

Cramer, R.J., DeCoster, J., Neal, T.M.S., & Brodsky, S.L. (2013). The Observed Witness Efficacy Scale: A measurement of effective testimony skills. *Journal of Applied Social Psychology, 43*, 1691-1703. doi: 10.1111/jasp.12124

This is a pre-print version of the paper that is available on the Wiley website and at doi: 10.1111/jasp.12124. This article may not exactly replicate the final version published in the journal. It is not the copy of record.

© 2013 Wiley

Running Head: OBSERVED WITNESS EFFICACY

The Observed Witness Efficacy Scale: A Measure of Effective Testimony Skills

Robert J. Cramer, Jamie DeCoster, Tess M.S. Neal, & Stanley L. Brodsky

Author Note:

Robert J. Cramer, Department of Psychology and Philosophy, Sam Houston State University. Jamie DeCoster, University of Virginia. Tess M.S. Neal, Department of Psychiatry, University of Massachusetts Medical School. Stanley L. Brodsky, Department of Psychology, University of Alabama.

Correspondence concerning this article should be addressed to Robert J. Cramer, Department of Psychology and Philosophy, Sam Houston State University, Huntsville, TX 77341. E-mail: rjc021@shsu.edu.

### Abstract

Despite advances in the scientific methodology of witness testimony research, no sound measure currently exists to evaluate perceptions of testimony skills. Drawing on self-efficacy and witness preparation research, the present study describes development of the Observed Witness Efficacy Scale (OWES). Factor analyses of a mock jury sample yielded a two-factor structure (Poise and Communication Style) consistent with previous research on witness self-ratings of testimony delivery skills. OWES subscales showed differential patterns of association with witness credibility, witness believability, agreement with the witness, and verdict decision. Juror gender moderated the impact of Communication Style, but not Poise, on belief of and agreement with the witness. Results are discussed with attention to application of the OWES to witness research and preparation training.

**Key Words:** Witness Efficacy; Witness Credibility; Witness Preparation; Poise; Communication Skills; Gender

**The Observed Witness Efficacy Scale: A Measure of Effective Testimony Skills**

The practice of witness preparation is growing for attorneys and trial consultants. There appears to be a parallel acceleration of scholarly attention to the ethical, legal, and empirical implications of witness preparation training as well (e.g., Boccaccini, 2002; Brodsky, 2004, 2009; Shargel, 2007; Slovenko, 2001; Wydick, 1995). Generally, the goal of witness preparation centers on training witnesses to walk the line between overly anxious and confident self-presentations; this is typically accomplished through communication skills and anxiety management training in the courtroom setting (Boccaccini, 2002; Crawford & Bull, 2006). Notably, witness preparation can be distinguished from coaching unethical testimony in that the former practice is geared toward providing fact finders the most clear and persuasive information possible (Brodsky, 2009). These goals are beginning to be applied to expert, criminal, lay, and child witnesses (Boccaccini, Brodsky, & Gordon, 2005; Cooke, Laczny, Brown, & Francik, 2002; Crawford & Bull, 2006; Mellor & Dent, 2004).

In his historical review of the development of witness preparation, Boccaccini (2002) noted that new directions such as efficacy research and empirically-driven methods of preparation are needed. Modest efforts have addressed these needs thus far. For example, Cooke and colleagues (2002) described a methodological advancement in the form of a virtual courtroom used to adequately prepare witnesses with disabilities. Empirical assessment of witness training is building as well. Preliminary effectiveness data indicates witness preparation yields improvements in managing nervousness, bolstering behavioral testifying skills, and coping with cross-examination (Boccaccini et

al., 2005; Boccaccini, Gordon, & Brodsky, 2003; Spanos, Quigley, Gwynn, Glatt, & Perlini, 1991).

Concerning conceptual advancements, Boccaccini and colleagues (2003, 2005) proposed a framework called the Persuasion Through Witness Preparation (PTWP) model to serve as a basis for working with witnesses. In short, this model promotes improved performance through targeted feedback and videotape review of mock testimony. Drawing on self-efficacy enhancement techniques, Cramer and colleagues (2009b) outlined several strategies for integrating the PTWP and Self-efficacy based witness preparation training. These include, but are not limited to, habituation to and practice the courtroom, observation of same ability models, consistent verbal positive reinforcement during practice, and monitoring of anxiety cues throughout training.

A notable limitation in this body of work is a lack of comprehensive observer confirmation of skill and performance improvement. That is, akin to a historic over estimate of an eye witness's own confidence on the stand (see Penrod & Cutler, 1995), there is potential for witness self-report of bolstered testifying skills to be limited or inaccurate as an outcome of training. Establishment of a validated measure of observer ratings could aid in thoroughly evaluating the impact of witness preparation programs. Indeed, observer ratings of skill mastery are commonly employed metrics of success in skill or self-efficacy based training research in a number of areas including, but not limited to, parenting skills (e.g., Mondell & Tyler, 1981), clinician risk assessment (e.g., McNiel, Hung, Cramer, Hall, & Binder, 2011), and military group performance (Hirschfeld, Jordan, Feild, Giles, & Armenakis, 2006).

### **Scale Construction and Usage in Witness Research**

An area of more recent advancement in witness efficacy is scale development in the context of witness preparation and jury decision making paradigms. Specifically, Brodsky, Griffin, and Cramer (2010) validated a measure of juror perceptions of witness credibility. The Witness Credibility Scale (WCS; Brodsky et al., 2010) contains four theoretically-derived and empirically supported factors of credibility: Witness confidence, trustworthiness, likeability, and knowledge. All four subscales, as well as their total composite score, display consistently high internal consistency (i.e., .88 and above) across several validation studies (Brodsky et al., 2010). Moreover, validity data suggest that the four subscales demonstrate differing and appropriate patterns of associations with a range of other trait descriptors (e.g., charming, attractive) and juror decisions (e.g., verdict, sentencing recommendations). Additional application of the WCS is primarily in the context of expert witness testimony (e.g., Brodsky, Neal, Cramer, & Ziemke, 2009; Cramer, Brodsky, & DeCoster, 2009a; Neal & Brodsky, 2008).

In way of influential witness characteristics, Cramer, Neal, and Brodsky (2009b) proposed the concept of witness self-efficacy, broadly defined as a witness's perceived ability to testify in court. Cramer and colleagues (2010) subsequently drew on self-efficacy theory and literature (e.g., Bandura 1993, 1997; Sherer et al., 1982) to develop and validate the Witness Self-Efficacy Scale (WSES), a measure of self-perceptions of testimony effectiveness. Testimony delivery skills based in effective witness testimony (e.g., Boccaccini et al., 2003, 2005; Brodsky, 2009; Cramer et al., 2009b) and verbal/non-verbal communication (e.g., O'Barr, 1982) literatures formed the basis for indicators of witness self-efficacy. The WSES contains two factors: Poise and Communication Style. Poise is akin to emotional control, whereas Communication Style predominantly reflects

verbal and nonverbal skills on the witness stand (Cramer et al., 2010). Both subscales demonstrated high internal consistency values, as well as expected positive associations with general and social self-efficacy. As assessed by the WSES, witness self-rated skills predicted mock juror perceptions of several outcomes, including witness credibility, believability, and agreement with the witness.

Despite establishment of these scales, current witness preparation literature lack an observer/juror-rated scale specific to effective testimony skills similar to those on the WSES. There is basis in the self-efficacy (e.g., Ducharme & Bachelor, 1993; Guadiano & Herbert, 2007) domain for use of both self- and observer-ratings of characteristics. Application of an observer-rated measure of specific testimony delivery skills would offer an additional feedback mechanism for witnesses taking part in preparation training. Moreover, direct comparisons can be made between self- and observer-ratings in order to identify incongruities and areas for improvement.

The present study fills the need for a juror-rated measure of witness efficacy, namely the Observed Witness Efficacy Scale (OWES). The OWES contains identical item content as the WSES, but with alterations made to allow for juror or observer judgments of the same set of empirically-supported testimony delivery skills. The specific alterations from the WSES to the OWES are as follows. First, the instructions of the WSES request the potential witness to “rate the degree to which you feel **you**” can master the list of 18 testimony skills (Cramer et al., 2010, p. 800). OWES instructions are altered so that observers of testimony “rate the degree to which you feel **the witness** did do” the list of 18 skills. In all, OWES instructions are changed for suitable use by jurors, whereas the WSES instructions are self-ratings for potential witnesses. Also, wording of

specific items was altered from the WSES to the OWES to reflect the same observer judgment of skills. For instance, WSES item 10 was altered from “Hide my nervousness” to the OWES observer format of “Hide nervousness.” A wealth of literature on existing personality and social psychological measures supports modifications from self-rated to observer-rated versions of scales (e.g., Costa & McCrae, 1992; Sloan, Loprinzi, Kuross, Miser, O’Fallon, et al., 1998).

We hypothesized that the OWES will replicate the WSES factor structure, thereby suggesting that self- and observer-perceptions of effective testimony are similar constructs. Moreover, juror-rated OWES factors will demonstrate significant positive associations with witness outcome variables (i.e., agreement with witness, witness believability, witness credibility, and verdict).

Juror gender is a well-established moderator of perceptions of witness testimony (e.g., Brodsky et al., 2009; Kovera, McAuliff, & Hebert, 1999; Larson & Brodsky, 2010). For instance, expert testimony was reported to influence male, but not female, jurors’ judgments in a civil case (Kovera et al., 1999). On the other hand, females have shown more favorable ratings of child testimony (Crowley, O’Callaghan, & Ball, 1994) and susceptibility to the likeability of an expert witness (Brodsky et al., 2009) compared to male counterparts. Given the moderating impact of female gender on perceptions of likeability (i.e., a surface characteristic) of testimony, we hypothesized a moderating effect in that female observers would be influenced by level of pose and communication style, whereas male counterparts would not.

## **Method**



*Participants.* Participants were 290 introductory psychology students at a large public university in the southeastern United States. Of the remaining 290 individuals ( $M$  age = 18.91,  $SD$  = 2.11) the sample was predominantly female ( $n$  = 208, 71.7%). Race was Caucasian ( $n$  = 234, 80.7%), African-American ( $n$  = 40, 13.8%), Latin-American ( $n$  = 7, 2.4%), Asian-American ( $n$  = 3, 1.0%), and ‘other’ ( $n$  = 6, 2.1%). Religion was predominantly of Christian denomination ( $n$  = 255, 87.9%). Only two percent ( $n$  = 7) had ever been called for jury duty.

## **Measures**

*Demographics.* Participants provided their age, gender, race, religion, testifying and jury duty experience.

*Observed Witness Efficacy.* Observed witness efficacy was assessed using the Observed Witness Efficacy Scale (OWES; see Appendix). This measure, containing 18 items each scored on a five-point (1 = “Not well”, 5 = “Very well”) scale, is an adaptation of the Witness Self-Efficacy Scale (WSES; Cramer et al., 2010). Alterations were made to the WSES as follows: a) instructions were modified for the OWES so that the participant is instructed to rate the witness on testimony delivery skills included in the WSES, and b) item wording was changed to reflect rating of the witness (as opposed to self-ratings). For example, WSES item number 2 (“Control my emotions when questioned by an aggressive attorney”) was altered to “Control their emotions when questioned by an aggressive attorney.” Psychometric properties of the OWES subscales, Poise and Communication Style, are reported in this article.

*Witness Credibility.* Witness credibility was assessed with the 20-item Witness Credibility Scale (WCS; Brodsky et al., 2010). Various studies (e.g., Brodsky et al., 2009,

2010; Cramer et al., 2009a) support four factors (i.e., Confidence, Trustworthiness, Likeability, and Knowledge; sum of five items of the WCS) as well as a sum totaled credibility score (i.e., sum of 20 items). Reliabilities for the total score and four factors are consistently within acceptable ranges of .70 or above (Brodsky et al., 2009, 2010).

*Verdict, Agreement with the Witness, and Witness Believability.* These additional testimony outcomes were rated on single 10-point Likert-items, with higher numbers denoting being found “not guilty,” as well as agreeing/believing the witness’s testimony. Although psychometrically limited, implementation of brief perception measures allows for efficient assessment and is consistent with much of the jury perception literature (e.g., Boccaccini et al., 2003; Cramer et al., 2009; Leippe, Manion, & Romanczyk, 1992)

### **Procedure<sup>1</sup>**

Details of the procedure in the present article were previously reported in detail by Cramer and colleagues (2010). Pertinent details of the present study are that mock jurors underwent standardized data collection procedures beginning with basic jury instructions. They then observed one of 41 randomly assigned mock testimony videos. Witnesses portrayed in these scenarios were undergraduate students testifying under cross-examination in their own defense after being accused of committing a negative behavior (each video lasted from four to ten minutes). Examples of these situations include, but are not limited to, cheating on a significant other, talking in class, and engaging in minor traffic violations. Use of innocuous scenarios was consistent with ethical desires to avoid harm and potential legal quandaries of eliciting information that could raise need to report information to law enforcement personnel (see Cramer et al.,

---

<sup>1</sup> Data used in the present study represent additional analyses from a larger project on witness testimony (see Cramer et al., 2010).

2010 for more detail regarding this methodological concern). Witnesses purposefully avoided testifying about behaviors that could lead to serious psychological injury or criminal charges. As reported by Cramer et al. (2010), the demographic details of the 41 witnesses ( $M$  age = 23.37 years,  $SD$  = 4.00) was as follows. Gender composition was 23 females and 18 males. The racial breakdown was 28 Caucasians, 11 African-Americans, 1 Latin-American, and 1 bi-racial). Once the video ended, participants completed the demographic form and measures assessing the witness (i.e., OWES, WCS, and likert items noted above).

### **Results**

A Confirmatory Factor Analysis (CFA) was conducted to assess whether the witness-rated WSES two-factor structure would be replicated in the juror-rated OWES. Only participants with complete OWES data were used in the model ( $n = 290$ ). This sample size is deemed adequate based upon a combination of indicators per factor and number of desired solutions (Gagne & Hancock, 2006).

The CFA featured two factors, namely Poise and Communication Style, originally defined in development of the WSES (Cramer et al., 2010). Consistent with WSES development, Poise was comprised of OWES items one through four, six through 13, and 17 to 18. These items largely pertain to emotional control, anxiety management, and confidence. Communication Style was represented by items five, seven through nine, 11 to 12, and 14 through 17. The major themes among these items highlight mastery of verbal and non-verbal behavior on the witness stand (see Appendix). Some items were allowed to overlap as dictated by WSES development (Cramer et al., 2010). Inclusion of previously supported items on multiple self-efficacy subscales is permissible given that

domains of self-efficacy are comprised of cognitive, emotional and behavioral aspects (Bandura, 1997). As summarized by Cramer and colleagues (2010), the common conceptual overlap between WSES subscales (poise and communication style) lies in verbal and cognitive testimony skills. In order to remain consistent with this conceptual framework, the identical item set for poise and communication style were used for the OWES in the present study.

The model converged, and the fit indices support an adequate model fit ( $\chi^2$  [126] = 394.05,  $p < .001$ ; RMR = .09; CFI = .91; RMSEA = .09; see DeCoster, 2009; Kenny, 2010). These model fit indices include allowance for correlation between both factors, as well as two sets of error terms for individual items. Thus, the OWES replicated the model of the WSES. Internal consistency values were also high for juror ratings of Poise ( $\alpha = .92$ ) and Communication Style ( $\alpha = .87$ ).

Multivariate regression was used to assess the independent effects of juror rated Poise and Communication Style, juror gender, and the interactions between gender with both OWES subscales on dependent measures (i.e., verdict, witness believability, agreement with the witness, and witness credibility). Multivariate assessment has advantages of limiting Type I error and taking into account statistical overlap between correlated dependent measures (Cohen, Cohen, West, & Aiken, 2003). Continuous independent variables were centered prior to analyses. Only participants who had complete data on all variables were used ( $n = 289$ ). Effect sizes were measured using  $R^2$  at the model level and partial  $\eta^2$  at the independent variable level (see Table 1).

Table 1 summarizes the multivariate regression of OWES factors and juror gender on dependent measures of interest. Poise significantly positively predicted witness

credibility, whereas Communication Style positively predicted verdict, witness believability, agreement with the witness, and witness credibility. Juror gender also showed significant associations with witness believability and agreement with the witness. Specifically, males were more likely to believe ( $M = 5.79, SD = 2.48, p < .05$ ) and agree with ( $M = 5.68, SD = 2.42, p < .05$ ) the witness than female counterparts ( $M$  belief = 5.11,  $SD = 2.33$ ;  $M$  agreement = 5.08,  $SD = 2.32$ ).

Juror gender moderated the effect of Communication Style on both witness believability and agreement with the witness (see Table 1). The first moderation effect is displayed in Figures 1. The pattern of Communication Style by juror gender is the same across dependent measures. For male participants, agreement with, and belief of, the witness is approximately equal across levels of Communication Style. On the other hand, female participants tend to believe and agree with the witness more when Communication Style is high.

A subsequent multivariate regression was conducted with identical independent variables to clarify the relation of juror rated witness efficacy and witness credibility subscales. All parameters for sample size and effect sizes were retained as described above. Table 2 also summarizes these results. Of note is that juror gender displayed no main or moderating effects. Also noteworthy is that Poise and Communication Style were significantly positively associated with different components of witness credibility. Poise was associated with witness confidence, whereas Communication Style was related to witness trustworthiness, likeability and knowledge.

## Discussion

The present study was designed to evaluate an observer-rated scale of testimony delivery skills. Results yielded an expected two-factor structure (i.e., Poise and Communication Style), with each factor offering unique predictive associations with testimony outcomes such as witness credibility, witness believability, agreement with the witness, and verdict. Moreover, both factors are defined consistently across self and observer ratings. As seen in Cramer and colleagues (2010) findings, witness self-efficacy was comprised of Poise, a characteristic of emotional control, and Communication Style, highlighted by a variety of verbal and nonverbal behaviors. Conceptualizations of Poise and Communication Style hold when compared with observer ratings.

Definitions of both OWES constructs affords insight into differential, yet appropriate, construct validity relations of Poise and Communication Style with witness credibility factors. Poise, or emotional control on the stand, may underlie perceptions of witness confidence given an established negative association between nervousness/anxiety and confidence (e.g., Bothwell & Jalil, 1992). In other words, because a witness's Poise is rooted largely in managing emotions such as nervousness, successful mastery of these skills yields perceptions of confidence. This association is also sensible given research illuminating a connection between behavioral indicators of confidence/nervousness (e.g., stability of tone of voice) and perceptions of confidence (Cramer et al., 2009a). Successful management of negative emotions on the stand would reasonably be perceived as confidence in one's ability on the stand.

Communication Style predicted witness trustworthiness, likeability, and knowledge. Examination of verbal (e.g., information conveyed in answers) and nonverbal (e.g., eye contact) facets of Communication Style) could explicate these associations.

Neal and Brodsky (2008) found that witness eye contact was linked to perceptions of witness credibility. Moreover, literature indicates that eye contact and verbal response style are associated with perceptions of likeability and trust (e.g., Brodsky et al., 2009; Liska & Hazelton, 1990; Levin, Giles, & Garrett, 1994; O'Barr, 1982). What is novel in the context of witness testimony is the connection between perceptions of Communication Style and knowledge. Intuitively, spoken communication such as complex language use and degree of information provided would lead to a witness being perceived as knowledgeable. While provision of answers beyond mere yes/no replies is part of how Communication Style is measured, nonverbal behavior such as posture and eye contact also play a role in perceptions of witness knowledge.

A comment is also warranted on gender differences in the perception of witness efficacy. Compared to males, female participants were more likely to believe and agree with witnesses rated high in Communication Style, or mastery of verbal and nonverbal communication skills on the stand. Female susceptibility to witness persuasion is consistent with some previous literature with child and expert witnesses (Brodsky et al., 2009; Crowley, O'Callaghan, & Ball, 1994). Indeed, females were more attentive to behavioral aspects of expert witness testimony compared to male counterparts (Brodsky et al., 2009). Gender differences in the present study may be attributable to a female penchant to attend to verbal and nonverbal behaviors in the setting of witness testimony. Likewise, the type of witness (i.e., falsely accused criminal defendant) may have elicited sympathy for the witness on the part of female perceivers.

The OWES adds to a burgeoning literature on witness testimony and preparation (e.g., Boccaccini et al., 2004, 2005; Brodsky et al., 2010; Cramer et al., 2009a, 2009b,

2010). Advantages of the OWES over previous witness scales include observer perceptions of empirically-supported testimony skill (as opposed to adjective ratings on the WCS) and establishment of a proxy for comparison of congruence and accuracy with self-perceptions of testimony delivery skills. Applied to trial consultation, the OWES can be utilized in witness preparation training, shadow juries, and jury research. For instance, trial consultants are often employed by attorneys in high stakes civil or criminal trials. In such cases, consultants may employ community members or legal professionals to act as shadow jurors to rate perceptions of witness testimony in the context of training, mock trial, or in court performance.

Testifying in the crosshairs of an aggressive attorney can feel as though a witness is caught in a ring of fire. From a meta-view of the state of witness preparation training, the OWES can be implemented as a tool for evaluation and improvement of witness in order to manage these stressful predicaments. In fact, Cramer and colleagues (2009b) proposed an integrated PTWP/Self-Efficacy model of witness preparation training. Across various works, Boccaccini and associates (2002, 2003, 2005) developed and evaluated a sound videotape-base method of witness preparation. Cramer and colleagues outlined several ways in which self-efficacy enhancement technique literature (e.g., Bandura, 1997; Schunk & Zimmerman, 2007; Yudowitch, Henry, & Guthrie, 2008) can be applied within the PTWP model. These strategies include, but are not limited to, verbal persuasion/reinforcement for progress, guided feedback in the context of repetitive practice, graduated practice/mastery (i.e., learning and generalization across testifying scenarios), observation of similar model witnesses, and attention to emotional and



physiological cues while testifying. The OWES can be incorporated in this model by having the mock jurors or consultants rate live and videotaped testimony sessions.

The present study possesses several limitations worth noting, thereby framing existing OWES data as preliminary and in need of further evaluation. Generalizability is limited by inherent laboratory and participant features, namely a college sample and use of non-criminal actions for witnesses. Such empirical restrictions are consistent with research in this area (e.g., Boccaccini et al., 2005; Cramer et al., 2010; Larson & Brodsky, 2010), but warrant improvement in future research. Moreover, witness demographics characteristics could not be evaluated for their interactive effects due to low sample size of actors in the present study. It is plausible that the impacts of communication style and poise are attenuated by observable witness demographic characteristics. The next natural step is to evaluate OWES theory and application under varying conditions such as with a community jury sample, expert witnesses (as opposed to lay witnesses), witnesses of varying race and gender, and within applied training programs.

### References

- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*, 117–148. doi: 10.1207/s15326985ep2802\_3.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Boccaccini, M. T. (2002). What do we really know about witness preparation? *Behavioral Sciences and the Law, 20*, 161–189. doi: 10.1002/bsl.472.
- Boccaccini, M. T., & Brodsky, S. L. (2002). Believability of expert and lay witnesses: Implications for trial consultation. *Professional Psychology: Research and Practice, 33*, 384–388. doi: 10.1037/0735-7028.33.4.384.
- Boccaccini, M.T., Gordon, T., & Brodsky, S.L. (2003). Effects of witness preparation on witness confidence and nervousness. *Journal of Forensic Psychology Practice, 3*, 39-51. doi: 10.1300/J158v03n04\_03.
- Boccaccini, M.T., Gordon, T & Brodsky, S.L. (2005). Witness preparation training with real and simulated criminal defendants. *Behavioral Sciences and the Law, 23*, 659- 687. doi: 10.1002/bsl.655.
- Bothwell, R. K., & Jalil, M. (1992). The credibility of nervous witnesses. *Journal of Social Behavior and Personality, 7*, 581-586.
- Brodsky, S. L. (2004). *Coping with cross examination and other pathways to effective testimony*. Washington, DC: American Psychological Association.
- Brodsky, S. L. (2009). *Principles and practice of trial consultation*. New York: Guilford Press.

- Brodsky, S. L., Griffin, M. P., & Cramer, R. J. (2010). The Witness Credibility Scale: An outcome measure for expert witness research. *Behavioral Sciences and the Law*, 28, 784-800. doi: 10.1002/bsl.917.
- Brodsky, S. L., Neal, T. M. S., Cramer, R. J., & Ziemke, M. H. (2009). Credibility in the courtroom: How likeable should an expert witness be? *Journal of the American Academy of Psychiatry and Law*, 37, 525–532.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, New Jersey: Lawrence Erlbaum, Inc.
- Cooke, P, Laczny, A., Brown, D. J., & Francik, J. (2002). The virtual courtroom: a view of justice. Project to prepare witnesses or victims with learning disabilities to give evidence. *Disability and Rehabilitation*, 24, 634-642. doi: 10.1080/10.1080/09638280110111414.
- Costa, P. T., & McCrae, R. R. (1992). *The NEO-PIR professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cramer, R. J., Brodsky, S. L., & DeCoster, J. (2009a). Expert witness confidence and juror extraversion: Their impact on credibility and persuasion in the Courtroom. *Journal of the American Academy of Psychiatry and Law*, 37, 63–74.
- Cramer, R. J., Neal, T. M. S., & Brodsky, S. L. (2009b). Self-efficacy and confidence: Theoretical distinctions and implications for trial consultation. *Consulting Psychology Journal: Practice and Research*, 61, 319–334. doi: 10.1037/a0017310.

- Cramer, R. J., Neal, T. M. S., DeCoster, J., & Brodsky, S. L. (2010). Witness self efficacy: Development and validation of the construct. *Behavioral Sciences and the Law*, 28, 892-907. doi: 10.1002/bsl.952.
- Crawford, E., & Bull, R. (2006). Child witness support and preparation: are parents/caregivers ignored? *Child Abuse Review*, 15, 243-256. doi: 10.1002/car.946.
- Crowley, M. J., O' Callaghan, M. G., & Ball, P. J. (1994). The juridical impact of psychological expert testimony in a simulated child sex abuse trial. *Law and Human Behavior*, 18, 89-105. doi: 10.1007/BF01499146.
- DeCoster, J. (2009). Interpreting CFA models. [www.stat-help.com/DeCoster\\_2009.doc](http://www.stat-help.com/DeCoster_2009.doc).  
Date accessed August 29, 2010.
- Ducharme, J., & Bachelor, A. (1993). Perception of social functioning in dysphoria. *Cognitive Therapy and Research*, 17, 53-70. doi: 10.1007/BF01172740.
- Gagne, P., & Hancock, G. P. (2006). Measurement model quality, sample size, and solution property in confirmatory factor analysis. *Multivariate Behavioral Research*, 41, 65-83. doi: 10.1207/s15327906mbr4101\_5.
- Gaudiano, B. A., & Herbert, J. D. (2007). Self-efficacy for social situations in adolescents with generalized social anxiety disorder. *Behavioural and Cognitive Psychotherapy*, 35, 209-223. doi: 10.1017/S1352465806003377.
- Hirschfeld, R. R., Jordan, M. H., Feild, H. S. Giles, W. F., & Armenakis, A. A. (2006). Becoming team players: Team members' mastery of teamwork knowledge as a predictor of team task proficiency and observed teamwork effectiveness. *Journal of Applied Psychology*, 91, 467-474. doi: 10.1037/0021-9010.91.2.467.

- Kenny, D. A. (2010). Measuring model fit. <http://davidakenny.net/cm/fit.htm>. Date accessed August 29, 2010.
- Kovera, M. B., McAuliff, B. D., & Hebert, K. S. (1999). Reasoning about scientific evidence: Effects of juror gender and evidence quality on juror decisions in a hostile work environment. *Journal of Applied Psychology, 84*, 362-375. doi: 10.1037/0021-9010.84.3.362.
- Larson, B. A., & Brodsky, S. L. (2010). When cross-examination offends: How men and women assess intrusive questioning of male and female expert witnesses. *Journal of Applied Social Psychology, 40*, 811-830. doi: 10.1111/j.1559-1816.2010.00599.x.
- Leippe, M. R., Manion, A. P., & Romanczyk, A. (1992). Eyewitness persuasion: How and how well do fact finders judge the accuracy of adults' and children's memory reports? *Journal of Personality and Social Psychology, 63*, 181-197. doi: 10.1037/0022-3514.63.2.181.
- Liska, J., & Hazelton, V. (1990). Deferential language as a rhetorical strategy: the case of polite disagreement. *Journal of Social Behavior and Personality, 5*, 187-198.
- Levin, H., Giles, H., & Garrett, P. (1994). The effects of lexical formality and accent on trait attribution. *Language Communication, 14*, 265-274. doi: 10.1016/0271-5309(94)90004-3.
- McNiel, D. E., Hung, E. K., Cramer, R. J., Hall, S. E., & Binder, R. L. (2011). An approach to evaluating competence in assessing and managing violence risk. *Psychiatric Services, 62*, 90-92. doi: 10.1176/appi.ps.62.1.90.

- Mellor, A., & Dent, H. R. (1994). Preparation of the child witness for court. *Child Abuse Review, 3*, 165-176. doi: 10.1002/car.2380030304.
- Mondell, S., & Tyler, F. B. (1981). Parental competence and styles of problem solving/play behavior with children. *Developmental Psychology, 17*, 73-78. doi: 10.1037/0012-1649.17.1.73.
- Neal, T. M. S., & Brodsky, S. L. (2008). Expert witness credibility as a function of eye contact behavior and gender. *Criminal Justice and Behavior, 35*, 1515–1526. doi: 10.1177/0093854808325405.
- O’Barr, W. M. (1982). *Linguistic evidence: Language, power, and strategy in the courtroom*. New York: Academic.
- Penrod, S., & Cutler, B. (1995). Witness confidence and witness accuracy: Assessing their forensic relation: *Psychology, Public Policy, and the Law, 1*, 817-845. doi: 10.1037/1076-8971.1.4.817.
- Schunk, D. H., & Zimmerman, B. J. (2007). Influencing children’s self-efficacy and self regulation of reading and writing through modeling. *Reading and Writing Quarterly, 23*, 7–25. doi: 10.1080/10573560600837578.
- Shargel, G. L. (2007). Federal evidence rule 608(b): Gateway to the minefield of witness preparation. *Fordham Law Review, 73*, 1263-1994.
- Sherer, M., Maddux, J. E., Mercadante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports, 51*, 663–671.
- Sloan, J. A., Loprinzi, C. L., Kuross, S. A., Miser, A. W., O’Fallon, J. R., Mahoney, M. R., et al. (1998). Randomized comparison of four tools measuring overall quality

- of life in patients with advanced cancer. *Journal of Clinical Oncology*, *16*, 3662-3673.
- Slovenko, R. (2001). Commentary: Psychiatric consultation on witness preparation. *Journal of the American Academy of Psychiatry and Law*, *29*, 42-45.
- Spanos, N. P., Quigley, C. A., Gwynn, M. I., Glatt, R. L., & Perlini, A. H. (1991). Hypnotic interrogation: Pretrial preparation, and witness testimony during direct and cross-examination. *Law and Human Behavior*, *15*, 639-653. doi: 10.1007/BF01065857.
- Wydick, R. C. (1995). The ethics of witness coaching. *Cardozo Law Review*, *17*, 1-52.
- Yudowitch, S., Henry, L. M., & Guthrie, J. T. (2008). Self-efficacy: Building confident readers. In J. T. Guthrie (Ed.), *Engaging adolescents in reading* (pp. 65–86). Thousand Oaks, CA: Corwin Press.

Table 1

*OWES Multivariate Regression Analysis on Witness Outcomes*

IV	Verdict <sup>a</sup>			Witness Believability <sup>b</sup>			Agreement with Witness <sup>c</sup>			Witness Credibility <sup>d</sup>		
	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$
Poise	.26	.61	< .01	< .01	.93	< .01	.05	.82	< .01	<b>5.67</b>	<b>.02</b>	<b>.02</b>
CS	<b>7.25</b>	<b>&lt; .01</b>	<b>.02</b>	<b>9.67</b>	<b>&lt; .01</b>	<b>.03</b>	<b>6.48</b>	<b>.01</b>	<b>.01</b>	<b>6.24</b>	<b>.01</b>	<b>.02</b>
Gender	1.66	.20	< .01	<b>5.92</b>	<b>.02</b>	<b>.02</b>	<b>4.54</b>	<b>.03</b>	<b>.02</b>	.48	.49	< .01
Gender x Poise	2.46	.11	< .01	3.24	.07	.01	2.91	.09	.01	.57	.45	< .01
Gender x CS	3.33	.07	.01	<b>5.39</b>	<b>.02</b>	<b>.02</b>	<b>4.23</b>	<b>.04</b>	<b>.01</b>	< .01	.95	< .01

Results in **bold print** are significant relations.

Note: IV = Independent Variable; *F* = F-statistic; CS = Communication Style

a:  $F(5, 283) = 8.04, p < .001, R^2 = .12$ ; b:  $F(5, 283) = 16.75, p < .001, R^2 = .23$ ; c:  $F(5, 283) = 12.89, p < .001, R^2 = .18$

d:  $F(5, 283) = 35.43, p < .001, R^2 = .38$



Table 2

*OWES Multivariate Regression Analysis on Credibility Subscales*

IV	Confidence <sup>a</sup>			Trustworthiness <sup>b</sup>			Likeability <sup>c</sup>			Knowledge <sup>d</sup>		
	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$
Poise	<b>29.14</b>	<b>&lt; .001</b>	<b>.09</b>	1.23	.27	< .01	.52	.47	< .01	.44	.50	< .01
CS	.03	.85	< .01	<b>3.56</b>	<b>.05</b>	<b>.01</b>	<b>4.09</b>	<b>.04</b>	<b>.01</b>	<b>12.59</b>	<b>&lt; .001</b>	<b>.04</b>
Gender	2.90	.09	< .01	.71	.40	< .01	1.95	.16	.01	.02	.88	< .01
Gender x Poise	.21	.65	< .01	.06	.81	< .01	2.11	.15	< .01	.01	.92	< .01
Gender x CS	.17	.68	< .01	.17	.67	< .01	.43	.51	< .01	.70	.40	< .01

Results in **bold print** are significant relations.

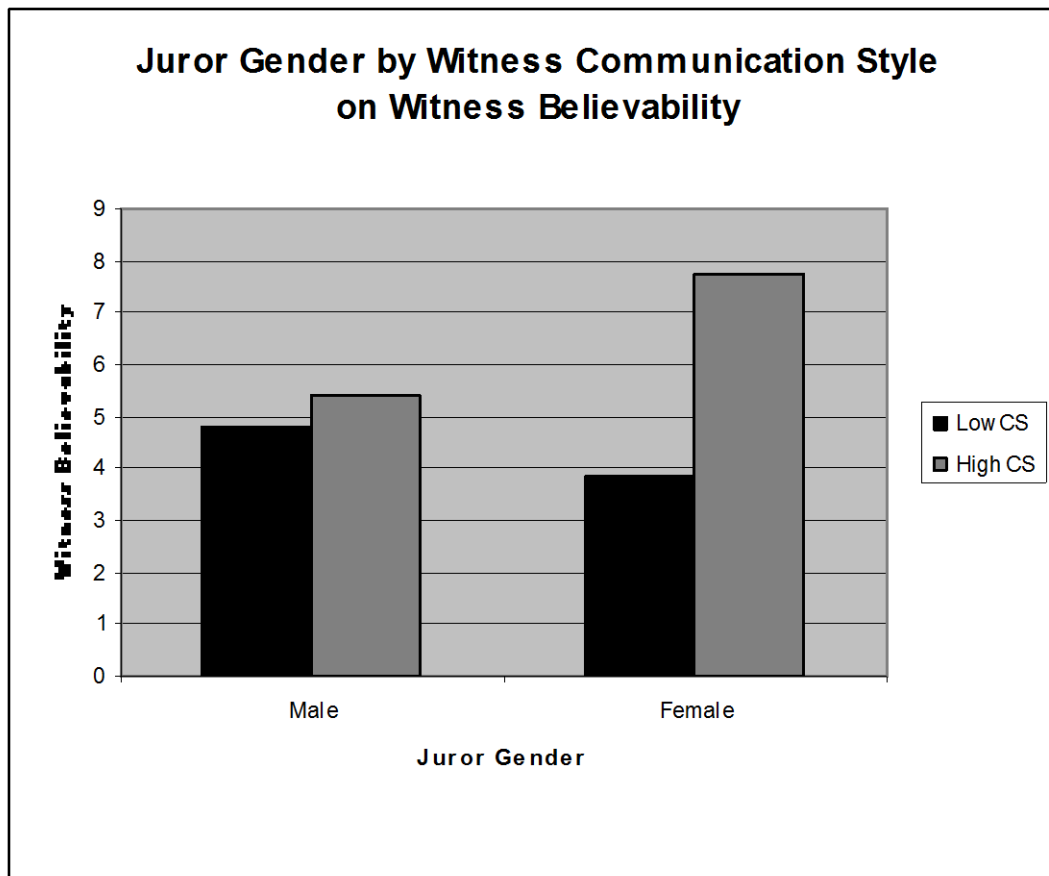
Note: IV = Independent Variable; *F* = F-statistic; CS = Communication Style

a:  $F(5, 283) = 54.38, p < .001, R^2 = .49$ ; b:  $F(5, 283) = 13.31, p < .001, R^2 = .19$ ; c:  $F(5, 283) = 12.18, p < .001, R^2 = .18$

d:  $F(5, 283) = 26.06, p < .001, R^2 = .31$

Figure 1

*Moderation: Juror Gender by Witness Communication Style on Witness Believability*



Note: CS = Communication Style; Low CS is defined as one standard deviation below the mean, and High CS is defined as one standard deviation above the mean.

**Appendix**  
**Observed Witness Efficacy Scale (OWES)**

Please rate the degree to which you feel **the witness** did do the following things when called to testify on the witness stand. Use the scale provided.

1	2	3	4	5
Not well		Moderately well		Very Well

1. Remain calm under cross examination
2. Control their emotions when questioned by an aggressive attorney
3. Maintain a stable tone of voice when speaking
4. Avoid fidgeting
5. Maintain a good posture throughout the testimony
6. Be comfortable on the witness stand
7. Remain poised when being questioned by an attorney
8. Maintain eye contact with the jury
9. Hold eye contact with an attorney
10. Hide nervousness
11. Convey confidence in their ability
12. Organize their thoughts
13. Comfortably admit when they are uncertain of an answer
14. Sit up
15. Lean slightly forward when answering some questions
16. Provide more than “yes/no” answers
17. Act natural
18. Be themselves when testifying