

# Psychological Assessment of Symptom and Performance Validity, Response Bias, and Malingering: Official Position of the Association for Scientific Advancement in Psychological Injury and Law

Shane S. Bush · Robert L. Heilbronner · Ronald M. Ruff

Received: 20 May 2014 / Accepted: 22 July 2014 / Published online: 17 August 2014  
© Springer Science+Business Media New York 2014

**Abstract** Evidence-based forensic psychological opinions require thorough and accurate information about examinees. Psychometric instruments can facilitate diagnostic decision making, but they rely on examinees to respond honestly to questions and put forth good effort on cognitive tests. Given the strong incentives for examinees in psychological injury cases to minimize prior problems and emphasize postaccident or posttrauma problems, the assessment of validity as part of forensic psychological evaluations is essential. Best practices in forensic psychology have their foundation in ethical principles. The purpose of this position statement is to promote ethical psychological practice in legal contexts by reviewing validity assessment issues and their ethical foundations. Because no previously published document focused specifically on symptom and performance validity assessment in psychological injury evaluations performed in forensic contexts, such a position statement provided by a professional organization devoted to the interface of psychological injury and law was needed to inform and guide practitioners and to educate other interested parties. The position statement emphasizes (a) the need for ethical practice in assessing validity, (b) consideration of factors such as culture and functional limitations, and (c) the importance of adopting a comprehensive, impartial, and scientific approach to validity assessment. The position statement acknowledges areas of differing opinions and the need for further research.

**Keywords** Symptom validity · Response bias · Malingering · Consensus statement · ASAPIL · Psychological injury and law

## Introduction

### Background

Psychologists have long understood the importance of having thorough and accurate information about patients when making diagnostic decisions, establishing treatment protocols, and making treatment recommendations. Psychometric instruments such as personality inventories can facilitate diagnostic decision making, but they rely on valid information from, or about, the person being assessed. Thus, it is important for examinees to respond honestly, rather than minimizing, exaggerating, or fabricating problems, or denying or minimizing common human weaknesses and faults. Similarly, for psychological tests of cognition, examinees must put forth adequate effort for the results to be considered a reliable and valid reflection of the constructs of interest (attention, memory, etc.). With valid test results, psychologists can interpret the findings as they relate to the construct being assessed. Without valid test results, there is reduced confidence in the inferences that can be drawn from the test results regarding the construct of interest.

To help establish whether examinees have responded in a reliable and valid manner, some early standardized psychological inventories, such as the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943), included validity scales. Given their primary importance, interpretation of the validity scales was established as the first step in the test data interpretation process. Because of an increasing appreciation of the necessity of determining response validity, particularly in forensic contexts, newer

---

S. S. Bush (✉)

Long Island Neuropsychology, P.C., Stony Brook University School of Medicine, Lake Ronkonkoma, NY, USA  
e-mail: drsbush@gmail.com

R. L. Heilbronner

Chicago Neuropsychology Group, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

R. M. Ruff

San Francisco Clinical Neurosciences, University of California, San Francisco, CA, USA

instruments and subsequent editions of the MMPI have increasingly focused on validity scales (see Heilbronner & Henry, 2013 for a review). While such scales can help psychologists determine the reliability and validity of the results of a given test, a multi-method approach is used to determine the validity of an examinee's overall approach to an evaluation. Such methods commonly include some combination of the following: psychometric measures with validity scales, free-standing validity measures, indices embedded within cognitive ability tests, behavioral observations, information obtained from records, and interviews of the examinee and collateral sources. Interpretation of multiple validity assessment methods within a structured framework (e.g., Slick, Sherman, & Iverson, 1999) facilitates the decision-making process.

Although examinees may produce invalid test results in clinical contexts for a variety of reasons (Iverson, 2006), the presence of strong incentives for examinees to misrepresent their true psychological functioning increases the importance of validity assessment in forensic contexts. For example, in some persons with a history of mild traumatic brain injury, litigation status has been found to affect symptom complaints, cognitive test performance, and recovery outcome (Binder & Rohling, 1996; Feinstein et al., 2001).

### The Need for a Position Statement

Position statements emphasizing the necessity of assessing symptom and performance validity and the importance of using a multi-method approach for neuropsychological evaluations have been published in the United States by the National Academy of Neuropsychology (Bush et al. 2005a, 2005b<sup>1</sup>) and American Academy of Clinical Neuropsychology (Heilbronner et al., 2009). Additionally, the Specialty Guidelines for Forensic Psychology (American Psychological Association, 2013), although not solely devoted to validity issues, state, "As with testimony regarding forensic examinees, the forensic practitioner strives to identify any substantive limitations that may affect the reliability and validity of the facts or opinions offered, and communicates these to the decision maker" (Guideline 4.02.02: Expert Testimony by Practitioners Providing Therapeutic Services). These Guidelines further state, "Forensic practitioners consider and seek to make known that forensic examination results can be affected by factors unique to, or differentially present in, forensic contexts including response style..." (Guideline 10.02: Selection and Use of Assessment Procedures). The British Psychological Society (2009) also published a position

statement supporting the importance of assessing effort in clinical evaluations of cognition.

These prior position statements provide valuable guidance to psychologists and other interested parties; however, no previously published document focuses specifically on symptom, performance, and response validity assessment that is pertinent for all psychological evaluations performed in forensic contexts. Thus, such a position statement provided by a professional organization devoted to the interface of psychological injury and law was needed to inform and guide practitioners and to educate other interested parties. The purpose of the present statement is to promote sound psychological practice in legal contexts by reviewing validity assessment issues and their ethical foundations. This position statement is intended to be aspirational.

### Procedure

The president of the Association for Scientific Advancement in Psychological Injury and Law (ASAPIL), Gerald Young, Ph.D., and other members of the ASAPIL board of directors identified the need for a position statement on this topic. The primary authors, with publication histories involving ethical, forensic, and symptom and performance validity topics, were invited by Dr. Young to create the position statement. The statement was then sent to the entire *Psychological Injury and Law* (PIL) editorial board for review and comment. Final edits were made by the primary authors, and the final document was approved by the ASAPIL board of directors. None of the authors serves on the ASAPIL board of directors.

### Ethical Foundations of Validity Assessment

The assessment of symptom and performance validity, like other aspects of psychological practice, is based on professional ethics. Ethical principles represent the shared values of the profession and, as such, provide the moral foundation for professional behavior. Healthcare professions and professional organizations have described and widely adopted the following four bioethical principles: (1) respect for patient autonomy, (2) nonmaleficence, (3) beneficence, and (4) justice (Beauchamp & Childress, 2009). Additional principles have been proposed and described, but these four comprise the core of many ethics codes, including the American Psychological Association (2010) *Ethical Principles of Psychologists and Code of Conduct* (APA Ethics Code).

<sup>1</sup> The National Academy of Neuropsychology position statement was translated into German and published in two German journals (Bush et al. 2006a, 2006b, Bush et al. 2007).

The APA Ethics Code builds upon the four bioethical principles, providing the following five general principles to help guide psychologists' choices and behaviors: (1) beneficence and nonmaleficence, (2) fidelity and responsibility, (3) integrity, (4) justice, and (5) respect for people's rights and dignity. Ten additional ethical standards provide more specific guidance for psychologists. Iverson (2006) and Bush (2009, 2013) previously described the ethical bases of validity assessment, primarily targeted toward neuropsychology practitioners but also relevant for clinical psychologists. Iverson concluded, "Careful assessment of effort and the accuracy of symptom reporting underlies proper test interpretation. The central issues, from an ethical perspective, relate to competence, objectivity, clarity in communication, and the proper use of tests" (p. 84). Using the APA Ethics Code as the primary resource for ethical information, Bush (2009) identified the following ethical standards as being particularly relevant for validity assessment: Boundaries of Competence (Standard 2.01), Bases for Scientific and Professional Judgments (Standard 2.04), Bases for Assessments (Standard 9.01), Informed Consent (Standards 3.10 and 9.03), Deception (in the context of research, Standard 8.07), Use of Assessments (Standard 9.02), Explaining Assessment Results (Standard 9.10), and Avoidance of False or Deceptive Statements (Standard 8.10) when reporting validity assessment results.

The present paper utilizes the APA General Principles to structure the review of ethical issues in validity assessment and to explain the ethical considerations that underlie various aspects of the validity assessment process. Although the APA General Principles were used in this paper, numerous ethical, legal, and scholarly resources exist to guide decision making and behavior in forensic practice (Bush et al. 2006a, 2006b). Consideration of multiple resources can facilitate the decision-making process and improve outcomes.

### Beneficence and Nonmaleficence

The goal of providing psychological services is to benefit the consumers of the services, while minimizing the potential for harmful outcomes for examinees, other involved parties, and the profession of psychology. These closely related ethical principles serve as the foundation for ethics codes, practice guidelines, regulations, and other tenets governing the behavior of psychologists. As a result, these principles also inform psychologists engaged in forensic activities when making decisions about validity assessment practices. Practicing in a manner that is consistent with these principles does not imply that psychological conclusions or legal outcomes must be favorable to the examinee or retaining party; rather, the benefit

and the avoidance of harm relate intimately to the legal process, triers of fact, and the public at large.

Failure to adequately assess symptom and performance validity and to interpret and report the findings of a psychological evaluation as accurately as possible can result in misleading information being conveyed to the triers of fact or other legal or administrative decision makers. Such a failure to follow current standards of practice can be harmful to the fact-finding process and the persons involved in legal matters and can waste valuable resources. In addition to assessing symptom and performance validity, forensic psychologists strive to assess response validity, which is the accuracy of the examinee's responses to autobiographical questions (e.g., educational history, vocational history, legal history) and questions pertaining to the legal matter in question (e.g., the nature of, and events surrounding, an injury, crime, or traumatic event). Assessing consistencies between examinee responses and records can inform practitioners about response validity. In forensic psychology, use of a multi-method approach to validity assessment that includes appropriate psychometric measures is consistent with sound ethical practice.

Despite the advances made in the assessment of validity and feigning, significant construct validity issues remain, especially around the issue of intentionality (e.g., whether the examinee's problems are consciously or unconsciously exaggerated or minimized). Compared to more traditional psychodiagnostic and cognitive tests, which have been refined and well-researched over many decades, measures of performance and symptom validity are still in their relative infancy. The initial method of defining poor effort as test scores that fall significantly below chance has been improved by establishing normative data for known diagnostic groups, simulation groups, and nonclinical populations. However, as with other areas of psychological research, methodological difficulties exist in validity assessment research. For example, simulation studies have students or other volunteers fake poor performances on tests. The scores from such studies then serve as cutoff scores for the measures used in the studies. However, few of the performance validity test manuals or articles provide test-retest reliability to examine how reliably volunteers fake their performances or how closely simulated performance corresponds to that of actual examinees who generate invalid results. Additionally, some comparison groups are comprised of mixed patient samples or populations that are of minimal similarity to a given examinee, which may not allow for appropriate comparisons for a given examinee according to the established cutoff scores.

Even when the cutoff scores are reliable and valid, no test can capture the intent underlying the examinee's invalid results. Invalid results may be consciously or

unconsciously generated by examinees. The strongest evidence for inferring intentionally poor performance comes from scores on forced choice tests that are significantly below chance (i.e., significantly less than 50 % correct), which occurs relatively infrequently. Thus, determinations regarding validity tend to be best supported by use of appropriate comparison groups. However, even when evidence clearly indicates that an examinee intentionally performed poorly, test results by themselves cannot explain why. Because no tests have been developed that can capture malingering per se in a reliable and valid manner, caution is indicated when inferring meaning from scores that fall in ranges that are consistent with invalid performance. Use of probabilistic language (e.g., possible, probable, definite) based on structured diagnostic criteria is advisable when considering determinations of malingering (Slick et al., 1999). Alternatively, conceptualizing invalid results as representing *feigning* is preferred to malingering in many situations because it makes no assumptions regarding the reasons for which the examinee generated invalid results (Rogers, 2008).

#### Fidelity and Responsibility

Psychologists are advised to establish trust with those with whom they interact in their professional roles. In forensic contexts, establishing trust does not always imply that examinees trust that examiners will advocate for their needs. Rather, examinees and retaining parties should trust that the psychologist will perform the requested services as accurately and objectively as possible. Establishing trust and rapport involves psychologists being open with all parties about the nature of the evaluation, including the inclusion of validity assessment methods and procedures and the importance of responding honestly and putting forth good effort on tests.

Consistent with the Law of No Surprises (Behnke, Perlin, & Bernstein, 2003), all parties are best served when psychologists explain in advance the nature of the services that will be provided. Psychologists should not explain the specific nature of validity assessment measures or procedures, indicate to examinees when such measures will be used, or otherwise educate examinees or their advocates in a way that could be used to manipulate the results. The appropriate selection, use, interpretation, and reporting of validity assessment measures and results is consistent with best practices, which promotes an atmosphere of trust. It can be advantageous to explain that the results may or may not be favorable to the examinee or retaining party. Psychologists strive

to make the forensic examinee comfortable so that the examinee is afforded every opportunity to approach the evaluation in a manner which maximizes the chance for obtaining reliable and valid results. Psychologists understand that there is continuum of symptom reporting that ranges from overreporting or exaggerating to underreporting or denial of symptoms. In the assessment of symptom validity, psychologists have a responsibility to consider both ends of the spectrum, and the full range in between. It is also important to consider whether examinees are presenting themselves as overly virtuous, without common human weaknesses or faults.

Because of concern for the ethical conduct of colleagues, psychologists should take advantage of opportunities to educate colleagues about the importance of validity assessment as an essential component of forensic evaluations. Directing colleagues to the position statements on validity assessment published by professional organizations can be a valuable component of the education process. Additionally, psychologists may choose to discuss with colleagues that some validity studies and measures can have poor construct validity and poor operationalization of constructs and that position statements need to be guided by the best available evidence.

#### Integrity

Psychologists performing forensic evaluations promote accuracy, honesty, and truthfulness from the initial contact with the retaining party throughout the completion of the service. Because interpretation of invalid test performances is made by examiners, it is essential that examiners are aware of their own biases. This awareness can be achieved only if examiners make an effort to identify their biases. With biases identified, examiners can strive to reduce the effects of the biases on their opinions. Just as it is important for a psychotherapist to examine countertransference, it is imperative that examiners explore their thoughts and feelings about examinees, especially in the context of litigation (Ruff, 2009).

The topic of external incentives is typically focused on examinees. However, external incentives may be applied to forensic examiners as well, in large part because the pay for psychological services in some forensic contexts is substantially higher than the rate for routine clinical work. In many instances, psychologists retained by plaintiff attorneys can receive more referrals if they document deficits that are not tainted by invalid responding or performance. Similarly, psychologists who are retained by the defense in civil cases

can often increase their referral base if the results of validity measures identify a high percentage of their cases as having produced invalid results, often attributed to inadequate effort or feigning. Thus, clinicians striving to practice in an ethical manner make efforts to explore how their personality characteristics, political orientation, cognitive dissonance, and other sources of bias affect the selection and interpretation of validity assessment measures and take steps to minimize the impact of bias.

Use of empirical research to guide test selection and interpretation promotes accuracy. Psychologists understand that the most empirically sound evidence often comes from studies published after the test manuals are published. Use of debiasing techniques (Sweet & Moulthrop, 1999) helps psychologists maximize objectivity in the interpretation and reporting of assessment results. The value of such techniques is dependent on a corresponding personal value system devoted to honesty. Psychologists must not alter their validity assessment practices or reporting solely based on which side has retained their services for a given case.

#### Justice

Psychologists who perform forensic evaluations strive to ensure fairness and equality in access to services, the process and procedures employed, and the services provided. While different types of forensic evaluations may necessitate the use of different validity measures or procedures, psychologists recognize the importance of equality within a specific type of forensic evaluation. Consideration of personal biases, such as disregard for the value of validity assessment, helps psychologists identify limitations in their practices and promotes fairness in their professional activities. Failure to consider personal biases and boundaries of competence can result in unjust practices and outcomes.

#### Respect for People's Rights and Dignity

Psychologists practicing in forensic contexts, like all psychologists, respect the rights and dignity of those with whom they work. Such respect is demonstrated by providing services that are consistent with best practices. Best practices in forensic psychological evaluations include multi-method, evidence-based validity assessment. Such assessment takes into account characteristics of the examinee, such as language preference, race, and objective functional limitations, which may have an impact on the assessment or interpretation process.

Psychologists also demonstrate respect for the rights and dignity of forensic examinees through the informed consent or notification of purpose process. In such

processes, psychologists inform examinees that they are to respond truthfully and put forth good effort on tests. Psychologists also inform examinees and retaining parties that validity measures will be used, although the specific nature of such measures or the timing of their use is not disclosed. While use of measures that appear to measure mood, personality traits, or cognitive abilities but actually measure validity may be considered a type of deception of examinees, such deception is necessary to establish the validity of the assessment results and to accurately inform the trier of fact, and psychologists satisfy ethical responsibilities in the informed consent process through the explanation in general terms that validity measures will be used (see [Appendix](#) for a sample informed consent form).

Additionally, dimensions of diversity, especially language, cultural factors, and disability status, are often underrepresented in validity research, and validity assessment instruments are often not validated on diverse samples. Practitioners are well served by considering such issues in their selection, use, and interpretation of validity assessment measures and procedures and identify these limitations in their reports.

#### Recommendations for Forensic Practitioners

1. Strive to be familiar and practice consistent with relevant practice, ethical, and legal/legislative requirements pertaining to validity assessment, including the present statement and extant position statements (e.g., Bush et al. 2005a, 2005b; Heilbronner et al., 2009).
2. Only validity measures having appropriate psychometric properties are used, selected based on the characteristics of the examinee and the circumstance(s) for which the examinee is referred.
3. List all validity measures and psychometric indicators used but avoid describing them in detail.
4. Interpretations of the results of assessment measures are based on consideration of all the relevant reliable assessment data, and then considered with the full data set (e.g., from examinee interview, collateral sources, records). These other data sets might contain substantial inconsistencies or discrepancies. The conclusions that best fit the full data set are offered in opinions and testimony, independent of the desires of the referral source.
5. Be wary of inferring motivation, volition, intention, and consciousness when there is insufficient evidence. However, do not avoid making such

judgments when sufficient evidence is available. Consistently using preferred inferences, such as feigning or a “cry for help,” can be unhelpful or misleading in individual cases unless the evidence overwhelmingly supports such a conclusion.

6. Use of validity measures and indicators is maximized when practitioners understand the various items and definitions, and how to resolve inconsistencies therein in their conclusions. Understanding inconsistencies within and across relevant ethics codes, professional guidelines, practice regulations, legal/legislative frameworks, and position statements, enables practitioners to address them effectively in court.
7. Repeatedly check for biases and incentives in one’s own practices and conclusions. Internal or external influences that detract from an unbiased approach to evaluations need to be considered and countered. It is the forensic practitioner’s responsibility to guard against biases and strive to maintain a balanced perspective.

## Conclusions

Forensic psychological practice has its foundations in ethical principles. Such principles guide professional choices and underlie every forensic opinion. Evidence-based forensic psychological opinions require thorough and accurate information about examinees. Psychometric measures can be an important part of the forensic evaluation process, but obtaining accurate information about the constructs of interest requires examinees to approach evaluations in a valid manner, responding honestly to questions and putting forth good effort on cognitive tests. Given the strong incentives for examinees in legal cases to minimize prior problems and emphasize post-accident or posttrauma problems, the assessment of validity as part of forensic psychological injury evaluations is essential. Best practices in forensic psychological evaluations consist of a multi-method, evidence-based validity assessment process that includes psychometric measures of validity.

The selection, use, and interpretation of the results of the validity assessment measures are the responsibility of the practitioner. Psychologists performing forensic evaluations should consider the limits of the normative data, comparison groups, computer printouts, and other information associated with the assessment measures and their interpretation, aware that the strongest

evidence of a measure’s utility often emerges from studies performed after the initial publication of the test manual. When faced with invalid results and considering making determinations of malingering, it is advisable to use probabilistic language or a term such as feigning that make no assumptions regarding examinee goals which underlie the production of invalid results.

In addition to the potential for examinee bias in forensic psychological evaluations, there are often strong incentives for practitioners to provide evaluation results that favor the retaining party. Biased selection, use, or interpretation of validity assessment results can substantially influence a practitioner’s conclusions in relation to the retaining party’s needs. Psychologists must consider their own potential biases and take steps to maximize objectivity. Being able to describe the evidence bases supporting one’s forensic opinions and to explain why possible alternative forensic opinions were rejected can help promote objectivity.

In all aspects of the validity assessment process, ethical psychologists are guided by a personal commitment to (1) provide beneficial services to examinees, retaining parties, the trier of fact or other decision maker, and society at large; (2) minimize the potential for harm to examinees, other involved parties, the legal or administrative system, and the profession of psychology which could arise from unprofessional practices; (3) inspire trust from others that the requested psychological services will be performed as accurately and objectively as possible; (4) promote accuracy, honesty, and truthfulness in all aspects of the services provided, including considering and minimizing their own biases; (5) strive to ensure fairness and equality in access to services, the process and procedures employed, and the services provided; and (6) demonstrate respect for the rights and dignity of those with whom they work by providing services that are consistent with best practices, including being forthcoming with examinees about the inclusion of validity assessment and considering diversity issues. Psychological evaluations have much to offer legal and administrative decision makers when psychologists are guided by an understanding of foundational ethical principles and a personal commitment to high standards of ethical practice.

**Acknowledgments** The authors wish to express appreciation to Drs. Bradley N. Axelrod, Louise Ferretti, Michael Gottlieb, Andrew W. Kane, Izabela Z. Schultz, Rodney D. Vanderploeg, and Gerald Young and for their review and comments.

**Conflicts of Interest** We collectively have no conflicts of interest to report and represent no organization other than ASAPIL.

## Appendix

Sample Informed Consent Form\*  
Forensic Psychological Evaluation\*\*

Examinee: \_\_\_\_\_

You have been referred for a forensic psychological evaluation by \_\_\_\_\_

\_\_\_\_\_  
(referral source)

### **Nature and Purpose**

The goals of psychological assessment include clarifying emotional states, personality traits, and thinking abilities such as intellectual functioning. Such information can help establish or rule out the presence of psychological disorders. The current evaluation was requested because of your claim of psychological injury. It is common, when someone is in an accident and comes under the care of mental health professionals or other clinicians for evaluation and treatment, for the insurance carrier or an attorney representing the defense in a litigated matter to request an evaluation by a psychologist of their choosing. A forensic psychological evaluation will include an interview, where questions are asked about your background and current symptoms. Additionally, standardized tests and other techniques may be used, including, but not limited to, asking questions about your mood, interests, activities, and knowledge of certain topics. You may also be asked to view printed material and engage in reasoning, spatial, and learning tasks. You are to answer questions as accurately as you can; for example, when discussing your problems, do not minimize problems, but also do not exaggerate concerns. You are to give your best effort during the testing. This does not mean that you have to get every answer or problem correct, for no one ever does. Part of the evaluation will address the accuracy of your responses, as well as the degree of effort that you exert on the test procedures. For some tests, there are no right or wrong answers; rather, obtaining your thoughts and feelings is the goal.

### **Foreseeable Risks, Discomforts, and Benefits**

For some people, psychological evaluations can bring up feelings of sadness, anxiety, frustration, or other emotions. Although such reactions tend to resolve fairly quickly, an attempt will be made to help minimize these factors. Requests for breaks are encouraged and will be provided as needed. The results of this evaluation may either support or not support your claim.

### **Limits of Confidentiality**

The results of this evaluation will be forwarded to \_\_\_\_\_

If this is a disability claim, at a minimum, representatives of the insurance carrier will have access to the results of this evaluation. If your claim is in litigation, at minimum, the defense attorney and staff and your attorney and staff will have access to the results. Should your case proceed to trial, the judge and jury will have access to the results. Beyond the above, confidential information about you obtained during the evaluation can ordinarily be released only with your written permission. There are some special circumstances that can limit confidentiality, including (a) statements of intent to harm yourself or others, (b) statements indicating harm or abuse of children or vulnerable adults, and (c) issuance of an order from a court of law. No feedback will be directly provided by the examining psychologist. In some situations you or a legal representative can request a copy of the report from the referral source.

I have read and agree with the nature and purpose of this evaluation and to each of the points listed above. I have had an opportunity to clarify any questions and discuss any points of concern before signing.

\_\_\_\_\_  
Examinee Signature

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Guardian or Authorized Surrogate  
(if applicable)

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date

\*This is a general template for informed consent that may not apply to all circumstances or jurisdictions. Practitioners may be well served by seeking advice from personal counsel to determine if this consent is appropriate for their circumstances or jurisdiction and modify as needed.

\*\*Adapted from the sample consent form for independent neuropsychological evaluations provided by the National Academy of Neuropsychology (Bush et al. 2005a, 2005b).

## References

- American Psychological Association. (2010). *Ethical Principles of Psychologists and Code of Conduct (EPPCC)*. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- American Psychological Association. (2013). Specialty guidelines for forensic psychology. *American Psychologist*, 68, 7–19.
- Beauchamp, T. L., & Childress, J. F. (2009). *Principles of biomedical ethics* (6th ed.). New York: Oxford University Press.
- Behnke, S. H., Perlin, M. L., & Bernstein, M. (2003). *The essentials of New York Mental Health Law: a straightforward guide for clinicians of all disciplines*. New York: W.W. Norton & Company.
- Binder, L. M., & Rohling, M. L. (1996). Money matters: a meta-analytic review of the effects of financial incentives on recovery after closed head injury. *American Journal of Psychiatry*, 153, 5–8.
- British Psychological Society. (2009). *Assessment of effort in clinical testing of cognitive functioning for adults*. Leicester, UK: Author
- Bush, S. S. (2009). Symptom validity assessment practices: ethical and professional considerations (Die praxis der beschwerdenvalidierung: ethische und fachwissenschaftliche gesichtspunkte). In T. Merten & H. Dettenborn (Eds.), *Assessment of Malingering (Diagnostik der Beschwerdenvaliditat)* (pp. 79–100). Berlin, Germany: Deutscher Psychologen Verlag.
- Bush, S. S. (2013). Ethical considerations in mild traumatic brain injury cases and symptom validity assessment. In D. A. Carone & S. S. Bush (Eds.), *Mild Traumatic Brain Injury: Symptom Validity*

- Assessment and Malingering* (pp. 45–56). New York: Springer Publishing Company.
- Bush, S. S., Barth, J. T., Pliskin, N. H., Arffa, S., Axelrod, B. N., Blackburn, L. A., & Silver, C. H. (2005a). Independent and court-ordered forensic neuropsychological examinations: official statement of the National Academy of Neuropsychology. *Archives of Clinical Neuropsychology*, *20*, 997–1007.
- Bush, S. S., Ruff, R. M., Troster, A. I., Barth, J. T., Koffler, S. P., & Silver, C. H. (2005b). Symptom validity assessment: practice issues and medical necessity. *Archives of Clinical Neuropsychology*, *20*, 419–426.
- Bush, S. S., Connell, M. A., & Denney, R. L. (2006a). *Ethical Issues in forensic psychology: a systematic model for decision making*. Washington, D.C.: American Psychological Association.
- Bush, S. S., Ruff, R. M., Tröster, A. I., Barth, J. T., Koffler, S. P., & Silver, C. (2006b). Diagnostik der beschwerdenvalidität: praktische Gesichtspunkte und medizinische Erfordernisse. *Neurologie und Rehabilitation*, *12*, 69–74.
- Bush, S. S., Ruff, R. M., Tröster, A. I., Barth, J. T., Koffler, S. P., & Silver, C. (2007). Diagnostik der beschwerdenvalidität: praktische Gesichtspunkte und medizinische Erfordernisse. *Praxis der Rechtspsychologie*, *17*, 155–163.
- Feinstein, A., Ouchterlony, D., Somerville, J., & Jardine, A. (2001). The effects of litigation on symptom expression: a prospective study following mild traumatic brain injury. *Medical Science and the Law*, *41*, 116–121.
- Hathaway, S. R., & McKinley, J. C. (1943). *Manual for administering and scoring the MMPI*. Minneapolis, MN: University of Minnesota Press.
- Heilbronner, R. L., & Henry, G. K. (2013). Psychological assessment of symptom magnification in mild traumatic brain injury cases. In D. A. Carone & S. S. Bush (Eds.), *Mild Traumatic Brain Injury: Symptom Validity Assessment and Malingering* (pp. 183–202). New York: Springer Publishing Company.
- Heilbronner, R. L., Sweet, J. J., Morgan, J. E., Larrabee, G. J., Millis, S. R., & Conference Participants. (2009). American Academy of Clinical Neuropsychology Consensus Conference Statement on the neuropsychological assessment of effort, response bias, and malingering. *The Clinical Neuropsychologist*, *23*, 1093–1129.
- Iverson, G. L. (2006). Ethical issues associated with the assessment of exaggeration, poor effort, and malingering. *Applied Neuropsychology*, *13*, 77–90.
- Rogers, R. (2008). An introduction to response styles. In R. Rogers (Ed.), *Clinical assessment of malingering and deception* (3rd ed., pp. 3–13). New York: Guilford Press.
- Ruff, R. (2009). Best practice guidelines for forensic neuropsychological examinations of patients with traumatic brain injury. *The Journal of Head Trauma Rehabilitation*, *24*, 131–140.
- Slick, D. J., Sherman, E. M., & Iverson, G. L. (1999). Diagnostic criteria for malingered neurocognitive dysfunction: proposed standards for clinical practice and research. *The Clinical Neuropsychologist*, *13*, 545–561.
- Sweet, J. J., & Moulthrop, M. A. (1999). Self-examination questions as a means of identifying bias in adversarial assessments. *Journal of Forensic Neuropsychology*, *1*, 73–88.