rated 39-51). This batch of coding allowed us to calculate interrater reliability ratings for each pair of raters (Cronbach, 1951). The initial reliability ratings were mixed: some variables evidenced acceptable-to-high reliability, whereas others had unacceptably low reliability (e.g., $\alpha < 0.70$; Cronbach, 1951).

Interrater Reliability. The variables with acceptable reliability for all three pairs of ratings included those requiring little subjective judgment: evaluator code ($\alpha = 1.0$), categorical evaluator conclusion ($\alpha = 1.0$) diagnoses provided ($\alpha > 0.99$), length of report ($\alpha > 0.94$), and sources of information ($\alpha > 0.83$). Variables calling for subjective judgments evidenced lower reliability. It became evident during the reliability analyses that one of the three coders was an outlier on the subjective ratings – only two of the coders had acceptably high reliability overall. The two coders evidenced acceptable reliability on almost all of the remaining variables, including the rating of evaluator's consideration of disconfirmatory evidence ($\alpha = 0.91$), as well as the two ratings of degree of ultimate opinion reached: good reliability was obtained for

Redding and colleagues (2001) eight-point ultimate opinion rating scale ($\alpha = 1.0$) and Fulero and Finkel's (1991) three-point rating scale ($\alpha = 0.92$).

The final set of variables – rating the language used by the evaluator – proved elusive for establishing adequate reliability. We attempted to rate three dimensions of the report language based on Bradley and Lang's (1999) Affective Norms for English Words Instruction Manual and Affective Ratings. Bradley and Lang (1999) developed this manual to provide standardized materials for researchers studying emotion and attention. Their manual is based on Osgood, Suci, and Tanenbaum's (1957) seminal semantic differential work. Osgood and colleagues (1957) concluded on the basis of factor analyses that the variance in emotional assessments was accounted for by three major dimensions: affective valence (pleasant to unpleasant), arousal (calm to excited), and dominance (low to high).

The three coders struggled to reach consensus for these language variables during the initial rating of 12 reports. Then, when the variables were independently coded, the arousal variable had such poor reliability even with discussion ($\alpha < 0.10$) that we removed this variable from the coding scheme. The two coders who evidenced good overall reliability with one another produced acceptable reliability ratings for the valence ratings. Language valence rated throughout the entire report had an alpha reliability coefficient of 0.84, and language valence rated specifically within the forensic section of the report had an alpha coefficient of 0.90. Dominance ratings were less reliable: total dominance ratings throughout the report were low ($\alpha = 0.60$) and forensic dominance ratings were low as well ($\alpha = 0.65$). The two coders discussed the variations in ratings and came to an agreement about them. In spite of the relatively low dominance reliability ratings, we decided to continue coding dominance and take the risk of null

findings rather than removing it from the coding scheme because we had already removed one language rating.

The remaining seventy reports were coded according to a plan developed based on the reliability results. The “outlier” coder evidenced good reliability with the other two coders on the more objective variables (e.g., evaluator code, categorical conclusion, diagnoses provided, length of report, and sources of information). This coder rated these five variables on all seventy of the remaining reports. S/he did not rate any of the more subjective variables. The two coders who evidenced adequate reliability on almost all the variables each took half of the remaining reports (35 each) and coded only the more subjective variables (e.g., evaluator’s consideration of disconfirmatory evidence, ultimate opinion reached, and language valence and dominance ratings).

Results

Descriptive statistics. This is the first study of its kind; therefore, the data are primarily reported descriptively. However, some exploratory analyses were conducted with the information gathered to generate hypotheses for future investigations. We intended to use the examiner’s categorical conclusion about the MSO issue (e.g., did they conclude that an NGRI defense would be possible or not) as one of the variables in the analyses. However every single one of the 122 reports concluded that an NGRI defense would not be possible. Thus, there was no variability in this item, which precluded its use in any of the analyses.

The average length of report was 7.37 pages ($SD = 2.06$; range 3.25 – 15.00). We also measured the length of only the forensic section of the reports (e.g., the sections regarding mental state and any other forensic issue included in the report). The average forensic section report length was 2.10 pages ($SD = 0.69$; range 0.00 – 4.75). Diagnoses provided were coded as

well, as we intended to use these variables in exploratory quantitative analyses. Almost all of the reports included at least one diagnosis (95.1%), and most of the reports included an Axis I diagnosis (89.3%). Over half (60.7%) of the reports included an Axis II diagnosis, and an additional 9.8% deferred making a diagnosis on Axis II.

Axis I diagnoses were largely composed of substance use disorders (77%). Multiple substance diagnoses were the most common (46.7%), followed by Marijuana Use or Abuse (13.9%), Alcohol Use or Abuse (4.1%), other substance-related diagnoses (4.9%), and “rule out” any substance-related diagnosis (7.4%). The second most common category of Axis I diagnoses was mood disorders (23%). Specifically, Depression was diagnosed in 14.8% of the reports, Bipolar Disorder in 1.6% of the reports, any “rule out” mood disorders in 5.7% of the reports, and multiple mood disorder diagnoses in 0.8%.

Psychotic disorders were diagnosed in 10.7% of the reports (Schizophrenia 1.6%, Schizoaffective 0.8%, “rule out” any psychotic disorder 7.4%, past history of psychotic disorder 0.8%). Anxiety disorders were diagnosed on Axis I in 5.7% of the reports (Post-Traumatic Stress Disorder in 1.6%, Panic Disorder with Agoraphobia in 0.8%, “rule out” any anxiety disorder in 2.5%, and multiple anxiety disorders in 0.8%). Other Axis I disorders were diagnosed in 36.1% of the reports, including Adult Antisocial Behavior, Malingering, Oppositional Defiant Disorder, Adjustment Disorder, Impulse Control Disorders, Attention-Deficit Hyperactivity Disorder, Anorexia Nervosa, and Reading Disorder.

Diagnoses on Axis II were provided for both Personality Disorders (46.7%) and Intellectual Disabilities (13.9%). The most common Personality Disorder diagnoses provided were “rule out” and provisional diagnoses (15.6%) and Personality Disorder Not Otherwise Specified (or with “features;” 15.6%) followed by Antisocial Personality Disorder (13.9%).

Borderline Personality Disorder (0.8%) and multiple Axis II Diagnoses (0.8%) were also provided. Intellectual Disability-related diagnoses included Mild Intellectual Disability (2.5%), Borderline Intellectual Functioning (5.7%), and other (including “rule-outs” and provisional diagnoses; 5.7%). Other Axis II diagnoses provided included “Low Average Intellectual Functioning” (3.3%), “Apparent Normal Intellectual Functioning” (0.8%), “Normal Intellectual Functioning” (1.6%), and “Prior History of Substance Abuse” (incorrectly placed on Axis II; 0.8%).

We coded type of source into nine different categories: 1) clinical interview (cited by 100% of evaluators); 2) mental status examination (cited by 100%); 3) current testing (73.8%; see Table 7); 4) records related to the alleged offense (e.g., arrest records, information concerning the offense from the district attorney, homicide reports, witness statements, officer/investigative narratives, co-defendant interviews, and confessions were coded here; 93.4%); 4) National Crime Information Center (NCIC) or state criminal index record check, parole/pardon reports, and previous indictments (28.7%); 5) defense attorney information form (23.8%); 6) prior mental health and/or medical records (27%); 7) interviews with hospital staff (1.6%); 8) interviews with jail staff or law enforcement (8.2%); and 9) interviews with attorney (20.5%). We also coded an “other” category, which included examiners citing letters from alleged defendant and codefendants, letters from family members, and interviews with family members and significant others. Other cited sources included news reports, social security administration records, and school records. The average number of types of sources upon which examiners relied was 5.05 ($SD = 1.13$; range 3 – 8).

Table 7. Testing Instruments Used in Sample of Forensic Reports

<u>Instrument Cited</u>	<u># of Reports</u>	<u>%</u>
Adaptive Behavior Assessment System-II (ABAS-II)	6	4.9
Competency Assessment Instrument (CAI)	61	50.0
Competence Assessment for Standing Trial for Defendants with MR (CAST-MR)	2	1.6
Competence to Waive Miranda Rights (CWM)	8	6.6
Independent Living Scales (ILS)	3	2.5
Miller Forensic Assessment of Symptoms Test (M-FAST)	3	2.5
Minnesota Multiphasic Personality Inventory-2 (MMPI-2)	4	3.3
Personality Assessment Inventory (PAI)	7	5.7
Structured Interview of Reported Symptoms (SIRS)	1	0.8
Test of Memory Malinger (TOMM)	5	4.1
Wechsler Adult Intelligence Scale – III (WAIS-III)	13	10.7
Wechsler Adult Intelligence Scale – IV (WAIS-IV)	4	3.3
“Verbal portion of WAIS-IV”	1	0.8
Wechsler Intelligence Scale for Children – III	1	0.8
Wide Range Achievement Test – 3 (WRAT-3)	1	0.8
“WRAT-3 Reading Scale”	1	0.8
Wide Range Achievement Test – 4 (WRAT-4)	1	0.8
“WRAT-4 Reading Scale”	1	0.8
“Items from the Hare Psychopathy Checklist – Youth Version”	1	0.8

Current testing information was cited by 73.8% of the sample; however, this variable originally included mental status examinations (MSE) as “testing.” Without including the MSE, the use of other tests was reported by 25.41% of the sample (see Table 7).

The language used in each report was coded on the two dimensions described above (valence and dominance; see Appendix I and Table 8). The language was coded for the entire report as well as specifically in the forensic section of the report. Valence was defined as the attractiveness (positive valence) or aversiveness (negative valence) of an event, object, or situation (Bradley & Lang, 1999). Valence was coded on a 5-point scale, from 1 (*Examiner Strongly Likes Defendant*) to 5 (*Examiner Strongly Dislikes Defendant*). The language valence for the total report averaged a rating of 3.16 ($SD = 0.63$, range 2-5). Valence specifically in the forensic section of the report was a little higher ($M = 3.21$, $SD = 0.53$, range 2-5). Dominance was defined as having or exerting authority or influence of an outcome (Bradley & Lang, 1999). Dominance was also coded on a 5-point scale, from 1 (*Pushover*) to 5 (*Authoritative*). The language dominance for the total report evidenced an average rating of 3.29 ($SD = 0.63$, range 2-5). Dominance specifically in the forensic section of the report was a bit higher here as well ($M = 3.84$, $SD = 0.62$, range 2-5; See Table 8).

Table 8. Examples of Language Coded on Valence and Dominance Dimensions

Valence		Dominance	
Positive	Negative	Low	High
“Provided excellent answers”	“Last suicide attempt was 2.5 years ago when [defendant] tried to strangle himself with his hands, which would be patently ridiculous”	“This would seem to indicate he doesn't represent significant risk”	“He will attempt to portray himself as having extreme memory difficulties, which is simply not accurate...he can do it even if he acts as if he cannot.”
“Quite responsive and polite”	“He has never had a driver's license but drove anyway”	“Lie perhaps on the cusp of” (intellectual ability)	“He is quite able to appraise legal defenses and plan legal strategy”
“Handsome”	“Excessive weight” and “exuded bad breath” and “was quite flippant”	“I could not ferret out any reason to the contrary that...”	“She will follow attorney advice”
“Has an excellent memory”	“He reports some problems with depression ever since he got himself into this situation”	“True reliability is unclear...he reported odd tactile sensations not typically associated with mental illness”	“He was extremely evasive and malingering throughout the evaluation.”
“Respectable and gentlemanly”	“Used virtually every kind of street drug”	“He appeared motivated to answer questions to the best of his ability”	“He has no cognitive impairment, so appropriate decision-making and judgment would have been possible had he so chosen”
“His hair was neatly coiffed and he sported a light goatee”	“Apparently pays limited attention to personal hygiene”	“The accuracy of information from the defendant has not been verified and should be viewed cautiously”	“He demonstrates fully reasonable comprehension and appears fully capable of assuming role of defendant”
“Appears to be a bright articulate person”	“Not surprisingly, his account differs from the police”	“He appeared indifferent in the main”	“He certainly would have no difficulty”
“He was very polite and careful”	“He would have been capable of conforming his behavior in an appropriate fashion at that time had he so chosen”	“He appears capable of appropriate behavior in court”	“He attempts to claim auditory and visual hallucinations, which are of course not credible.”

We rated examiner's consideration of disconfirmatory evidence and alternative hypotheses on a five-point rating scale (see Appendix I). A rating of one corresponded with examiners who evidenced no indication of considering disconfirmatory information – only evidence supporting his/her conclusion was presented in the report. A rating of two was given when examiners included disconfirming information in the report without identifying it as such, and without incorporating the evidence into their opinion or understanding of the case. Threes were assigned to reports in which examiners include evidence that could possibly disconfirm their opinion and when it was identified as potentially disconfirming, but where examiners did not adequately explain or incorporate the information. A rating of four was provided to reports in which disconfirming information was included, was identified as such, and was effectively incorporated into the examiner's understanding of the case. Finally, a rating of five was given when disconfirming information was included and was offered as a fully viable alternative to the examiner's opinion, leaving the reader with two different scenarios to consider. The average rating on this five-point rating scale for this sample was 2.72 ($SD = 1.02$; range 1-4).

In regards to the ultimate issue ratings, two separate variables were rated by coders. The first was Redding and colleagues' (2001) eight point scale (see Appendix I). The first level on this scale was descriptive clinical symptom information only. The second level was clinical symptoms and diagnoses only. The third was providing clinical diagnoses as well as statistical data on diagnostic reliability. Level four was interpreting the legal standard, but only for mental disorders (e.g., providing an opinion as to whether the diagnosis or symptoms present in the case satisfied some legal definition). These first four levels revolve around diagnoses, whereas levels five through eight interpret legally relevant behavior. Level five provides theoretical accounts connecting defendant's symptoms and legally-relevant behavior. The sixth level included

statistical crime data about the relation between clinically and legally-relevant behavior. The seventh level was weighing possible motives or explanations for criminal behavior. Finally, level eight was issuing ultimate opinions: conclusory statements often couched in the language of the legal standard and issuing an ultimate opinion on the defendant's legal (in)sanity at the time of the alleged crime.

The second ultimate issue variable coded was based on Fulero and Finkel's (1991) three levels of ultimate opinion. The first level in this scheme was diagnostic information only. The second was penultimate opinion, with a diagnosis tied to legally-relevant behavior. The third and final level was ultimate opinion, in which the examiner gave a categorical opinion about "sanity" or "insanity" at the time of the alleged offense. The evaluators in this sample approached the ultimate issue often. On Redding and colleagues' eight point scale, the evaluators in our sample averaged an ultimate issue rating of 7.72 ($SD = 1.15$; range 1-8). On this 8-point rating scale, 86.9% of examiners were rated as providing an ultimate opinion. On Fulero and Finkel's (1991) three point scale, the examiners in our sample averaged 2.36 ($SD = 0.52$; range 1-3). In contrast to Redding and colleagues' (2001) scale, only 35.2% of examiners provided an ultimate opinion (56.6% provided a penultimate opinion) on Fulero and Finkel's (1991) stricter three-point scale.

We coded two additional variables. One was a categorical item asking the coder to make a judgment about whether the examiner had "clearly left out information that should've been addressed." For instance, if the coder reading the report thought something significant to the MSO issue was not addressed, they should have coded "yes" on this item. Of the 122 reports, the coders thought that 62.3% had clearly left information out of the report that should have been addressed.

Information left out included MSO reports documenting previous psychiatric hospitalizations but failing to explore the reason(s) for treatment or diagnoses provided. For instance, one report stated the defendant had been “psychiatrically treated three times for unremembered reasons” without further follow-up and without addressing this in the MSO section of the report. Other reports document the medication the defendant was taking at the time of the alleged offense (e.g., “Wellbutrin,” “Ritalin,” “psychotropic medication”) without exploring the reasons for the prescriptions, onset or severity of symptoms, or providing any other details. A few reports concluded that “perceptual anomalies were not noteworthy,” leaving our coders wondering what perceptual anomalies were present in the defendant and how they may have affected the defendant’s mental state at time of alleged offense.

Some reports documented mental health history and treatment well, but failed to analyze the mental health history in regards to mental state at time of offense. Others simply reported that the defendant did not “claim” any mental disorders, and therefore did not explore the issue further. One examiner ruled out a mental state defense with the argument that the defendant had no history of mental health treatment, which our coders considered faulty logic (especially because in that particular case, the examiner had documented a history of inpatient treatment). One report in which the examiner failed to review prior mental health records was sent back to the examiner by the judge with a request to review and incorporate the records. A minimalistic addendum was submitted to the court.

The last variable coded was whether the report included the “disclaimer” paragraph to the court, with examiners conceding to the court that they understand the ultimate issue is the court’s decision. One hundred percent of this sample of reports included this “disclaimer” paragraph. It

is likely that certified forensic examiners in this state are administratively required to include this “disclaimer” paragraph in forensic reports.

Quantitative Analyses. Our first *a priori* hypothesis predicted that reports with higher rates of emotionally charged words and pejorative phrases would be less likely to provide an Axis I diagnosis, more likely to provide an Axis II diagnosis, and to conclude that a mental state or NGRI defense would not be possible. None of these predictions were supported. First, there was no variability at all in the NGRI defense conclusion variable. Not a single report in our sample of 122 reached the conclusion that an NGRI defense would be possible. The lack of variability in that variable precluded its use in any analyses.

To examine the relation between language ratings and whether an Axis I diagnosis was provided, a logistic regression was conducted, with all four language variables as predictors (dominance total and forensic as well as valence total and forensic). None of the language variables were systematically related to whether an Axis I diagnosis was provided, $X^2(4) = 1.15$, $p = 0.89$. A binary logistic regression was not appropriate for analyzing whether an Axis II diagnosis was provided, because the Axis II diagnosis variable had more than two levels. Twelve reports included a “deferred” diagnosis on Axis II, so a third category (“deferred”) was added to the coding scheme for this variable. Thus, a multinomial logistic regression, an extension of the logistic regression model when the outcome is recorded at more than two levels (Hosmer & Lemeshow, 2000), was used to examine the relation between Axis II diagnosis and language use. Again, none of the language variables were systematically related to whether an Axis II diagnosis was provided, $X^2(8) = 11.61$, $p = 0.17$.

One-tailed bivariate correlations were conducted to examine the relation between language use and report length, sources of information, consideration of alternative evidence,

and ultimate opinion provision. We used the probability values for one-tailed tests because we made directional predictions in our *a priori* hypotheses. We expected that reports with higher rates of emotionally charged language would be shorter, cite fewer sources of information, evidence less consideration of alternative hypotheses, and address the ultimate legal question more fully.

Some of these predictions were supported by the data. Reports with stronger unpleasant valence ratings in the forensic section of the report were shorter reports overall, as predicted ($r = -0.24, p = 0.005$). Further, reports with stronger unpleasant valence ratings throughout the entire report had shorter forensic sections of the report ($r = -0.17, p = 0.04$). However, valence ratings specifically in the forensic section were not significantly related to forensic section length, nor were valence ratings for the entire report related to overall length. Only one language dominance rating was significantly related to length: more dominant language used in the forensic section of the report was associated with shorter overall reports ($r = -0.23, p = 0.005$).

Number of sources was not related to language ratings, contrary to our predictions. In partial support of our predictions, examiner consideration of alternative hypotheses was related to language use, but only language used within the forensic section. More unpleasant valence ratings in the forensic section of the report were associated with less examiner consideration of alternate conclusions ($r = -0.17, p = 0.04$). More dominant language in the forensic section of the report was also associated with less examiner consideration of alternative hypotheses ($r = -0.27, p = 0.002$).

The ultimate opinion ratings were mostly unrelated to the language variables. Redding and colleagues (2001) eight-point scale evidenced no significant correlations with any of the four language variable ratings. Fulero and Finkel's (1991) three-point scale, however, evidenced a

significant correlation with language valence ratings. More unpleasant valence ratings in the overall report were associated with higher ultimate opinion provision ($r = 0.17, p = 0.04$), as were more unpleasant valence ratings specifically in the forensic section of the report ($r = 0.18, p = 0.04$).

Additional Exploratory Quantitative Analyses.

Additional logistic regressions. Exploratory logistic regressions were conducted to determine additional relations. Two outcome variables examined included whether diagnoses were provided and whether the coder thought that information was left out of the report. Predictor variables included number of sources used and consideration of alternative evidence. Number of sources relied upon did predict whether a diagnosis was made. Reports citing a greater number of sources were more likely to provide an Axis I diagnosis, $X^2(1) = 9.55, p = 0.02$, Odds Ratio = 2.72 (95% CI = 1.33 – 5.55). Reports with a greater number of sources were also more likely to provide an Axis II diagnosis, $X^2(2) = 7.50, p = 0.02$. For a one-unit change in number of sources used, an Axis II diagnosis was more likely to be made than not (Odds Ratio = 1.47 (95% CI = 1.00 – 2.17)). Finally, reports with a greater number of sources were more likely to make any diagnosis on any Axis, $X^2(1) = 5.39, p = 0.02$, Odds Ratio = 3.15 (95% CI = 1.06 – 9.32).

The remaining logistic regression was conducted to explore the relation between examiners' consideration of alternative hypotheses and the coders' ratings of whether or not reports "clearly left information out" that should have been addressed. The analysis indicates that as examiners' consideration of alternative hypotheses decreased, coders' ratings of whether information was left out increased, $X^2(1) = 28.36, p < 0.001$, Odds Ratio = 0.31 (95% CI = 0.19 – 0.50).

Additional bivariate correlations. During the data analysis process, other bivariate correlations were examined. These correlations were conducted using two-tailed probability analyses, as no directional *a priori* hypotheses were formed. Significant correlations emerged with regard to number of sources relied upon by examiners with report length as well as consideration of alternative hypotheses. As the number of sources relied upon increased, the length of the overall report ($r = 0.49, p < 0.001$) and the forensic section of the report ($r = 0.36, p < 0.001$) increased. Reports citing more sources of information also evidenced greater consideration of alternative hypotheses ($r = 0.40, p < 0.001$).

Consideration of alternative hypotheses was correlated with report length. Reports with greater consideration of alternatives had longer forensic sections ($r = 0.43, p < 0.001$) and were longer overall ($r = 0.56, p < 0.001$) than those with less consideration of alternatives. Finally, report length evidenced a relation with level of ultimate opinion provision on Redding and colleagues (2001) eight-point rating scale. Shorter reports were associated with higher levels of ultimate opinion provision ($r = -0.24, p = 0.01$), and shorter forensic sections of reports were marginally related in the same pattern ($r = -0.17, p = 0.06$).

Hierarchical Linear Models (HLM). Because this sample of 122 evaluations was completed by 14 individual evaluators, we explored how much variance was attributable to individual evaluators. Several of the variables included were coded behaviors of the same evaluators, and thus are not statistically independent from one another. In other words, some of the variance is attributable to the individual evaluators, as opposed to true differences between defendants. The variance attributable to individual evaluators, as opposed to other sources of variance, can be estimated via hierarchical linear modeling (HLM; see e.g., Boccaccini, Turner, & Murrie, 2008; Murrie, Boccaccini, Zapf et al., 2008). Other sources of variance might include

individual differences among the defendants who were evaluated, variance in the construct being measured, and other sources of error.

We specified unconditional random effects models to examine the extent to which variability in 10 continuous outcome variables (entered individually in separate analyses) could be attributed to differences in evaluators. The variables included the four language rating variables (dominance and valence in the whole and the forensic sections of reports), number of sources used, length of the report, number of tests used, consideration of alternative hypotheses, and the two ultimate issue ratings. Evaluators were treated as a random effect to allow for the outcome variables from the same evaluator to be correlated (Norusis, 2003). Random effects models are also appropriate when findings are intended to generalize to all forensic evaluators instead of just those in dataset used. Although the number of evaluations in the sample varied by evaluator (ranging from 1 to 34 evaluations per evaluator), HLM analyses do not assume equal group or nest size and can accommodate these differences (see Tabachnick & Fidell, 2007). All HLM analyses were conducted with SPSS 18.0.

The variables we included in these analyses were continuous outcome variables, thus it was possible to divide the amount of variance due to evaluators by the total amount of variance in the data to determine the portion of variance attributable to systematic differences between evaluators. These variance estimates were provided by the unconditional effects models. The amount of variance attributable to examiners was divided by the total amount of variance in the model (e.g., variance attributable to examiners plus residual variance). This proportion is termed an intraclass correlation coefficient (ICC), and when used in this way is interpreted as the proportion of variance in the set of scores attributable to evaluator differences.

The unconditional random-effects models for the language variables indicated there was no systematic differences in language ratings due to individual evaluator differences, variance estimate due to evaluators < 0.01 ($SE < 0.02$), $Wald Z < 0.49$, $p > 0.25$. The ICCs ranged from 0.020 to 0.078, indicating that 2% to 7.8% of the variance in language ratings was attributable to differences between the evaluators. Number of sources cited was also not systematically related to differences between evaluators, variance estimate = 0.21 ($SE = 0.20$), $Wald Z = 1.06$, $p = 0.29$, ICC = 0.155 (15.5% of variance in number of sources attributable to individual evaluators).

The remaining five outcome variables approached or reached statistical significance, indicating evaluators did systematically differ on these variables. The low sample size of evaluators ($N = 14$) resulted in low power for these tests, potentially limiting the statistical significance of these results. However, we report these marginally significant findings here because the intent of this study is exploratory. These result trends are valuable for future studies to build upon. Length of report approached significance, variance estimate = 1.63 ($SE = 0.91$), $Wald Z = 1.81$, $p = 0.07$, ICC = 0.385 (38.5% of variance attributable to individual evaluators). Number of tests also approached significance, variance estimate = 0.60 ($SE = 0.31$), $Wald Z = 1.91$, $p = 0.06$, ICC = 0.495 (49.5% of variance attributable to individual evaluators). Consideration of alternative hypotheses approached significance as well, variance estimate = 0.44 ($SE = 0.23$), $Wald Z = 1.88$, $p = 0.06$, ICC = 0.451 (45.1%).

The two ultimate issue rating items evidenced differences by evaluator. On the first rating, based on Redding and colleagues' (2001) eight-point scale, statistically significant evaluator differences emerged, variance estimate = 1.46 ($SE = 0.67$), $Wald Z = 2.17$, $p = 0.03$, ICC = 0.682 (68.2%). The second item, based on Fulero and Finkel's (1991) three-point scale,

revealed marginally significant differences, variance estimate = 0.11 ($SE = 0.06$), $Wald Z = 1.88$, $p = 0.06$, $ICC = 0.390$ (39%).

Discussion

This study achieved its primary goal of allowing exploratory analyses to inform future research. Several very interesting results were obtained in the course of this study, including the compilation of descriptive statistics for this sample of capital case MSO reports. It should be noted that the evaluations included in our sample were almost all joint evaluations, including both a Competence to Stand Trial component and a Mental State component. Further, several of these evaluations also included a third component: Competence to Waive Miranda Rights. The focus of this study was on Mental State variables, thus we did not code variables related to adjudicative or Miranda waiver competency.

We found evidence of clinician variation in forensic evaluations attributable to idiosyncratic differences in evaluators themselves. These findings are consistent with Homant and Kennedy's (1987) analyses, in which 34% of the variance in hypothetical evaluations was found to be attributable to evaluator differences as well as Boccaccini and colleagues' (2008) study, which reported up to 30% of the variance in actual forensic psychological testing was attributable to individual evaluators. We thought that ambiguous situations would enhance bias, and that MSO evaluations might allow for substantial evaluator idiosyncrasies due to the somewhat ambiguous nature of MSO evaluations. The primary variable to examine within this context was the variance in Mental State conclusions (e.g., whether an NGRI defense was opined possible for a particular defendant). Unfortunately, this sample evidenced no variability whatsoever in this decision – every single one of the 122 reports concluded that an NGRI defense would not be possible. Thus, we could not calculate how much variance in NGRI

defense conclusions was attributable to individual evaluators because there was no variance to partition.

We did, however, examine the variance accounted for by evaluator for several other variables. Results replicated and extended Homant and Kennedy (1987) and Boccaccini and colleagues' (2008) findings. Individual examiner idiosyncrasies accounted for up to 68% of the variance in outcome variables in this study. Low power precluded several of our models from reaching statistical significance, despite the fact that five of the outcome variables evidenced systematic evaluator differences accounting for > 38% of the variance each. With greater power (e.g., more reports and in particular, more evaluators), these findings would likely reach statistical significance. Evaluator differences accounting for more than 15% of the variance in any outcome variable is generally meaningful, thus our findings of more than a third of the total variance in several variables attributable to evaluator variance is theoretically and practically meaningful (M.T. Boccaccini, personal communication, August 9, 2011). In this sample, length of report, number of tests used, consideration of alternative hypotheses, and level of addressing the ultimate issue all evidenced differences attributable to individual evaluators.

The lack of variance in NGRI defense conclusions was a surprise, and does not match the base rates of insanity findings provided in the literature. The established base rate of approximately 10% for evaluators' opinions supportive of insanity (Cochrane et al., 2001; Murrie & Warren, 2005; Warren et al., 1991; 2004) was not replicated in this study. The base rate of NGRI-supportive opinions was 0% in this sample. Individual clinicians' base rates supporting insanity typically fall in the 5% to 25% range (Murrie and Warren, 2005). The base rate for individual examiners in this sample was also 0%. Individual examiner base rates were thus inconsistent with those reported in the literature as well. We expected that base rates

substantially above or below those reported in the literature may indicate biased decision-making processes on part of the clinician. Thus, it appears our sample may be biased. Our sample of examiners was court-ordered to do these evaluations and were considered to be neutral rather than associated with adversarial party; however, these evaluators were state employees paid by the Department of Mental Health and Mental Retardation. Perhaps seeking reports conducted by evaluators hired directly by defense and prosecuting attorneys would evidence greater variability in opinions reached.

An alternative explanation for this 0% insanity-supportive opinion result may be due to the fact that these reports were specific to capital cases. The base rate of insanity-supportive opinions in capital cases is not known, and may be lower than the 10% rate in all types of cases. In an informal discussion of these results with forensic evaluators involved in these cases, a few psychologists discussed the unique pressure placed on attorneys in capital cases. These evaluators suggested that attorneys may be more likely to refer defendants for an MSO evaluation in capital cases, even when an insanity defense is unlikely, to ensure they cover all possible strategies. Having a lower bar for MSO referrals in capital cases makes sense: it reduces the chances of an ineffective assistance of counsel appeal filing if the evaluation was completed. Thus, it is possible that fewer legitimate insanity referrals are made in capital cases, and that the base rate of insanity-supportive opinions reached might be significantly lower in capital cases. Future research should investigate the rate of insanity-supportive opinions in capital cases from a variety of referral sources to clarify the answers to these questions.

Psychologists certified to conduct forensic evaluations in the state of Alabama go through a training and peer-review process prior to certification. The reports written by certified forensic evaluators in this sample were quite similar in format. This similarity likely increased the

interrater reliability for many of the variables we coded; however, this similarity also likely decreased the variability necessary to conduct some analyses. To some degree, similarity of the reports is good, as standardization may improve communication with the court. However, too much similarity may suggest that individual defendants may not be getting individualized evaluations.

We intended to analyze what factors lead to opinions supporting an insanity claim, as Warren and colleagues (2004) did. However, we were unable to replicate their findings due to the lack of variability in insanity conclusions. Instead of analyzing diagnoses and other variables predictive of insanity claims, we simply report descriptive diagnostic statistics for this sample. Almost all reports included a diagnosis (95%). Most provided an Axis I diagnosis (89%), and over half (61%) included an Axis II diagnosis (10% deferred an Axis II diagnosis). Most of the Axis I disorders were substance use disorders (77%), with multiple substance diagnoses most often provided within this category. Mood disorders were included in roughly a quarter (23%) of cases. Psychotic disorders were diagnosed in 11% of cases, and Anxiety disorders in 6%. Personality disorders (47%) and Intellectual Disability (14%) diagnoses were provided on Axis II. Once again, diagnoses did not differentially predict support for an insanity claim in this sample, because none of the reports opined support for an insanity claim.

Ethical and practice guidelines mandate that examiners cite the sources of information that provide the bases for their reasoning and conclusions (Committee on Ethical Guidelines for Forensic Psychologists, 1991; Heilbrun et al., 2002). Consistent with Heilbrun and Collins' (1995) suggestions for what data psychologists should use in MSO evaluations, every evaluator cited information about current psychological functioning (e.g., clinical interviews and mental status examinations). The use of third party information was common, as almost all reports cited

records related to the alleged offense, and many used additional sources of information such as prior mental health and medical records, interviews with jail staff or law enforcement, interviews with attorneys, and information from family members and significant others. Examiners relied on more than five different types of sources on average, lending credence to the notion that these evaluators were using a variety of sources of information in the evaluation process. A corroborating finding that number of sources cited may evidence greater objectivity was the positive correlation that emerged between number of sources and greater consideration of alternative hypotheses: examiners more willing to consider disconfirmatory information also cited a greater number of sources.

The current sample of reports generally replicated Heilbrun and Collins' (1995) analysis of what evaluators actually do in MSO evaluations. As in Heilbrun and Collins' study, 100% of evaluators in this study included a clinical interview in their evaluation. Our examiners included a mental status examination at a higher rate (100%) than in Heilbrun and Collins' sample (68%). Examination of records related to the alleged offense were also reported at a higher rate in our sample (93% vs. 56%). Similar rates of prior mental health record examination were cited in our sample compared to Heilbrun and Collins' (27% vs. 32%, respectively). Interviews with jail staff or law enforcement was reported at a lower rate in our sample (8% vs. 25%).

The findings from Heilbrun and Collins' (1995) study and our current study generally map onto Borum and Grisso's (1996) survey of examiners inquiring about what information is "essential" for inclusion in MSO evaluations. However, the rates of examiners actually including what was rated as "essential" were not as high as would be ideal in either Heilbrun and Collins' sample or our more recent analysis of reports. We can conclude from these results that forensic examiners attempt to conduct MSO evaluations consistent with aspirational ideals

outlined by Borum and Grisso (1996); however, they fall short of ideal on several elements and room for improvement remains.

Holistic evaluations – those that include an analysis of all information possibly relevant to the referral issue – should be sought in the interest of objectivity. One indicator of holistic information in reports is whether evaluators consider disconfirmatory evidence. Data contrary to offered opinions should nevertheless be incorporated into the report in the interest of objectivity (Garb, 1998; Otto, 2009; van Gorp & Kalechstein, 2005; Williams, 1990). We rated examiner’s consideration of disconfirmatory evidence and alternative hypotheses on a five-point rating scale, with higher ratings corresponding with more consideration of disconfirmatory evidence (see Appendix I). The average rating on this five-point scale for this sample was 2.72, suggesting that examiners on average do not incorporate disconfirmatory evidence or if they do, it is not adequately incorporated into their theory of the case. Examiners in this sample evidenced confirmatory distortion as described by Martindale (2005), selectively reporting data to produce a distorted picture consistent with their opinion. Consistent with this notion is the finding that consideration of alternative hypotheses was negatively correlated with “clearly” leaving information out of the report that should have been addressed: examiners were more likely to leave information out when they considered fewer alternatives.

A second indicator of holistic evaluations is report length. Heilbrun and Collins (1995) concluded that an average of four pages for forensic reports was sufficient evidence that examiners provided more than conclusions and opinions. In our sample, the average page length was over seven pages. Thus, we concluded that clinicians in this sample on average documented bases for opinions, described the evaluation process, and provided conclusions and opinions in reports. This finding may mean that forensic evaluations quality may be increasing on at least

one indicator (report length). However, this finding could also reflect the fact that this particular sample of reports generally included more than one forensic issue (MSO, adjudicative competence, and sometimes Competence to Waive Miranda Rights as well). Consistent with the argument that longer reports may be associated with less bias were the findings that report length was positively correlated with consideration of alternative hypotheses and number of sources cited.

It is not clear whether four (or even seven pages) is a sufficient length for an MSO evaluation. While discussing the results of this study with two forensic examiners and a judge in Alabama, the issue of report length was raised. One forensic examiner argued for report brevity: to include only information explicitly relevant to the referral question and supporting the conclusions and opinions, to reduce the burden on the court to read the report. The other forensic examiner argued for report depth and breadth, going so far as to say that any forensic report shorter than 30 pages would be insufficient. The judge interjected, noting that he never reads any forensic report in entirety, but instead immediately upon receipt flips to the summary section to process the essential information.

We propose that a balance may be struck between these competing perspectives. Reports should sufficiently document the bases for conclusions and opinions, even if they are dozens of pages long. Special attention should be paid to the summary section. For most cases, this section is likely the most important section of the report. For those cases that are appealed or where the evaluation is contested, the substantive depth and breadth of the rest of the report would then become most important. The argument that attending especially to the summary section is important, in part due to the fact that the sample of reports in this study evidenced very little variability in the summary sections. The summary section should not only provide the

conclusions and opinions reached, but should also provide an individualized and carefully drafted distillation of the essential facts and findings of the evaluation that support the conclusions and opinions.

The evaluators in this sample approached the ultimate issue often. On Redding and colleagues' (2001) eight-point scale, 86.9% provided an ultimate opinion. Fulero and Finkel's (1991) three-point scale has a somewhat stricter criterion for ultimate issue testimony, and on this scale, only 35.2% of examiners provided an ultimate opinion. On Fulero and Finkel's scale, an additional 56.6% stopped just short of the ultimate issue and provided a penultimate opinion. Reports in which the evaluator provided a diagnosis, tied the diagnosis to the legally-relevant behavior (even using the language of the statute) were coded as penultimate opinions on Fulero and Finkel's scale, whereas this was coded as an ultimate opinion on Redding and colleagues' scale. Fulero and Finkel required a categorical "sane" or "insane" opinion at the time of the alleged crime for an ultimate opinion rating.

Regardless of the scale used, the data indicate examiners closely approached or provided an opinion about the ultimate issue in most cases. These results are generally consistent with Borum and Grisso's (1996) finding that most forensic evaluators agree that opinions about psychiatric diagnosis and its relation to the ultimate MSO issue are important to include in MSO evaluations. When using the stricter Fulero and Finkel (1991) three-point ultimate opinion rating scale, the percentage of reports addressing the ultimate legal issue (35.2%) is similar to that found by Heilbrun and Collins (1995) in MSO reports (41%).

We intended to use level of ultimate opinion provision as a possible indicator of "certainty" to determine whether a relation existed between how far the ultimate legal question was addressed and indicators of potential bias. Level of ultimate opinion on the Redding and

colleagues (2001) eight-point scale evidenced a significant negative correlation with report length. Indeed, shorter reports were associated with higher levels of ultimate opinion provision.

Our *a priori* exploratory hypotheses were based on the language variables. We expected there to be enough variance in the language ratings to use them in regression and correlation analyses relating to the remaining variables coded (e.g., report length, diagnoses provided, conclusions and opinions, sources of information, and consideration of alternative hypotheses). However, these language variables largely were not systematically related to the other variables. A few different things could explain these findings. Perhaps the lower reliability for these language ratings (particularly the dominance ratings) introduced too much error into the analyses and reduced the power of the analysis below the point at which significant findings could emerge. Alternatively, the lack of variability in these language coding variables could have reduced the power of the tests, particularly in this relatively small sample. Consistent with this argument is the notion that perhaps these examiners were not biased – or were carefully editing out the biased language in their reports. Yet another alternative explanation is that perhaps the language variables we coded (dominance and valence) were not a good proxy for “bias.”

To address the limitations in the language ratings, future investigators should construct detailed language coding schemes and conduct sufficient training toward the goal of obtaining high interrater reliability. A tight definition of “biased” language is recommended. Our coders struggled with this – as evidenced by the difficulty in obtaining reliable ratings as well as the numerous discussions we had to clarify questions and concerns about coding.

Other limitations included our small sample size, particularly the limited number of different evaluators. Future researchers should garner larger samples of reports and individual evaluators. Future studies should also attempt to garner a more varied sample of reports, ideally

from multiple referral sources. The exploratory nature of this study increased alpha inflation and increased the chance of a Type I error. It is possible that one or a few of our findings may be spurious. Nevertheless, this study was valuable for generating hypotheses for future research by uncovering possible ways in which bias may evidence itself in forensic reports.

GENERAL DISCUSSION

This series of studies represented an investigation into a relatively unexamined area of forensic psychology. It is among a handful of studies that have begun investigating whether bias translates into actual decision-making (see e.g., Stanley, Sokol-Hessner, Banaji, & Phelps, 2011). Heilbrun and Brooks (2010) proposed an agenda for the next decade in the field of forensic psychology, framed by the National Research Council's recommendations for improvements in all forensic sciences (see NRC, 2009). Although forensic psychology was not included in the NRC's definition of forensic science, it could be included in the future and the NRC's recommendations are generally fitting from the perspective of forensic psychology.

Two of the issues raised by the National Research Council concerning the nature of forensic evidence used in criminal proceedings are 1) problems with the nature of the science on which expert evidence is based and 2) evidence tainted through bias, human error, and the absence of sound operational and performance standards (NRC, 2009). The council noted, "Research has been sparse on the important topic of cognitive bias in forensic science – both regarding their effects and methods for minimizing them" (NRC, 2009, p. 124). Based on the National Research Council's report, Heilbrun and Brooks (2010) recommended research on observer bias and human error in forensic examinations be undertaken. The current series of studies fall in line with these recommendations.

Analyses of Specific Aims

Specific Aim 1. The first specific aim of this series of studies was to integrate quantitative and qualitative methods in compiling descriptive information about forensic

psychologists' occupational socialization processes, awareness of potential biases, attitudes toward capital punishment, and behaviors in capital case evaluations. This aim was achieved.

Qualitative methods were used to explore these issues in study one. Occupational socialization as described by participants in the first study varied widely across time and situation. The field has developed and grown tremendously in the last few decades, and psychologists have received increasing amounts of specialized training related to forensic decision-making. Findings from study two suggest that occupational socialization increases over time, including greater identification with career, greater work satisfaction, greater belief in objectivity, and greater endorsement of bias correction strategies.

In regards to clinician awareness of bias, everyone reported they practiced objectively, but almost everyone also reported believing colleagues were more biased than themselves in study one. On the continuous rating scale in study two, psychologists' average rating of personal objectivity was close to but did not reach the highest value (6.04 out of 7). Thus, although psychologists believe themselves to be objective, they do not claim "pure" objectivity and leave a little room for error in their estimations, consistent with the notion of methodological objectivity.

In regards to capital punishment attitudes, psychologists were willing to discuss their thoughts about the death penalty and their behaviors in capital case evaluations during the interviews in study one. Nothing unexpected emerged, except perhaps the fact that everyone was willing to discuss their capital punishment attitudes. In study two, a quantitative measure of death penalty support was included. Forensic psychologists' mean score on the measure was 47.7, which was fairly low (unsupportive) of the death penalty. The scale was composed of 15 items, each rated on a 1 (*strongly disagree*) to 9 (*strongly agree*) scale. Thus, total scores could

range from 15 to 135. With an average score of 47.7, we conclude that as a group, forensic psychologists do not strongly endorse capital punishment.

Specific Aim 2. The second specific aim was to investigate how psychologists' personal attitudes toward capital punishment might influence data interpretation and conclusions in assessments of capital defendants. Clinicians discussed ways in which their capital punishment attitudes might affect their decision-making in capital cases in both studies one and two. Several clinicians in both studies indicated they refrained from conducting capital case evaluations due to the strength of their capital punishment convictions.

We found evidence that psychologists' personal attitudes toward capital punishment systematically differed in regards to referral acceptance in capital cases. This is a novel finding that has not been documented elsewhere in the literature. Psychologists' preexisting death penalty attitudes predicted from whom they were willing to accept capital case referrals. Psychologists with stronger death penalty supportive attitudes were more likely to accept capital cases from the prosecution, whereas psychologists less supportive of the death penalty were more likely to accept capital cases from the defense. These findings may provide an explanation for or may exaggerate the allegiance effect, in which psychologists reach conclusions consistent with the goals of the adversarial retaining party (Boccaccini et al., 2008; Murrie et al., 2009).

Specific Aim 3. The third specific aim was to compare evaluator awareness of bias to implicit bias in capital case evaluations. To address this aim, psychologists reported awareness of potential biases in studies one and two were qualitatively compared to the data from study three. As discussed in the analysis of specific aim 1, forensic psychologists believe they are objective, although they left a little room for error. Findings from the third study in which actual reporting behaviors were examined suggests psychologists may act in more biased ways in than

they think they do. Study three uncovered evidence of individual clinicians accounting for a large portion of the variance (up to 68%) in several outcome variables indicative of potential bias. Report length, number of sources cited, consideration of alternative hypotheses, and level of addressing the ultimate issue each evidenced systematic differences attributable to individual evaluators.

Although evidence of potential bias was discovered in these analyses, promising results regarding strategies to manage biases were also discovered. Consistent with ethical and practice guidelines, forensic psychologists relied on multiple sources in their evaluations (over five sources on average in this sample). Heilbrun and Collins (1995) concluded that forensic reports four pages in length were sufficiently long for psychologists to provide substantive information in addition to conclusions and opinions. Our sample of reports was over seven pages in length on average, indicating that our psychologists may have provided sufficient substantive information in their reports.

Specific Aim 4. The fourth specific aim was to generate hypotheses for future research on how psychologists can recognize and mitigate their implicit biases, in addition to how the occupational socialization process in forensic psychology might need to change to teach psychologists to recognize and mitigate their potential biases. This aim was met and surpassed. A wealth of data was discovered in the qualitative interviews from study one in regards to what psychologists can do to recognize and mitigate their biases. These qualitative data led to the development of the Bias Correction Strategies Scale, which was included in the survey in study two. Further discussion of strategies for managing bias is presented below.

Suggestions for the field's occupational socialization process to better teach psychologists to recognize and mitigate their biases emerged as well. We discovered that

psychologists are occupationally socialized to believe they are largely objective when in fact they are susceptible to implicit cognitive biases. Thus, the occupational socialization process must adapt to this information and teach budding psychologists how to recognize and correct for their own biases. Borum and colleagues (1993) suggested that clinical training programs currently underemphasize the process of clinical judgment and decision-making. They argued that clinicians must be trained about the limitations of clinical judgment, how biases are manifested in practice, and how to avoid or minimize their impact. The current research shines a light on how biases might be mitigated. There is great potential for sharpening forensic psychologists' objectivity by training students about biases and methods to effectively manage biases during the occupational socialization process. The strategies discussed herein may be beneficial to explicitly include in clinical assessment courses, didactic seminars, supervision sessions, and clinical practicums.

Since bias is indeed an issue worthy of concern in MSO evaluations, the field has a duty to teach new practitioners to become aware of their potential biases and how to minimize the impact of such biases in their work. Neuberg and Fiske (1987) described how attempts to eliminate judgment errors by debriefing subjects in great detail about their bias as well as how to avoid the bias have thus far been unsuccessful. They argued the failure may be due to subjects not recognizing the bias within themselves (even after debriefing), or not knowing how to overcome them. Arkes (1989) described debiasing techniques that forensic clinicians may use, but he also noted that telling people about a bias and then warning them not to be influenced by it is not effective. However, Wegener and Petty (1995) showed that when people are made aware of their own potential biases, they work to correct for them. Further, Sommers (2007) found that explicit reminders to be objective can reduce subtle racial biases in juror decision-

making, and Devine and colleagues (2002) found that internal motivation to respond without prejudice moderated explicit bias. The possibilities for examining these processes in this context are ripe.

Strategies for Managing Potential Biases

Human judgment is subject to various biases, because cues are unconsciously picked up from the environment and factored into mental analyses (NRC, 2009). Cognitive biases are not character flaws; instead, they are common features present in decision-making and they cannot be willed away (NRC, 2009). Peshkin describes subjectivity as “a garment that cannot be removed... [it is] insistently present” (1988, p. 17). However, developing an enhanced awareness of subjectivity and bias through formal and systematic monitoring is a necessary exercise to “tame” the unintentional influence of that subjectivity (Peshkin, 1988, p. 20).

The qualitative data emerging from study one and the data from the Bias Correction Strategies scale in study two yielded valuable information about strategies forensic evaluators use to minimize the impact of their biases on their work. These strategies mapped onto and went beyond those strategies previously identified to help clinicians attend to potential errors in decision-making. One such suggestion was knowing oneself and having insight into one’s biases. Unexamined subjectivity “lies inert...beyond our control” according to Peshkin (1988, p. 17). Systematic and honest introspection and discussion with others is a major step toward mitigating the influence of bias.

Evaluators may attempt to avoid cognitive dissonance by disproportionately relying on early pieces of evidence encountered with resistance to changing preliminary conclusions (NRC, 2009). An evaluator too wedded to a preliminary conclusion may find it difficult to accept new information fairly (NRC, 2009), which is consistent with the confirmatory bias discussed earlier

(Borum et al., 1993; Martindale, 2005; Nisbett & Ross, 1980). To avoid this situation, forensic examiners should avoid preliminary conclusions and should wait until all relevant and valid information is obtained to reach conclusions. The most valid sources of data should receive the heaviest weight in decision-making (Borum et al., 1993). All possible hypotheses should be considered, and the strength of the data should be evaluated for each hypothesis prior to clinical opinion formation.

Active consideration of alternative hypotheses was recommended by our participants and also existed as a suggestion in the literature prior to this study (Arkes, 1981; Arkes, 1989; Arkes, Faust, Guilmette, & Hart, 1988; Borum et al., 1993; Garb, 1998). When clinicians are required to write down alternative hypotheses and then provide reasons why each hypothesis could be correct, they are significantly less likely to be influenced by confirmatory bias than clinicians who are not required to actively consider alternate hypotheses (Arkes et al., 1988). Seeking all relevant information – especially disconfirmatory information – and incorporating the information into the report, was recommended by our participants.

In considering whether to gather more information, Borum and colleagues (1993) recommend keeping incremental validity in mind. Including additional data of questionable validity may not increase the accuracy of judgments (and may in fact decrease their accuracy). Thus, more information is not always better. Seeking out certain types of oft-ignored data, such as base-rates, when making clinical decisions, is recommended (Arkes, 1981; Borum et al., 1993; Garb, 1998). Another suggestion in our sample and the existing literature was to reduce reliance on memory by taking detailed notes and documenting decision-making processes and sources of information (Arkes, 1981; Arkes, 1989; Borum et al., 1993; Garb, 1998).

Other strategies included procedural safeguards to minimize the effects of bias emerged from our analyses. Some of these included spreading the evaluation out over time, editing out pejorative language in reports, strictly addressing the referral question, critically examining conclusions, and avoiding dual roles. An additional strategy offered was developing a degree of humility about one's ability to be objective. Overconfidence results in the risk of making unjustified inferences on the basis of limited information, sometimes with resistance to attending to new and relevant information (NRC, 2009). In regard to overconfidence, our participants and Borum and colleagues (1993) suggest gathering follow-up information on accuracy following evaluations. Despite the difficulties inherent in this task, Borum and colleagues (1993) recommend speaking with the referral source and following the outcome of the case. Other methods suggested by participants include systematically examining one's rate of agreement with the referral source and comparing rates of opinions with base rates in the literature.

Keeping in mind that the advocacy position of the psychologist is to his/her professional forensic opinion concerning the forensic issue under consideration rather than to the evaluatee or the retaining party was recommended by participants. In addition, many participants described how financial dependence on a particular referral stream can enhance the pressure to "please" the referral source, a situation we termed the "Economic Effect." Developing financial referral-based independence was offered as a solution to the "Economic Effect."

It may be appropriate to look to a more standardized measure for conducting MSO evaluations to reduce the impact of examiner bias. Rogers (1984) published the Rogers Criminal Responsibility Assessment Scales (R-CRAS), a method for applying standardized decision models in the assessment of criminal responsibility. Although the R-CRAS has been found to have adequate reliability and validity (Rogers, 1984; Rogers & Ewing, 1992; Rogers, Seman, &

Clark, 1986; Rogers & Sewell, 1999), it has not been widely adopted by forensic evaluators.

Rogers and Sewell (1999) argued the R-CRAS is currently best validated measure for evaluating criminal responsibility and should thus be used more often to increase the reliability and validity of mental state at the time of offense evaluations. It is possible such a measure could also reduce the effects of examiner bias in MSO evaluations.

Recommendations for Valid and Reliable Scientific Reporting

The National Research Council (2009, page 121) described principles of science and guidelines for interpreting scientific data. Although these recommendations were intended for the forensic sciences as defined in their report, forensic psychology could benefit from adopting these recommendations. The National Research Council outlined several recommendations for valid and reliable scientific evidence in criminal proceedings, including:

- 1) careful and precise description of the scientific procedures employed, so that others can replicate and validate them,
- 2) identifying as many sources of error as possible that can affect both the accuracy and precision of an instrument,
- 3) quantifying measurement rather than summary reporting of results (e.g., include actual values so that others can interpret the data as well),
- 4) reporting confidence intervals with a high probability of containing the true value,
- 5) precisely defining the method and purpose of the measure, and recognizing its limitations, and
- 6) conducting validation studies of the performance of a forensic procedure to assess the percentages of false positives and false negatives

Communication of results in reports should be complete and thorough, including at a minimum methods and materials, procedures, results, and conclusions. Reports should identify sources of uncertainty in procedures and conclusions and provide estimates of their measurement scales to indicate level of confidence in results. Providing a detailed analysis of statistical reliability would not be practicable or appropriate, but sufficient content should be provided to permit the nonscientist reader to understand the procedure undertaken and allow for critical examination of the conclusion (NRC, 2009, p. 186).

Standardization in reporting findings, with uniform and consistent use would be ideal, according to the National Research Council (2009). Forensic reports and related courtroom testimony should include clear descriptions of the limitations of the analyses, including associated probabilities and confidence intervals should be provided where possible. Testimony should be provided in lay terms so all trial participants can understand how to weigh and evaluate the evidence (NRC, 2009).

Heilbrun and Brooks (2010) described how the overall quality of forensic evaluation reports might be improved. They distinguished between best practice, appropriate practice, and poor practice. Best practice was described as aspirational, with strong empirical foundations, to be expected from highly trained and board-certified specialists. The National Research Council's (2009) recommendations largely have best practice in mind. However, an important point made by the council was not letting the "perfect" be the enemy of the "good" (NRC, 2009, p. 183). They stated that many forms of forensic investigation and analysis work relatively well once appropriate tasks and methods have been standardized (NRC, 2009). This appears to parallel Heilbrun and Brooks' (2010) description of appropriate practice, defined as that which is consistent with standards and guidelines set by the field. Poor practice, in contrast, is marked by

substantial limitations that grossly impair its accuracy, helpfulness, or overall quality. These limitations might include extreme brevity in the evaluation and/or reporting process, using outdated or irrelevant tests, making serious scoring or interpretive errors, or failing to address the relevant legal constructs referred (Heilbrun & Brooks, 2010).

Forensic evaluations described as “best practice” would be those that minimize or eliminate the effects of examiner bias. Relying on strong empirical foundations, such as specialized tools with identifiable error rates and associated confidence intervals, would both minimize the effects of bias and maximize the validity of the scientific evidence provided to the court. It should be noted several of the suggestions provided by participants and those that Heilbrun and Brooks (2010) would describe as “best practice” are echoed in Grisso’s (2010) recent article providing guidance for improving forensic reports.

Limitations and Future Directions

Limitations existed within each of the individual studies; however, using three separate studies measuring different traits and using different methods enhanced the holistic nature of the study and balanced out some of the individual study limitations. In the third study, low power precluded several models from reaching statistical significance. With greater power, these findings would likely reach statistical significance. In addition, the exploratory nature of the analyses in study three increased the chances of a Type I error. Thus, future studies should attempt to replicate these findings in a larger sample of reports with more evaluators. Ideally, a future study would be designed to survey the evaluators who completed the reports, in order to examine the relation between examiner attitudes and actual behaviors in their own reports.

The ultimate goal of this line of research is directly pair psychologists’ capital punishment attitudes with characteristics of their own reports to examine the potential for bias.

This cannot be done in this initial study. Therefore, only inferences can be drawn as to what the examiner's capital punishment attitudes might be in study three based on the content of their reports. Future studies will be conducted on more diverse samples of reports to determine if examiners with rates of "finding" insanity in more than 25% of their reports (above the base rate) are more likely to have indicators of bias in their reports. Specifically, will these examiners be a) more likely to provide axis I diagnoses, b) less likely to provide axis II diagnoses, c) include fewer sources of information on which conclusions are based, d) have a higher ratio of supporting than uncertain/non-supporting statements, and e) be more likely to address the ultimate legal question more fully? Likewise, will examiners with rates of "finding" insanity in less than 5% of their reports (below the base rate) be a) more likely to not provide axis I diagnoses, b) provide axis II diagnoses, c) include fewer sources of information on which conclusions are based, d) have a higher ratio of supporting than uncertain/non-supporting statements, and e) be more likely to address the ultimate legal question more fully?

If research pairing individual examiner reporting behaviors with their capital punishment attitudes finds an effect of examiner bias on forensic work, further research could investigate other situations within and outside the legal context in which evaluator attitudes might bias their work. If evidence of examiner bias is found in this extreme situation (capital cases) with attitudes toward a topic in which many people hold strong beliefs (capital punishment), other less extreme situations and attitudes can be examined to determine under what conditions examiner bias may evince itself.

An important goal for future studies examining actual reports is to procure a sample with the variability necessary for analysis. Our primary "variable" of interest evidenced no variability. In our sample, every single evaluator concluded that an NGRI defense was not possible. Future studies

should gather reports from a variety of referral sources to maximize variability. Our second primary outcome variable, language ratings, also did not work well. It is possible our language coding scheme was not strong enough for use in this kind of analysis. A loose definition or coding scheme may have reduced our interrater reliability ratings, which in turn may have introduced enough error to substantially reduce the power of the analyses. Studies attempting to use language ratings as a proxy for bias in the future should construct detailed definitions and language coding schemes, and provide sufficient training to reach high interrater agreement on these variables.

Our ultimate issue coding system did not work as well as we intended either. Although we expected to use Redding and colleagues' (2001) ultimate opinion rating scale as a continuous variable in analyses, the coding levels were actually more like separate categories rather than ordinal data. Thus, Fulero and Finkel's (1991) three-point scale is recommended for future research.

Many participants in study one discussed disengagement from the emotional and personal elements of cases, diffusing responsibility for the case outcome to the functioning of the justice system, and compartmentalizing feelings about cases. These mechanisms of controlling bias sounded like Bandura's (1999) description of moral disengagement; thus, a measure of moral disengagement in the capital punishment process was added to study two (Osofsky, Bandura, & Zimbardo, 2005). Unexpectedly, moral disengagement was not systematically related to belief in objectivity, perceived utility of bias correction strategies, or occupational socialization in study two. Thus it appears socialization into moral disengagement is not a common training mechanism. Individual differences in moral disengagement did emerge, but these differences appear to be a more stable internal construct or tendency than a product of training. Future studies can better answer these questions.

Studies one and two shed light on the debate about the value of using therapeutic skills in forensic work (e.g., developing rapport, conveying empathy). Compelling arguments emerged for both sides of the debate, but no consensus emerged. Future work should investigate reasons for and against using therapeutic skills in forensic work to assist examiners in considering both sides of the issue and perhaps generating a consensus in the field at some point in the future.

The finding in this investigation that higher occupational socialization predicted greater belief in objectivity is encouraging, suggesting that socialization into objective practice can improve baseline objectivity. The additional finding that occupational socialization was also associated with endorsement of bias correction strategies lends support to the argument that objectivity can increase with greater socialization. However, it remains to be investigated whether belief in objectivity is related to actual objectivity. Future investigations must pair the analysis of evaluator attitudes and beliefs with an investigation of their own reporting behaviors. We can only infer these relationships from this initial investigation, as our sample of reports was not conducted by the people we surveyed regarding attitudes and beliefs. Nevertheless, the findings of this initial study provide fertile ground for developing hypotheses upon which future investigations can build.

Bias was found to exist in forensic evaluations at a more frequent rate than examiners report in these studies. However, these studies also provided a wealth of data in regards to what psychologists can do to manage the impact of their biases on their work. The most compelling direction for future research based on the state of the knowledge now is to systematically examine whether such strategies are able to reduce bias. What are the empirically supported strategies for bias management in clinical evaluations? The data herein provide fertile grounds for beginning these investigations.

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APPENDICES

Appendix A (For Study 1) Scripted Interview

Telephone Script:

Hello, Dr. X. My name is Tess Neal. I am a clinical psychology-law student at The University of Alabama. Stan Brodsky and I are working on a study right now, and I'm contacting you today to request your participation. You were randomly selected from the list of all psychologists certified through the American Board of Forensic Psychology.

The purpose of this qualitative study is to investigate how people come to think like a forensic psychologist. We're also investigating how personal beliefs might influence data interpretation and conclusions in forensic assessments. We're starting with qualitative interviews to generate hypotheses for use in a larger survey that will follow these interviews. The data from these interviews are very important. I'd like to ask you some questions about potential bias in forensic assessment in general, and also about your own work. Would you be willing to speak with me about your thoughts and experiences?

(If no): Ok, thank you for your time today. Have a good evening. Goodbye.

(If yes); Ok, great. I have one question before we decide if you will actually do the interview. I will only be including people who have done Mental State at the Time of Offense evaluations in capital cases. Have you ever done an MSO evaluation in a capital case?

If yes: Ok, good. Do you have up to an hour to speak with me now, or would you like to schedule a more convenient time?

If no: Ok, well thank you for your time in speaking with me and your willingness to participate in the research. Have a good evening. Goodbye.

(Start of interview)

Dr. X, to ensure that the data from this study can be coded and analyzed, I will be digitally recording each interview. However, I've done several things to protect your privacy. First, once the recording begins, I won't say your name or ask any questions that might identify you. Second, once each interview is complete, a professional transcriptionist, who is very unlikely to recognize your voice, will transcribe the content of each interview. After the interview is transcribed, the recording of the interview will be erased. Third, your identity will not be written down anywhere. I have assigned each participant a research code, and there will be no way to

identify who you are. I've also received IRB approval to waive the requirement for a signed consent form so your name will not be linked to this study in any way. Would it be ok for me to turn on the recorder now?

(If no): Ok, I understand your concerns. Thank you very much for your time today. Have a good evening. Goodbye.

(If yes): Ok, great. From this point forward, I won't say or ask anything that would identify you. The recorder is now turned on. Ok, I will start by reading you the Information Sheet (read Participant Information Sheet).

Now let's get to the interview. I'll be asking you six questions about your experiences, but please feel free to elaborate on any answer as much as you'd like. Also, if there are important issues you believe I've overlooked, please speak with me about it. Do you have questions before we begin? (answer them if so). Ok, here's the first item:

- Occupational socialization is a process many people go through as they learn and participate in their work – as they “become” a member of their profession. This socialization process often shapes the way people think, their emotions, and their values in ways that are consistent with the work they do. A lot of research has been done examining this process in a variety of fields. For instance, studies have looked at how medical students become doctors, how police recruits become officers, and how nursing students become nurses. Will you speak with me about your experience in becoming a forensic psychologist?
 - a. (How long have you been in forensic psychology?)
- Tell me about any occupation socialization experiences you had in regards to becoming “objective” in the work that you do. For instance, do you remember being taught that objectivity and impartiality are important in forensic work?
 - a. Tell me more about this.
 - b. If you were teaching a graduate student about what it means to be “objective” in forensic work, what would you say?
- In general, how can psychologists' personal biases enter the picture in their forensic work?
 - a. Tell me more about this.
- Tell me about your own background, experiences, and beliefs that might influence the choices you must make when you do forensic evaluations.
 - a. To what extent are you concerned about your own potential biases when you do forensic work?
 - i. Tell me more about this.
 - b. Talk to me about any experiences you've had in which you were concerned about your ability to be objective.

- i. What did you do in that (those) situation(s)?
 - In many situations in which strong feelings are elicited, the potential for bias is greater. In the forensic realm, capital cases may elicit the strongest emotions of any type of case, because many people have strongly held convictions about capital punishment. Tell me about any experiences you've had with capital case referrals or evaluations in which you were concerned about your objectivity.
 - Do you have any strategies or methods you employ to try to correct for your own potential biases?
 - a. Tell me more.

Well, that was the last question I had for you today. Is there anything you would like to elaborate on or go back to? Do you have questions for me? Ok, well, let me read you this debriefing statement before I let you go. (read debriefing). Would you like a copy of this debriefing for your own records? (If yes: ok, what is your email address so that I may email it to you now?) Thank you so much for your participation. It was great speaking with you. Have a good evening. Goodbye.

Appendix B (For Study 2)
Forensic Psychologist Questionnaire

1. What is the highest degree you have earned?
 Ph.D. J.D. Joint Ph.D./J.D.
 Psy.D. Master's Degree Other (Specify _____)
2. In what year did you obtain your highest degree? _____
3. What is your profession? _____
4. Where did you receive your clinical training? _____
5. What is your primary place of employment?
 - a. Institution or agency (e.g., hospital, prison, court clinic, etc.)
 - i. Specify type of institution _____
 - b. Private
 - i. Specify type of practice _____
 - c. University
 - d. Other or more than one
(specify _____)
6. Please fill in an estimated percentage for each item below (to equal a total of 100% for this question) regarding your clinical work (not just specific to forensic work):

_____ % Assessments _____ % Therapy/Treatment _____ % Other (specify) _____
7. Do you conduct forensic evaluations? Yes No
8. If so, for how many years have you conducted forensic evaluations? _____
9. If so, what percentage of your practice is in *forensic* evaluations? _____ %
10. Are you certified by a specialty board in forensic or clinical psychology? Yes No
 - a. If yes, specify _____
11. If applicable, how did you receive your forensic training? (Please check all that apply)
 - a. Formal academic forensic psychology training
 - b. Practicum or other supervised experience
 - c. Internship

- d. One year or more of post-doctoral forensic training
- e. Diplomate or certification in forensic psychology
- f. Other
(specify _____)

12. If applicable, what is your primary source of current forensic training?
- a. Workshops/ Continuing Education Programs
 - b. Regular supervision
 - c. Other
(specify _____)

13. What do you think about using therapeutic clinical skills training (e.g., empathy, developing rapport) in forensic work? _____

14. What do you think about the value of formal training in being objective in forensic work? If you think this is an important training goal, how should this training be accomplished?

15. Have you received any formal training about HOW to be objective in forensic work? If so, please describe the context and content of the training. _____

16. Estimate the percentage of criminal and civil cases in which you work (to equal a total of 100% for this question):
_____ % Criminal _____ % Civil

17. Estimate the percentage (to equal a total of 100% for this question) regarding by whom you have been retained in forensic casework:
____ % Defense ____ % Prosecution ____ % Plaintiff ____ % Court ____ % Other Public Agency

18. If applicable, please fill in as estimated percentage for each item below (to equal a total of 100% for this question) regarding by whom you have had opportunities to be hired:

___% Defense ___% Prosecution ___ % Plaintiff ___% Court ___ % Other Public Agency

19. What is the primary state in which you practice? _____

20. Are you licensed to practice in other states? ___ Yes ___No

a. If so, in what other states are you licensed to practice?

21. Do any of the states in which you practice have the death penalty? ___ Yes ___No

a. If so, which state(s)? _____

22. If you practice in a death penalty state, do you perform capital case evaluations? _Yes _No

a. Why or why not? _____

23. Estimate the percentage of times you have reached an opinion in a capital case unfavorable to the defendant:

_____%

24. Estimate the percentage of times you have reached an opinion in a capital case favorable to the defendant:

_____%

25. If a state in which you practice has the death penalty, have you or would you evaluate a defendant in a capital case for the prosecution? ___ Yes ___No

26. If the state in which you practice has the death penalty, have you or would you evaluate a defendant in a capital case for the defense? ___ Yes ___No

27. If applicable, have you or would you evaluate a defendant in a capital case for the court as a court appointed assessor? ___ Yes ___No

28. Have you or would you conduct a competency for execution evaluation? ___Yes ___No

29. Have you ever declined or considered declining a capital case referral/assignment when you believed your ability to remain impartial would be compromised due to your personal convictions about capital punishment? __Yes __No

30. What is your gender? __Male __Female

31. What is your age? _____

32. What do you consider to be your race or ethnicity?

- | | | |
|---|---|---|
| <input type="checkbox"/> African American | <input type="checkbox"/> Hispanic (non-white) | <input type="checkbox"/> Pacific Islander |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Hispanic (white) | <input type="checkbox"/> White |
| <input type="checkbox"/> Biracial | <input type="checkbox"/> Native American | <input type="checkbox"/> Other (Specify_____) |

**Appendix C (For Study 2)
Occupational Socialization Scale**

Please circle your answer for each question on the scale provided.

1. The goals of my profession are also my goals.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
2. I understand how to perform the tasks that make up my job.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
3. During my forensic training, I learned the importance of objectivity and impartiality in one's work.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
4. I know the history of this profession (e.g., forensic psychology's roots).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
5. I have not really decided what my career objectives should be yet.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
6. I would be a good example of a psychologist who represents my profession's values.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
7. I know how to be objective and keep my personal beliefs from influencing my professional work.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
8. I have not fully developed the appropriate skills and abilities to successfully perform my job.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
9. I know what I want out of life.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
10. I know what constitutes acceptable job performance.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

11. I know this profession's overall policies and/or rules (e.g., ethical code for clinical psychologists and for forensic psychologists).
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
12. I understand what all the duties of my job entail.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
13. I know this profession's long-held traditions
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
14. I feel competent to share my findings with the court in a credible manner (e.g., to testify).
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
15. I know the responsibilities, tasks, and projects for which I was hired.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
16. My chosen line of work gives me a sense of well-being.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
17. I believe most of my colleagues like me.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
18. I have a strategy for achieving my career goals.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
19. I know how to meet my client's needs.
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
20. I have a good understanding of the politics in my profession
- 1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

Chao, O’Leary-Kelly, Wolf, Klein, and Gardner’s (1994) Socialization Content Questionnaire

Please circle your answer for each question on the scale provided.

- 1. I have learned how things “really work” on the inside of this organization.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 2. I know very little about the history behind my work group/department.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 3. I would be a very good representative of my organization.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 4. I do not consider any of my coworkers as my friends.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 5. I have not yet learned “the ropes” of my job.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 6. I have not mastered this organization’s slang and special jargon.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 7. I know who the most influential people are in my organization.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 8. I have learned how to successfully perform my job in an efficient manner.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 9. I am not familiar with the organization’s customs, rituals, ceremonies, and celebrations.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 10. I am usually excluded in social get-togethers given by other people in the organization.
1 2 3 4 5
Strongly Disagree Strongly Agree
- 11. The goals of my organization are also my goals.
1 2 3 4 5
Strongly Disagree Strongly Agree

24. I understand what all the duties of my job entail.

1 2 3 4 5
Strongly Disagree Strongly Agree

25. I would be a good representative of my organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

26. I am not always sure what needs to be done in order to get the most desirable work assignments in my area.

1 2 3 4 5
Strongly Disagree Strongly Agree

27. I am usually excluded in informal networks or gatherings of people within this organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

28. I have a good understanding of the motives behind the actions of other people in the organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

29. I am familiar with the history of my organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

30. I understand what most of the acronyms and abbreviations of my trade/profession mean.

1 2 3 4 5
Strongly Disagree Strongly Agree

31. I am pretty popular in the organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

32. I can identify the people in this organization who are most important in getting the work done.

1 2 3 4 5
Strongly Disagree Strongly Agree

33. I believe most of my coworkers like me.

1 2 3 4 5
Strongly Disagree Strongly Agree

34. I support the goals that are set by my organization.

1 2 3 4 5
Strongly Disagree Strongly Agree

Gould's (1979) Career Planner Scale

Please circle your answer for each question on the scale provided.

1. I have a plan for my career.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
2. I identify strongly with my chosen line of work.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
3. I clearly understand my capabilities.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
4. I adapt easily to changes in my job.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
5. Sometimes I wish I had chosen a different career field.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
6. My career objectives are not clear.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
7. I have a strong sense of personal identity.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
8. I get a sense of pride from my chosen line of work.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
9. I know what I want out of life.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
10. I change my career objectives frequently.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
11. Compared to other areas of my life, my chosen line of work is *not* very important to me.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

12. I like to try new and different things in my job.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

13. I have not really decided what my career objectives should be yet.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

14. If I were to describe myself to someone, I would probably begin by stating my line of work.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

15. I have a strategy for achieving my career goals.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

16. I do not like having to adapt to new and changing job conditions.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

17. I am sometimes dissatisfied with my choice of career fields.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

18. I know what I need to do to reach my career goals.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

19. My chosen line of work gives me a sense of well-being.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

20. I often feel confused about who I am as a person.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

21. If I were to rank (in importance to me) all the things that I do, those things related to my line of work would be at or near the top.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

Haueter, Macan, & Winter's (2003) Newcomer Socialization Questionnaire

Please circle your answer for each question on the scale provided.

1. I know the specific names of the products/services produced/provided by this organization.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
2. I understand how my particular work group contributes to the organization's goals.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
3. I know the responsibilities, tasks and projects for which I was hired.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
4. I know the history of this organization (e.g., when and who founded the company, original products/services, how the organization survived tough times).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
5. I know my work group's objectives.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
6. I understand how to perform the tasks that make up my job.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
7. I know the structure of the organization (e.g., how the department fits together).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
8. I understand the relationship between my group and other groups.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
9. I understand which job tasks and responsibilities have priority.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
10. I understand the operations of this organization (e.g., who does what, how sites, subsidiaries and/or branches contribute).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
11. I understand the expertise (e.g., skill, knowledge) each member brings to my particular work group.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

12. I understand how to operate the tools I use in my job (e.g., voice mail, software, programs, machinery, broom, thermometer).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
13. I understand how each member's output contributes to the group's end product/service.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
14. I know how to acquire resources needed to perform my job (e.g., equipment, supplies, facilities).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
15. I understand this organization's objectives and goals.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
16. I understand what the group's supervisor expects from the work group.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
17. I know who to ask for support when my job requires it.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
18. I understand how various departments, subsidiaries, and/or sites contribute to this organization's goals.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
19. I understand the group supervisor's management style (e.g., hands-on, participative).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
20. I know who my customers (internal and external) are.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
21. I understand how my job contributes to the larger organization.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
22. I know my work group role.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
23. I know how to meet my customer's needs.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

24. I understand how to act to fit in with what the organization values and believes.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
25. When working as a group, I know how to perform tasks according to the group's standards.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
26. I know when to inform my supervisor about my work (e.g., daily, weekly, close to deadlines, when a request is made).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
27. I know this organization's overall policies and/or rules (e.g., compensation, dress code, smoking, travel expense limitation.).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
28. I know the policies, rules, and procedures of my work group (e.g., attendance, participation).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
29. I know what constitutes acceptable job performance (i.e., what does my supervisor and/or customers expect from me).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
30. I understand the internal politics within this organization (e.g., chain of command, who is influential, what needs to be done to advance or maintain good standing).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
31. I understand how to behave in a manner consistent with my work group's values and ideals.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
32. In the course of performing my job, I understand how to complete necessary forms/paperwork (e.g., time sheets, expense reports, order forms, computer access forms).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
33. I understand the general management style (e.g., top-down, participative) used in this organization.
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree
34. I understand the politics of the group (e.g., who is influential, what needs to be done to advance or maintain good standing).
1 2 3 4 5 6 7
Strongly Disagree Strongly Agree

35. I understand what is meant when members use language (e.g., acronyms, abbreviations, nicknames) particular to this organization.
- | | | | | | | |
|-------------------|---|---|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree | | | | | | Strongly Agree |

Appendix D (For Study 2)
Death Penalty Attitudes Scale (DPAS)

Please circle your answer for each question on the scale provided.

1. I think the death penalty is necessary.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
2. Society has a right to get revenge when murder has been committed.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
3. There are some murderers whose death would give me a sense of personal satisfaction.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
4. There is no such thing as a sentence that truly means "life without parole."
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
5. The death penalty should be used more often than it is.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
6. The death penalty is the just way to compensate the victim's family for some murders.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
7. The death penalty does not deter other murderers.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
8. It is more cost efficient to sentence a murderer to death rather than to life imprisonment.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
9. No matter what crime a person has committed executing them is a cruel punishment.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
10. The death penalty makes criminals think twice before committing murder
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree
11. Even when a murderer gets a sentence of life without parole, he usually gets out on parole.
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

12. Executing a person for premeditated murder discourages others from committing that crime in the future.
- | | | | | | | | | | |
|--|-------------------|---|---|---|---|---|---|---|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | Strongly Agree |
13. The desire for revenge is a legitimate reason for favoring the death penalty.
- | | | | | | | | | | |
|--|-------------------|---|---|---|---|---|---|---|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | Strongly Agree |
14. It is immoral for society to take a life regardless of the crime the individual has committed.
- | | | | | | | | | | |
|--|-------------------|---|---|---|---|---|---|---|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | Strongly Agree |
15. Executing a murderer is less expensive than keeping him in jail for the rest of his life.
- | | | | | | | | | | |
|--|-------------------|---|---|---|---|---|---|---|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Strongly Disagree | | | | | | | | Strongly Agree |

Appendix E (For Study 2)
Moral Disengagement Scale

The following statements describe how persons might regard different situations about capital punishment. Please indicate if you **strongly disagree**, **disagree**, **not certain**, **agree**, or **strongly agree** with each of these statements by circling your answer.

1. Murderers should be executed to deter others from committing murder.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

2. If a society is to be law-abiding, murders must be avenged with capital punishment.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

3. The bible teaches that murders must be avenged: “life for a life and eye for eye.”

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

4. Life imprisonment for murderers is unacceptable, because prison guards will be endangered by convicts who have nothing to lose.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

5. Life imprisonment for murderers is unacceptable, because they can escape to kill again.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

6. Capital punishment is not as bad as the murders that convicts have committed.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

7. The death penalty is right because it costs society less than keeping murderers in prison for life.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

8. Capital punishment is just a legal penalty for murder.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

9. An execution is merciful compared to a murder.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

10. Jurors do not have much say about the death penalty because later court rulings will decide the matter.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

11. When the twelve jurors approve the death penalty, no one juror should be held responsible for the decision to execute a murderer.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

12. Those who carry out state executions should not be criticized for following society's wishes.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

13. Jurors do not have much choice in their decisions about the death penalty because they have to follow sentencing instructions.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

14. Nowadays the death penalty is done in ways that minimize the suffering of the person being executed.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

15. Elaborate legal safeguards assure that innocent persons are not executed.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

16. Murderers who receive the death penalty have forfeited the right to be considered full human beings.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

17. Because of the nature of their crimes, murderers have lost important human qualities.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

18. Society has no choice but to impose the death penalty for horrible crimes.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

19. Murderers should blame themselves when they receive the death penalty.

-2-----1-----0-----1-----2
Strongly Disagree Disagree Not Certain Agree Strongly Agree

Appendix F (For Study 2)
Bias Correction Strategies Scale

The following statements describe strategies persons may use to manage personal biases in clinical work. Please indicate how useful you think each strategy is for maintaining objectivity.

1. Developing a sense of pride in one's professional identity.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

2. Receiving explicit didactic training about objectivity.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

3. Exposure to the importance of objectivity through reading professional literature.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

4. Observing others who manage their personal biases successfully.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

5. Taking personal responsibility to continue learning after completing formal training and education.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

6. Consulting with colleagues about issues of potential bias.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

7. Fostering a continuing commitment to objectivity.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

8. Continuous introspection about personal biases.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

9. Intentionally controlling existing bias.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

10. Accepting referrals only for cases in which bias is unlikely.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

11. Being an active consumer of scientific knowledge.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

12. Being an active producer of science.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

13. Examining patterns of personal decision-making (e.g., how often one agrees with the explicit or implicit preferences of the referral party)

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

14. Basing conclusions and opinions on sound data.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

15. Investigating all relevant data before forming an opinion.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

16. Critically examining conclusions (e.g., considering alternative hypotheses).

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

17. Restricting conclusions and opinions to scientific foundations.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

18. Limiting the scope of the inquiry and report to the referral question.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

19. Using structured evaluation methods.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

20. Taking time to think about evaluation information rather than immediately writing the report.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

21. Meeting with the evaluatee more than once.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

22. Taking careful notes during an evaluation.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

23. Attending to wording choice in reports to edit out value-laden language.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

24. Disengaging emotionally from cases.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

25. Limiting empathy and rapport in forensic cases.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

26. Avoiding advocacy.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

27. Resisting allegiance effects.

1-----2-----3-----4-----5
Very Useless Useless Not Certain Useful Very Useful

Appendix G (for Study 2)
Letter to Participants Printed on Departmental Letterhead

Dear Colleague:

Greetings from The University of Alabama! We are writing you today in the hopes that you will join us in gathering information about our profession. We would greatly appreciate it if you would give us about 20 minutes of your time today to fill out five very brief questionnaires. This NSF-funded project is the first study on how forensic psychologists are socialized into the occupation and the ways in which these experiences may lead to different ways of practicing forensic psychology. This project has the potential to assist in solving problems faced by many forensic mental health experts.

If you would be willing to help, we will be happy to share the results. If you need clarification, or have questions, or would like a summary of the results, please contact either of us at either of the email addresses listed below. Thank you for your time and your attention to this request. We hope you join us in this project.

Warm regards,

Tess M.S. Neal, M.A.
Doctoral Candidate
tmneal@crimson.ua.edu

Stanley L. Brodsky, Ph.D.
Professor
sbrodsky@bama.ua.edu

Appendix H (For Study 2)
Follow-up Postcard sent Two Weeks after Initial Mailing

A Friendly Reminder

I hope this note finds you well. Two weeks ago, I sent you a survey in the mail. I want to express my appreciation to you if you have already responded. If you have not yet responded, it is not too late to participate. Your help would be appreciated a great deal. Please email me with any questions or concerns at tmneal@crimson.ua.edu. Thank you for your time.

Warm regards,
Tess Neal

Appendix I (For Study 3)
MSO Report Analysis Protocol

1. What is the report #? _____ 2. What is the code of the examiner/evaluator? _____
3. What did the evaluator conclude? (e.g., NGRI defense possible?) _____ Not possible _____ Possible
4. Diagnosis provided? __ No __ Yes __ Deferred
 - a. If yes, Axis I? __ No __ Yes __ Deferred
 - Psychotic (e.g., Schizophrenia, Schizoaffective, Delusional) Specify _____
 - Mood (e.g., Bipolar, Depression, Mania) Specify _____
 - Anxiety (e.g., GAD, PTSD, OCD, Phobia) Specify _____
 - Substance Dependence (e.g., Etoh, MJ, Cocaine, Polysub.) Specify _____
 - Other Specify _____
 - b. If yes, Axis II? __ No __ Yes __ Deferred
 - Intellectual Disability (e.g., Mental Retardation) Specify _____
 - Personality Disorder (e.g., Antisocial, Borderline) Specify _____
 - Other Specify _____
5. How long is the report (by ¼ pages)? _____ **Count to the very last bit of signature block typing
6. How long is the forensic section (by ¼)? _____ **Count from “Forensic Assmt” to “Summary”
7. Did the examiner cite sources of information? __ No __ Yes How many sources? _____
Which of the following did they use (circle all that apply)
 - a. Clinical interview
 - b. Mental status exam
 - c. Current testing information (includes CAI)
 - i. What tests used? _____
 - d. Arrest Records re: alleged offense (e.g., arrest reports, info concerning alleged offense from DA, homicide report, witness statements, narratives of officers, investigative narratives, interview w/ co-defendant, alleged confession documents, etc.)
 - e. Previous Criminal Records (e.g., NCIC [National Index], Statewide Criminal Index [AJIS, etc.], Parole/Pardon reports, Indictments)
 - f. Defense attorney information form
 - g. Prior mental health records
 - h. Interviews with hospital staff

- i. Interviews with jail staff/ law enforcement
 - j. Interview with attorney
 - k. Other (e.g., letters written by defendant)? Specify _____
8. Ratings of emotionally charged language or pejorative words/phrases (e.g., “absolutely,” “unquestionably,” “totally,” “incredibly,” “unbelievably,” “brutal,” “lack of conscience,” “insensitive”)
- A. *We’re looking for evidence that the examiner may be BIASED – or not processing information about the defendant objectively. We must use the examiner’s language (because that’s all we have).*
 - B. See Bradley & Lang (1999) Affective Norms for English Words Manual and Affective Ratings for guidance on how to interpret various words on each dimension below (note: when looking at the manual, look at the “overall subjects” on the first 17 pages).
 - C. These should be coded on two dimensions:
 - a. **Note: 3 is neutral for each – start from 3 and go up or down as appropriate**
 - b. Each of these three dimensions should receive a summary rating between 1 & 5 for:
 - i. Valence (pleasant to unpleasant)
 - 1. Attractiveness (positive valence) or aversiveness (negative valence) of an event, object, or situation.
 - 1 = Examiner Strongly Likes Defendant
 - 2 = Examiner Likes Defendant
 - 3 = Examiner is Ambivalent toward Defendant
 - 4 = Examiner Dislikes Defendant
 - 5 = Examiner Strongly Dislikes Defendant
 - a. *Valence Total:* _____
 - b. *Valence Forensic:* _____
 - ii. Dominance / control (low to hi)
 - 1. Having or exerting authority or influence [of an outcome]
 - 1 = Pushover. Lots of hedging. Non-assertive. Abstract info reader has to put together – no strong tie into opinion. May not come to an opinion.
 - 2 = Passive. Ties together somewhat, but using passive communication (less confident). Still uses hedging. Has an opinion, coherent narrative stereotypes
 - 3 = Appropriately assertive. Explanatory, thorough, not off-putting. Confident.
 - 4 = Assertive (strong). More affirmatively and confident
 - 5 = Authoritative. Being very confident & asserting dominance of opinion, Arrogant, Off-putting. Strong language. (“clearly,” “definitely”)

- a. *Dominance/control Total* _____
- b. *Dominance/control Forensic* _____

Note: Please write in if there are notable/interesting words used: _____

9. Is “the whole story” being told? Rating of presented evidence that may contradict or shed doubt on examiners’ opinion, evidence of weighing alternatives, etc.
 - a. Rate on a 1-5 scale _____ (see descriptions below)
 1. This examiner evidenced no consideration of disconfirmatory evidence. The report only documents evidence that supports his/her conclusion. No alternate explanations are offered. (We have no way of knowing if there was disconfirmatory evidence, but we would still put as #1 if their behavior, in this case report writing, includes no evidence of weighing alternative interpretations).
 2. Some disconfirming information was included in the report (in the background mostly), but was not readily identified by the examiner as possibly disconfirming or presented as an alternatives, etc. The potentially disconfirming information is in the report, but the examiner does not incorporate it into their opinion of or understanding of the case (and they do nothing to try to “explain it away”).
 3. The examiner would include evidence that could possibly disconfirm their opinion (e.g., history of MI, etc.) and would IDENTIFY it as such, although not adequately or fully explain it away or incorporated.
 4. The examiner would include disconfirming information, identify it as such, and then take that potentially disconfirming evidence and effectively explain it away by incorporating it into their understanding of the case, outright saying it isn't relevant, or discounting it entirely as false.
 5. The examiner would include disconfirming information, identify it as such, and offer it as a fully viable and equally valid alternative; leaving the reader with two (or multiple) different scenarios to consider. The examiner may or may not provide an opinion. The reader would be left uncertain about how the case should be decided.

10. Did the examiner clearly leave out information that should've been addressed? (e.g., do you feel like you were left “hanging” on anything significant to the MSO issue?) (NOTE: It does not have to be previously mentioned. Also note – if you think it could be a PROBLEM that it’s left out, write it down). No ___ Yes ___ (Elaborate): _____

11. How fully was the ultimate legal question addressed? – Where did they “stop?” (Redding et al).
- a. Level 1: Descriptive Clinical Information (e.g., descriptions of the defendant’s behavior as observed by the expert or as reported by others. Symptoms reported – no diagnosis provided.)
 - i. Example: “The defendant reported a persistent sad mood after separating from the defendant’s former spouse. The defendant described loss of appetite, sleeplessness, fatigue, and thoughts of suicide. Friends described the defendant as withdrawn.”
 - b. Level 2: Clinical Diagnosis (e.g., statements indicating whether the defendant met diagnostic criteria and what the diagnosis would be.)
 - i. Example: “The defendant is suffering from depression in response to marital problems. The formal clinical diagnosis for this condition is major depressive episode.”
 - c. Level 3: Statistical data on diagnostic reliability (e.g., statements indicating the reliability or validity of clinical diagnoses offered by the expert.)
 - i. Example: “The diagnosis of major depressive episode has a reliability of about 68%. That is, different examiners would agree on the diagnosis about two-thirds of the time.”
 - d. Level 4: Interpretations of the legal standard for mental disorder (e.g., opinions as to whether the diagnosis or symptoms in the present case satisfy some legal [e.g., statutory] definition.) The three prongs of the insanity standard are a) ability to understand the nature, character, and consequences of the act; b) ability to distinguish right from wrong; and c) ability to resist the impulse of the act (Warren, Murrie, Chauhan, Dietz, & Morris, 2004). (In Alabama, we don’t have prong C). Level 4 addresses whether the D’s diagnosis meets the legal standard of severe mental illness
 - i. Example: “The duration and severity of the defendant’s depression is such that, in my opinion, it represents a ‘significant mental disease’ as the term is used in the law.”
 - ii. Example: “The defendant’s ability to resist the impulse of the act was substantially impaired by his/her impulse control disorder.”

** : Levels 1-4 revolve around DIAGNOSIS, levels 5-8 discuss and interpret legally relevant BEHAVIOR

- e. Level 5: Theoretical accounts of legally relevant behavior (e.g., statements that puts forth theoretical accounts that connect the defendant’s symptoms and legally relevant behavior.
 - i. Example: “It is the opinion of this examiner that the defendant’s delusional state distorted his/her sense of reality, which may have led him/her to truly believe he/she was protecting his/her family in the course of his/her actions.”)
 - ii. Example: “Severe depression often affects thinking and judgment in significant ways. The defendant’s feelings of hopelessness and wishes to die led the defendant to contemplate the burning of the home previously shared with the defendant’s former spouse as an act of self-annihilation and a symbolic destruction of the defendant’s marriage.”
- f. Level 6: Statistical crime data on the relation between clinically and legally relevant behavior (e.g., actuarial data about the relation between clinical behavior [symptoms or diagnosis] and legally relevant behavior [incidence of various types of crime]. For instance, were base rates provided for the relation between the particular diagnosis(es) and legal charge(s)?).

- i. Example: “Of defendants charged with arson and subsequently referred for evaluation, about 17% are diagnosed with a significant mental disorder and about 4% are diagnosed with a depressive condition similar to that of the defendant.”
 - g. Level 7: Weighing possible motives or explanations for criminal behavior (e.g., opinions that consider different possible motives or explanations and *selects one as contributing* most significantly to the alleged crime.
 - i. Example: “An arson like the present offense possibly could be motivated by financial gain (e.g., insurance) or retaliation/ revenge (e.g., destroying assets of the ex-spouse). In this case, the intentional burning was unconcealed and precluded insurance recovery, and this ex-spouse no longer had a financial interest in the house or its contents. Therefore, it is my opinion that the self-destructive impulses related to depression motivated the arson”
 - h. Level 8: Ultimate-issue opinions (e.g., conclusory statement often couched in terms of the legal standard – ultimate opinions on defendant’s legal (in)sanity. For instance, “It is the opinion of this examiner that the defendant was legally insane at the time of the crime.”)
 - i. Example: “Although the defendant was depressed and suicidal at the time of the alleged offense, it is my opinion that the defendant understood the wrongfulness of burning their house and that the arson was not an irresistible impulse. Therefore, the defendant was not legally insane.”
12. How fully was the ultimate legal question addressed? – Where did they “stop?” (Fulero & Finkel).
- a. Level 1: Diagnostic Information Only (e.g., info about the patient’s mental disorder (can be labeled as a specific disorder), or info about having no mental disorder.)
 - i. Example 1: “defendant met criteria for delusional paranoid disorder, which is a severe psychiatric condition, and people who have this disorder are unable to see reality clearly because they seriously distort their own feelings and project them onto others. I believe the disorder was present at the time of the alleged murder, as well as before and after the shooting.”
 - ii. Example 2: “the defendant had an obsessive -compulsive disorder that is not a psychotic condition. People with this disorder can usually function adequately and meet the ordinary demands of life. They typically remain in contact with reality.”
 - b. Level 2: Penultimate Opinion (e.g., Expert diagnosed AND tied diagnosis to legally-relevant behavior. Can use the language of statute (but cannot give a “sane” or “insane” at time opinion.)
 - i. Example 1: “the defendant he was unable to think about the consequences of his behavior, because of his delusions. I believe that he was not able to think about the wrongfulness of his acts. In his mind, his acts were justified.”
 - ii. Example 2: the defendant could and did think about the consequences of his behavior and that he was aware of the wrongfulness of his acts.”
 - c. Level 3: Ultimate Opinion (e.g., Gives a categorical opinion about “sanity” or “insanity” at the time of crime. Can also have given a diagnosis and penultimate opinion.)

- i. Example 1: "I believe the defendant was insane at the time of the alleged offense."
- ii. Example 2: "The defendant was sane at the time of the alleged murder."

13. Did examiner include the final paragraph about how they understand they cannot provide ultimate issue opinions to the court? No_____ Yes _____
14. Any other information you think is relevant or important?

Appendix J

Study 1 IRB Approval

IRB# 10-02-001

Tess Neal

PHOTOGRAPHIC COPY

UNIVERSITY OF ALABAMA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator
Name:	Tess Neal, MA	Stanley L. Brodsky, PhD
Department:	Psychology	Psychology
College:	A & S	A & S
University:	The University of Alabama	The University of Alabama
Address:	404 Gordon Palmer Hall	362-C Gordon Palmer Hall
Telephone:	402-217-4449	205-348-1920
FAX:		
E-mail:	tmneal@crimson.ua.edu	sbrodsky@bama.ua.edu

Title of Research Project:

Qualitative Interviews with Experienced Forensic Psychologists

Date Printed: 12/15/09 Funding Source: None

Type of Proposal: New Revision Renewal Completed Exempt

Attach a renewal application
Attach a continuing review of studies form
Please enter the original IRB # at the top of the page

UA faculty or staff member signature: _____

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: Full board Expedited

IRB Action:

Rejected Date: _____
 Tabled Pending Revisions Date: _____
 Approved Pending Revisions Date: _____

Approved—this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 1/4/2011

Items approved: Research protocol: dated
 Informed consent: dated
 Recruitment materials: dated
 Other: Information sheet dated

Approval signature: _____ Date: 1/5/2010

Appendix K

Study 2 IRB Approval

10-08-192 1

UNIVERSITY OF ALABAMA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

Principal Investigator	Second Investigator
Name: Tess Neal, MA	Stanley L. Brodsky, Ph.D.
Department: Psychology	Psychology
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Title of Research Project:

Surveying Forensic Psychologists about Potential Bias

Date Printed: 5/21/10 Funding Source: National Science Foundation

Type of Proposal: New Revision Renewal Completed Exempt

Attach a renewal application
Attach a continuing review of studies form
Please enter the original IRB # at the top of the page

UA faculty or staff member signature: 

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: Full board Expedited


IRB Action:

Rejected Date: _____
 Tabled Pending Revisions Date: _____
 Approved Pending Revisions Date: _____

Approved—this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 6-7-11/6/10

Items approved: Research protocol: dated
 Informed consent: dated
 Recruitment materials: dated
 Other: dated

Approval signature: 

Date: 6/8/2010

Appendix L
Study 3 IRB Approval

10-02-186
Stan Brodsky 1

UNIVERSITY OF ALABAMA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN
SUBJECTS REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator
Name:	Tess Neal, MA	Stanley L. Brodsky, Ph.D.
Department:	Psychology	Psychology
College:	A & S	A & S
University:	The University of Alabama	The University of Alabama
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Telephone:	402-217-4449	205-348-1920
FAX:		
E-mail:	trneal@crimson.ua.edu	sbrodsky@bama.ua.edu

Title of Research Project:
Examining Forensic Reports for Potential Examiner Bias

Date Printed: 5/15/10 Funding Source: None *NSF*

Type of Proposal: New Revision Renewal Completed Exempt

Attach a renewal application
Attach a continuing review of studies form
Please enter the original IRB # at the top of the page

UA faculty or staff member signature:

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: Full board Expedited

IRB Action:
 Rejected Date: _____
 Tabled Pending Revisions Date: _____
 Approved Pending Revisions Date: _____

Approved—this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: *6-2-11*

Items approved: Research protocol: dated
 Informed consent: dated
 Recruitment materials: dated
 Other: dated

Approval signature: Date: *6/3/2010*