

# The Journal of Forensic Vocational Analysis

*Official Publication of the American Board of Vocational Experts*

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The American Board of Vocational Experts (ABVE) is a professional credentialing body established as a not-for-profit organization. Persons who have attained diplomate or fellow status have advanced academic preparation in the areas of rehabilitation, psychology or counseling and hold advanced degrees from accredited institutions of higher education.

ABVE, representing both the private and public sectors of the rehabilitation enterprise, was founded in 1980 to ensure the integrity and uniqueness of the vocational expert and to set and maintain rigorous standards for ethical practice. As litigation continues to proliferate, and the courts continue to delineate and refine the law, the need for qualified vocational experts becomes essential in the resolution of complex vocational issues in our ever-evolving society.

The certified vocational expert is expected to maintain currency of knowledge regarding the effects of personal injury on earning capacity, labor market changes, hiring practices, knowledge of occupational requirements, as well as the growth and decline of patterns in local labor markets. The ABVE through the presentation of regularly scheduled professional educational seminars and through its various publications, assists the certified vocational expert in the maintenance and expansion of various competencies. The ABVE holds one national conference each year to provide a forum for the exchange of ideas and information regarding forensic practice.

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# The Journal of Forensic Vocational Analysis

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# **The Journal of Forensic Vocational Analysis**

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### **Guidelines for Authors**

*The Journal of Forensic Vocational Analysis's (JFVA)* purpose is to explore and explicate issues of interest to the vocational expert and practitioner; it is a journal that members of the American Board of Vocational Experts and other forensic practitioners may find both intellectually useful and, more importantly, applicable to their forensic practice.

The JFVA seeks to publish original articles that are based on sound research methodology in accordance with the *Publication Manual of the American Psychological Association* (7th ed., 2020). In addition to the publication of original manuscripts, the JFVA regularly features book reviews and commentaries. Occasionally, special issues on select topics and monographs are published. Two issues of the *Journal* will be published each year.

Manuscripts on the following topics are of particular interest:

- Conceptual and empirical manuscripts relevant to medical, economic, psychological, sociological, and rehabilitation principles and practices, vis-à-vis vocational forensic issues.
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- Issues related to updated judicial protocol and procedures, relevance of decisions, and the impact of judicial proceedings on practice.
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Proposals for the development of a special issue, monograph, or book or media reviews should be directed to the editor. These proposals will be considered by selected members of the editorial board with the appropriate content expertise. Manuscripts will be reviewed by members of the editorial board who will (1) recommend publication to the manuscript as presented, (2) recommend publication with revisions or (3) not recommend publication. Feedback to authors submitting manuscripts not recommended for publication will directly refer to the major gaps or problems within the submitted document with recommendations for future submission.

All submitted manuscripts must be prepared in accordance with the guidelines of the *Publications Manual of the American Psychological Association* (7th ed., 2020). Do not submit manuscripts that are under review by other periodicals or that have been previously published. There is no prohibition to the acceptance of previously published material provided prior permission has been obtained from the copyright holder and only when such articles/monographs may be more fully dispersed as deemed by the board of directors of the ABVE. Manuscripts should include a brief abstract, a short (3-5 sentence) author biography, and three learning objectives and multiple-choice questions related to the articles.

It is the preference of the editor that all manuscripts be submitted electronically in rich text format (rtf) to Chrisann Schiro-Geist, PhD, at [chrisann@memphis.edu](mailto:chrisann@memphis.edu). E-mail your manuscript as an attachment without any identifying information in the filename. A cover page with all authors listed, addresses, e-mail and telephone numbers and other identifying information is required to be submitted as an attachment as well. Once received, an acknowledgment letter or e-mail will be transmitted to the submitting author or lead author. The review process will typically average approximately 60 days.

# Editorial

## Chrisann Schiro-Geist

This has been a unique year for the American Board of Vocational Experts (ABVE), and this will be a unique issue of the Journal of Forensic Vocational Analysis (JFVA). The journal and its membership have had to be resilient and flexible to survive the issues posed by a pandemic, its effect on day-to-day operations and the availability of our authors, reviewers and members. I want to thank the ABVE board for being supportive and cooperative as issues caused by the current world crisis have arisen. The authors, also, have been most cooperative in getting on with business during a difficult time. Also, I would like to introduce you to Sarah Cozort, our new editorial assistant. She joins us with an extensive background as an editor in academic and commercial venues, making her ideally suited for a position with a journal that works both with scholars and practitioners outside of the Academy. In addition to her editorial background, she holds an MFA in creative writing and a certificate in writing studies from The University of Memphis, and is a PhD student in Rhetoric and Writing Studies at Virginia Tech. We are happy to have found someone with an enthusiasm for editing and working with authors to bring out the best in their prose.

Despite all the events of 2020, we have managed to put together a volume that reflects current issues in the field and looks toward possibilities for future work. Ron Smolarski has created a wonderful article on “Household Chore Damages Assessment.” It is a clear, practical approach to assessment and will be a true asset to the reader. Scott Stipe follows with a piece on “Vocational Expert Qualifications: Ethical, Practical and Professional Considerations.” Please, take this into consideration, as it is an interesting look at what he believes makes us who we are. Perhaps some of you will be compelled to share your own thoughts on this issue in a future issue of JFVA. The topic of bullying and how it affects the future of those whom we evaluate is discussed by Joel Harris in his article, “Anti-Bullying Intervention and Its Relevance to Forensic Testimony,” and is a piece to think about for the future, especially if you do work in cases related to youth. We finish out with an article by Daniel Thompson, “Choosing a Damages Expert,” which provides especially illuminating insights around life care planning. It also reflects some of the nuances in the field brought to us by our Canadian colleagues. Lots to look at here.

We close with Ron Smolarski’s review of the “MVQS Worker-Trait Factor Analysis,” which considers McCroskey’s work – now operational through 2030! We are not presenting this as an ABVE endorsement of the McCroskey method, but rather as a review, similar in approach to a book review. All good material for you to think about. We look forward to bringing you thoughtful and timely articles into 2021, including some of the best from our virtual presentations in our 2020/2021 annual meetings. We will survive and thrive, as a journal and as an organization, through these difficult times.

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## **Certification Requirements and Categories**

**ABVE Diplomates and Fellows** hold either a master's degree or a doctorate in human services or a related field from an accredited institution; have specific experience and/or training in work sample assessment, functional capacity measures, psychological testing and measurement, job placement and job surveys; and have successfully completed work product evaluation and the National Certification Examination.

**Diplomate** status requires 7 years of vocational expert forensics experience, either in the assessment of vocational capacity and the demonstration of distinguished performance or as a recognized vocational expert. Relevant work conducted by the latter might include published works, a leadership position in a professional organization, the presentation of papers at professional seminars, or service in study groups or on legislative committees to enhance the professionalism of the organization.

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# Anti-Bullying Intervention and its Relevance to Forensic Testimony

**Joel Harris, PhD**

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**Abstract.** *Kids On the Block (KOB) is a program designed to increase knowledge and improve attitudes toward students with disabilities in schools. Previously, research has not examined KOB's effects on school bullying on students. The present study examined the program's effectiveness at increasing knowledge and prosocial attitudes toward bullying, by examining trends in student knowledge and attitudes prior to and after viewing the intervention. Fourth- and fifth-grade students completed measures of bullying knowledge, explicit attitudes toward bullying, and implicit attitudes toward bullying across three time points. Students who viewed the KOB show demonstrated small but statistically significant increases in knowledge, as well as explicit prosocial attitudes toward bullying, after viewing the intervention. Schools may wish to incorporate the KOB intervention as an efficient way to increase student knowledge and promote explicitly prosocial attitudes about bullying. The article also notes the potential for insight — relevant to forensic testimony in vocational rehabilitation — to be garnered from interrogation of the relationship between conflict in childhood, especially resulting in trauma sustained in the educational environment and conflict in the workplace later in life.*

## Introduction

Bullying is defined as repeated acts of aggression, coercion or intimidation against a victim who is at a disadvantage to the bully – in terms of physical size, psychological/social power, or other elements that contribute to a power imbalance (Carney & Merrell, 2001; Olweus, 1993; Smith & Ananiadou, 2003). The key features of bullying include the intent to harm, the repetition of the harmful act(s), and the power differential between bully and victim (Merrell et al., 2008). Bullying can be physical (e.g., fighting, pushing) or relational in nature (e.g., social exclusion, spreading rumors) (Smith et al., 1999), and may be the most prevalent type of school violence (Batsche, 1997; Swearer & Cary, 2008). The Center for Disease Control's Youth Risk Behavior Survey indicates that 30% of students in grades six to ten have been involved in a bullying situation as either the bully or victim (Whitted & Dupper, 2005), while up to 75% of children

reported being bullied at least once during their time in school (Hoover et al., 1992; Swearer & Cary, 2008). Although 88% of all bullying incidents are observed by others (Bauman, 2010), most instances of bullying go unreported (Eliot et al., 2010).

Although this article focuses primarily on preventative measures that can be taken early in a child's education, the issue of childhood trauma and school-related interpersonal conflict is deeply connected to workplace conflict later in life – in ways that scholars at the crossroads of behavioral psychology and primary/secondary education are only now beginning to understand (Randall, 2001; Adler, 2004). The hope is that, through greater exposure to interdisciplinary work that effects how workplace conflict—and rehabilitative measures—are addressed, rehabilitative vocational experts may begin to consider how insights born of the fields of behavioral psychology and primary/secondary education might affect the cases of



our clients. Further, as the field of vocational rehabilitation faces the unique challenges presented by emergent forms of digital labor, recent work on primary and secondary school cyberbullying may become increasingly informative to our own work (Drogin & Young, 2008).

### Effects of Bullying

Bullying has psychological and physical costs for both victims and bullies. There are significant short-term effects of bullying for victims, including psychosomatic symptoms such as headaches, stomach and backaches (Due et al., 2005; Nansel et al., 2004; Williams et al., 1996), as well as psychological repercussions, such as depression, anxiety, irritability, loneliness, suicidal ideation, and helplessness (Harel-Fisch et al., 2011; Haynie et al., 2001; Kaltiala-Heino et al., 1999; Peskin et al., 2007; Salmon et al., 2000). The long-term effects of peer-victimization extend to academic performance, impacting attitude toward school, GPA, and attendance throughout the postsecondary years (Rueger et al., 2011). Additionally, being a victim of bullying in school is a significant predictor of depression up to seven years after the initial incident of abuse (Ttofi et al., 2012). As with other forms of abuse, being a victim of bullying can lead to acting out, violent or aggressive behavior, running away from home, illegal activity, and substance abuse later in life (Farrington, 1989; Kaltiala-Heino et al., 2000; Kim et al., 2011; Ttofi et al., 2012).

Bullies also exhibit poor psychosocial adjustment and, typically, perform below average academically (Smith et al., 2004). School bullies have been shown to lack empathy and may experience cognitive distortions—and social perception biases—with respect to perceived threats in their environment, frequently leading to use of aggression to solve problems (Merrell et al., 2008). The negative effects of engaging in aggressive behavior, on the perpetrator's own psychological health, include increased anxiety, depression, low self-esteem, and even suicidality (Baldry, 2004; Kub & Feldman, 2015; Roland, 2002). Bullies are also subject to psychosomatic complaints in later life, as well as a tendency to continue to bully in the workplace well after the postsecondary years (Cook et al., 2010; Schäfer et al., 2004). They are more likely to be incarcerated, carry weapons, and engage in domestic disputes (Cook et al., 2010), and they are at heightened risk for experiencing psychiatric problems, difficulties in romantic relationships, as well as substance abuse problems later in life (Cook et al., 2010). By the time they reach adulthood, more than half of children identified as bullies had criminal convictions (Olweus et al., 1999). Perpetration of bullying has even been found to have an inter-generational component (Kub & Feldman, 2015).

The Cambridge Study in Delinquent Development found that a significant number of former childhood bullies, at age 32, tended to have children who were bullies as well (Ttofi et al., 2012).

### Bullying in Elementary School

Bullying is especially prevalent and problematic during elementary school. Fifth graders reported more victimization than students in all other grades from kindergarten-through-12th grade (Swearer et al., 2012). According to Williams, et al. (2003), bullying in school settings is generally thought to begin in elementary school and peak during the middle-school years. Adding to this problem, is the low likelihood that bullying behaviors will be reported. Twenty-five-to-thirty percent of students who have been bullied report the incident to an authority figure (Eliot et al., 2010), and of this percentage, only 11% of students are willing to seek help at school for personal problems (Siyahhan et al., 2012). Additionally, students who never spoke with their parents or teachers about bullying reported significantly higher levels of hopelessness (a key element of depression) than students who reported bullying or were not involved (Siyahhan et al., 2012). As a result, many researchers advocate strongly for proactive bullying-related interventions and prevention focused on elementary school students (Lawson et al., 2013; Olweus, 2004). Given the extent and harmful effects of bullying, especially in elementary schools, this research tested the effectiveness of a widely used anti-bullying intervention.

### Why Does Bullying Occur?

Bandura's Social Cognitive Theory (SCT) offers a framework for exploring why students engage in bullying (Shafer & Silverman, 2013). According to this theory, behavior is learned through modeling and social experiences (Prati, 2012). Modeling is the process of learning by watching someone else's behavior. The likelihood of modeling is predicated by three different conditions: (a) the model is perceived to be a powerful figure; (b) the outcome of engaging in the modeled behavior is reward rather than punishment; (c) the model has some characteristics in common with the observer (Bandura, 1973, 1986; Prati, 2012). It is also important to note SCT emphasizes that, while social experiences may continuously affect behaviors, individuals are able to alter their cognitions and behaviors. Specifically, this model stresses the ability of an individual to take part in self-directed behavior change, as well as vicarious learning given the role of cognitive function in behavior (Shafer & Silverman, 2013; Wilson, 2011).

A significant amount of research to date has examined bullying in the context of SCT. Salient findings include: bullies are perceived by their peers as popular, powerful, and leaders in school settings (McLaughlin et al., 2006; Papanikolaou et al., 2011; Roberts & Morotti, 2000; Vaillancourt et al., 2003), and teachers and peers rarely punish bullies for aggressive behaviors (Craig & Pepler, 1997). In fact, peers of a bully often actively reinforce these aggressive behaviors by joining the bully in these actions, reacting passively (e.g., not informing a teacher / expressing negative feelings about the actions), or by being respectful and cordial to bullies (Burns et al., 2008; O'Connell et al., 1999). Accordingly, Bandura (1977) has found that both vicarious reinforcement and vicarious punishment can affect observers' behaviors. Teachers typically enforce rules by rewarding desirable, prosocial behavior, and punish undesirable, antisocial behavior, a strategy that tends to have the desired effect in the classroom (Lam et al., 2014). This strategy may not be effective when applied to complex patterns of behavior identified as bullying (Shafer & Silverman, 2013). When addressing bullying, school personnel must not only work to extinguish bullying behaviors but, also, clearly define—as well as demonstrate—alternative behaviors. Researchers suggest that school personnel incorporate school-wide anti-bullying programs that work to define bullying, how to identify bullying, rules and consequences of bullying, how to avoid being a bystander to bullying, how to report bullying, as well as providing resources to allow students to practice these skills (Jones et al., 2012).

### **Anti-Bullying Programs and Strategies**

The past few years, many anti-bullying programs and interventions have been developed and implemented in elementary schools. These programs tend to be comprehensive and school-wide, with a structured evaluation process, inclusive of students, faculty, staff, administration, and parents of students (Bell et al., 2010; Newman-Carlson & Horne, 2004; Olweus, 1993; Olweus, 2005; Smith et al., 2004). Programs, such as the Olweus Bullying Prevention Program and the Bully Busters Program, emphasize the development of prosocial skills, redirecting negative behavior and emotions, of both victims and bullies, on a case-by-case basis (Bell et al., 2010; Olweus, 2005). Newer comprehensive programs, such as Steps to Respect, reinforce academic performance, while teaching students strategies for responding to bullying (Hall, 2006). Other programs focus on enhancing the assertiveness of victims when confronted by bullying behavior (Hall, 2006). Kochenderfer and Ladd (1997) found that use of problem-solving strategies by students was helpful in ending bullying. As a result, Bully Proofing Your

School, a bullying prevention program designed to curtail bullying at the elementary level, focuses on remediation of bully and victim problem-solving skills (Garrity, 1997).

There are three key elements of anti-bullying programs that have been empirically supported to reduce bullying and victimization. First, while different anti-bullying programs vary widely—in age range, comprehensiveness, focus, and degree of evaluation, the majority of anti-bullying programs conceptualize bullying as a behavior that needs to be redirected or remediated, rather than simply punished (Colvin et al., 1998). Roth et al. (2010), as well as Rigby and Griffiths (2011), provide evidence that non-punitive, remediation-focused approaches have positive outcomes, significantly increasing empathy and prosocial values, as well as reducing bullying behaviors. Second, many anti-bullying programs emphasize the importance of creating a positive school climate (Ttofi & Farrington, 2011), as research suggests that efforts by school staff to provide a supportive climate can be a valuable method of engaging students in the prevention of bullying and threats of violence (Eliot et al., 2010; Swearer & Doll, 2001). Third, numerous studies have found that bullies can be trained to enhance their diminished empathic ability (Olweus, 1993), which can significantly decrease or even inhibit aggressive and bullying behaviors (Kaukiainen et al., 1999; Miller & Eisenberg, 1988; Richardson et al., 1994; Sahin, 2012).

### **Bullying Attitudes**

Goethem et al. (2010) states that it is important to differentiate between implicit attitudes and explicit attitudes. Implicit attitudes are spontaneous, impulsive emotional evaluations and reactions, while explicit attitudes refer to intentional, controlled, and conscious evaluations (Gawronski & Bodenhausen, 2006). The distinction between implicit and explicit attitudes is predominantly used in aggression research, maintaining that the more automatic processes of implicit attitudes can affect the more reflective processes of explicit attitudes (Hoffmann et al., 2008). Accordingly, this study includes measures of both explicit, as well as implicit, bullying attitudes.

### **Kids On the Block**

Kids On the Block, Inc. (KOB) is a program that addresses bullying using principles of remediation, positive school climate, empathy training, and increases prosocial bullying attitudes. KOB is a puppet show for students in elementary and middle school, specifically kindergarten-through-sixth grade (KOB, 2012). This program originated in 1977 in direct response to United States

Public Law 94-142, which required that children with disabilities be educated in the least restrictive environment (Dietl, 1982). For many children, this meant being included in a classroom with their non-disabled peers. KOB was created with a focus on increasing knowledge and changing attitudes toward individuals with disabilities (Dunst, 2012). The puppets vividly and effectively model relationships between children by using frank, humorous communication of facts and feelings among the puppets, as well as between the puppets and the audience (KOB, 2012).

Research has not yet examined its effectiveness promoting prosocial attitudes of students toward bullying or increasing their knowledge about bullying. Past studies have examined the effectiveness of KOB in the context of students with disabilities and found the program to be effective in promoting knowledge and prosocial attitudes toward individuals with disabilities (Dunst, 2012; Gilfoyle & Gliner, 1985; Grider, 1985; Haugland, 1986; Schumacher et al., 1997; Snart, 1993). Although the effectiveness of KOB on knowledge and attitudes regarding individuals with disabilities is well-established, it is unknown whether it is effective in improving knowledge and attitudes about bullying in general.

### Purpose of the Study

The goal of the present study was to assess the effectiveness of Memphis KOB in improving fourth- and fifth-grade students' knowledge and attitudes about bullying. This research asked whether significant improvements in student knowledge, explicit attitudes, and implicit attitudes about bullying occurred when students saw the KOB "No Bullying" puppet show. If one or more of these three factors, regarding student knowledge and attitudes, were to significantly increase, this would demonstrate its effectiveness for implementation of the KOB intervention in elementary schools. It was hypothesized that students who viewed the KOB intervention would show an increase in bullying knowledge, as well as an increase in prosocial explicit and implicit attitudes toward bullying.

## Methods

### Research Design

To evaluate the effectiveness of KOB as an anti-bullying intervention, an interrupted time-series design was used. Measures of explicit attitudes and implicit attitudes toward bullying were administered to two classrooms per grade of elementary school students (fourth and fifth grades) at three separate points of time, with

the intervention introduced immediately after the first measure was administered. Another group of two classes per grade of fourth- and fifth-grade students acted as a waitlisted control group. The waitlisted control group did not view the intervention until four school weeks later at which point all measure administrations had been completed. The first and second measure administrations were spaced approximately one week (approximately five school days) apart, and the third and final administration occurred approximately two weeks (approximately 10 school days) after the second administration. The first administration provided a baseline measure of awareness of bullying prior to exposure to the KOB intervention. The second administration of measures occurred one week after the intervention and measured bullying knowledge and attitudes in the week immediately following the KOB intervention. A third administration of measures occurred approximately three weeks (approximately 15 school days) following the intervention. Dunst (2012) has previously used the time period of one week between a pretest and a KOB performance on disability. Furlong et al. (2010) have also recommended that assessments should be administered both before and after the intervention.

### Participants

Participants were 175 students at an elementary school in the Memphis, Tennessee area. This sample size was estimated based on a power analysis of the number of participants needed to have an 80% chance of detecting a small ( $f = 0.1$ ) effect (Cohen, 1992), assuming a correlation among repeated measures of .8 and using an alpha level of 0.05. Participants were 52% male ( $n = 91$ ) and 47.4% female ( $n = 83$ ) with 0.6% (1) not reporting on gender, and the age range was 8.5 to 11 years ( $M_{age} = 9.6$ ). The reported racial makeup of the sample was 82.9% ( $n = 145$ ) African American, 5.6% ( $n = 11$ ) Hispanic or Latino, 6.3% ( $n = 11$ ) Native American, 4.6% ( $n = 8$ ) Caucasian, 2.3% ( $n = 4$ ) Asian or Pacific Islander, 0.6% ( $n = 1$ ) other, and 1.1% ( $n = 2$ ) did not report race.

### Measures

**Demographic questionnaire.** Participants completed a questionnaire asking about age, grade level, gender, teacher name, and race (see Appendix A). These items were used to provide descriptive statistics about the sample.

**Kids On the Block Bullies and School Safety Test.** Knowledge about bullying was measured using the

KOB Bullies and School Safety Test (BSST; see Appendix B). The BSST is a 10-item measure developed and used by KOB to assess knowledge gained from viewing the “No Bullying” puppet show, and the questions were based on information presented to students in KOB scripts. Students were asked to indicate whether statements such as, “Bullying is not your problem if it is not happening to you,” were true or false. Although this measure has been administered in the past as a pretest and posttest of the intervention, no formal analysis of the results was available. Therefore, psychometric properties of this measure had not been established.

Cronbach’s alpha for the BSST for this study was 0.45 at Time 1, 0.49 at Time 2, and 0.52 at Time 3. The scale’s internal consistency reliability is low, which may indicate that bullying knowledge would be better conceptualized as a multidimensional rather than unidimensional construct. However, rather than dropping any items, the full scale was used in the analysis for two reasons. First, the scale was designed by KOB specifically to sample knowledge that should be gained from the program and removing items might have reduced content validity. Second, the sample size was large enough that adequate power was achieved to detect effects on the BSST measure despite its low reliability. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses for more information regarding treatment of missing data).

**Moral Approval of Bullying Subscale.** Explicit student attitudes toward bullying were measured using the 10-item Moral Approval of Bullying Subscale (MABS; see Appendix C) of the Student School Survey created by Williams and Guerra (2007). Explicit student attitudes toward bullying refer to intentional, controlled, and conscious evaluations (Gawronski & Bodenhausen, 2006). The MABS asked students to rate acceptability of behavior on a five-point scale, with choices ranging from “Really wrong,” “Sort of wrong,” “Sort of OK,” to “Perfectly OK,” and “Pass.” A sample item is, “Students ignore it when someone weaker is being pushed around.” Response options were changed to reflect student attitudes toward bullying over the past week instead of the past year. This scale is intended for use with youth 10-to-17 years old. Responses were reverse-coded as needed on a 4-point scale so that higher values reflected more prosocial explicit attitudes about bullying, and responses of “Pass” were recoded as missing. The mean score was computed for each respondent. Previous research has consistently found

that endorsement of bullying as acceptable or normative is associated with a higher likelihood of committing acts of bullying (Bentley & Li, 1995; Espelage & Swearer, 2003; Huesmann & Guerra, 1997). Predictive validity is supported by a study in which a very similar 6-item version of the MABS was administered by Williams and Guerra (2007) to 5<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grade students, and scores were significant positive predictors of bullying involvement. Cronbach’s alpha for the MABS is 0.93 (Hamburger et al., 2011), indicating excellent internal consistency. Cronbach’s alpha for the MABS for this study was found to be 0.73 at Time 1, 0.63 at Time 2, and 0.71 at Time 3. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses).

**Semantic Differential Scale.** Student implicit attitudes towards bullying were assessed using Osgood et al.’s (1957) Semantic Differential Scale (SDS; see Appendix D). Implicit attitudes are spontaneous, impulsive emotional evaluations and reactions (Gawronski & Bodenhausen, 2006; Osgood et al., 1957). The SDS can be used to measure attitudes toward a concept, person, or object. Students were presented with the concept “bully” and asked to rate that concept on ten 5-point bipolar dimensions. Bipolar adjective pairs anchoring these dimensions were chosen for understandability by elementary-school students, with sample pairs such as ‘good-bad’ and ‘safe-dangerous.’ As is typical for semantic differential scales measuring attitudes, the bipolar adjective pairs were selected from the evaluative domain of the Semantic Differential Technique sourcebook (Snider & Osgood, 1969). The evaluative domain generally accounts for most of the variance in overall scores when the semantic differential method is used to assess attitudes (Bauer, 2008). Adjective pairs were presented so that the more positive adjective anchored the left side of the scale in some items and the right side in other items to prevent response biases. Scales ranged from Good = 5, to Neutral = 3, to Bad = 1. To score this measure, the mean rating across all items was used as the subject’s attitude score (Aronson et al., 1990). Cronbach’s coefficient alpha for semantic differential scales typically ranges from .87 to .97 according to Heise (1970), indicating good to excellent internal consistency. Crites, et al. (1994) found a median Cronbach’s alpha of .95 for semantic differential scales measuring attitudes and found that the semantic differential scale is psychometrically stable across multiple attitude objects. Past research supports the content (Bauer, 2008) convergent, and discriminant (Crites et al., 1994) validity of semantic differential scales. Cronbach’s alpha for the SDS for this study was found to

be 0.95 at Time 1, 0.94 at Time 2, and 0.95 at Time 3, indicating excellent internal consistency. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses).

**Procedures.** Student attitudes toward bullying (implicit and explicit), as well as knowledge of bullying, were assessed at the following times: (1) immediately before the KOB show (pretest), (2) five school days after the KOB show (posttest), and (3) eight school days after the KOB show (follow-up test). The BSST, MABS, and SDS were administered to eight classrooms by two KOB puppeteers trained for data collection. Directions were read aloud and repeated as needed, and children independently marked their answers in a questionnaire packet. Evaluators ensured students recorded their names and teacher name on questionnaires as to accurately track data. It took approximately 10 minutes to complete the measure. One week prior to the KOB show, parents were asked to return a passive consent form within one school week if they did not consent to their child's participation in the study. The Institutional Review Board of the school district approved this study.

## Results

### Preliminary Analyses

Responses to the KOB, BSST, MABS, and SDS measures were rescored so that higher scores represented greater knowledge about bullying and attitudes reflecting greater disapproval of bullying. Completion of at

least five items in each scale was chosen as the a priori cutoff for a participant's responses on a scale to be included in analysis. Person-mean imputation was used to compute scale means as recommended by Roth et al. (1999). Averaging a participant's responses to the items in a scale is conceptually equivalent to imputing their average response on the scale for all missing items. Because each scale measured one construct, a participant's mean score on answered items in a scale should provide a good estimate of what their response on missing items would have been. Therefore, completion of at least half of each scale allowed a scale score to be computed (Roth et al., 1999).

If, however, a participant completed less than half of a scale (or was not present on that day of data collection), a scale score was not computed. A missing values analysis was run on the scale scores for the three measures at each of the three time points. Little's MCAR test indicated that data were missing completely at random,  $\chi^2(66) = 73.75, p = .24$ . Therefore, participants with missing scale scores were removed from the analysis via listwise deletion (Tabachnik & Fidell, 2013). Descriptive statistics are shown in Table 1 and means by group are shown in Table 2.

Table 1

*Means and Standard Deviations of BSST, MABS, and SDS Measures*

Measure	<i>N</i>	<i>M</i>	<i>SD</i>
BSST			
Time 1	173	0.75	0.15
Time 2	162	0.77	0.15
Time 3	143	0.75	0.16

MABS			
Time 1	172	3.34	0.48
Time 2	161	3.40	0.48
Time 3	141	3.40	0.48
SDS			
Time 1	168	4.08	1.22
Time 2	160	4.11	1.18
Time 3	142	4.27	1.23

Table 2

*Mean Scores on BSST, MABS, and SDS by Group*

	Control ( <i>n</i> = 67)	Experimental ( <i>n</i> = 54)
Measure	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
BSST		
Time 1	1.73(0.17)	1.80(0.12)
Time 2	1.73(0.15)	1.82(0.12)
Time 3	1.69(0.15)	1.84(0.12)
MABS		
Time 1	3.26(0.45)	3.43(0.49)
Time 2	3.22(0.54)	3.54(0.33)
Time 3	3.25(0.49)	3.54(0.38)

SDS		
Time 1	4.11(1.08)	4.36(1.09)
Time 2	4.17(1.01)	4.38(1.10)
Time 3	4.25(0.98)	4.35(1.23)

### Analytic Plan

Multivariate analysis of variance was considered because the dependent variables were correlated with each other (see Table 3). However, our hypotheses concerned time effects on each of the separate dependent variables and not effects on the linear combination of the variables that best discriminated between groups. When research questions do not call for multivariate analyses and multivariate results are not interpretable (as would be the case in this study), univariate analyses are more appropriate (Grice & Iwasaki, 2007). Thus, planned linear trend analyses were conducted for each of the three dependent variable measures. Hypothesis 1 was that the experimental group would demonstrate linear gains in bullying knowledge across the three points in time, whereas stu-

dents in the control group would not. These ideas were tested using orthogonal polynomial contrasts for each group with BSST scores at each of the three time points as the dependent variable and time as the repeated measures variable. Hypothesis 1 would be supported if the experimental group showed a significant linear increase in BSST scores over time and the control group did not. Hypothesis 2 (with MABS scores as the dependent variable) and Hypothesis 3 (with SDS scores as the dependent variable) were also tested using orthogonal polynomial contrasts. Hypothesis 2 would be supported if the experimental group showed a linear increase in MABS scores over time and the control group did not. Hypothesis 3 would be supported by the same linear pattern in SDS scores.

Table 3

### *Correlations Between BSST, MABS, and SDS Measures*

	BSST			MABS			SDS		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
BSST T1	-								
BSST T2	.46**	-							
BSST T3	.41**	.69**	-						
MABS T1	.19*	.27**	.40**	-					
MABS T2	.26**	.33**	.48**	.67**	-				

MABS									
T3	.27**	.40**	.40**	.72**	.84**	-			
SDS T1	.08	.00	.17*	.10	.18*	.12	-		
SDS T2	.12	.07	.26**	.17*	.19*	.18	.79**	-	
SDS T3	.11	.13	.24**	.14	.29**	.20*	.60**	.82**	-

\*  $p < .05$ . \*\*  $p < .01$ .

### Assumptions

First, assumptions of the analyses were addressed. Outliers were identified as having a standardized residual on a dependent measure greater than 3. Univariate outliers were found, and analyses were conducted both with and without outliers, with both results reported in each section below. Generally, removing outliers did not influence results. All Cook's distance values were less than 1, and no cases exceeded critical values for leverage. Shapiro-Wilk's test indicated that the dependent variable distributions deviated significantly from normal, all  $ps < .01$ , which may have reduced the power to detect trends. But because the hypothesized trends were detected, this reduced power was not an issue in this study. Mauchly's test of sphericity indicated that the assumption of sphericity was not met for any of the analyses, all  $ps < .05$ . This is to be expected in repeated measures designs, as measures closer in time to each other tend to be more similar than those that are farther apart in time. However, in trend analysis there is only one degree of freedom for the time variable so that the assumption of sphericity is not required (Schinka et al., 2003); therefore, the lack of sphericity was not problematic.

### Knowledge About Bullying

In support of Hypothesis 1, the experimental group showed a significant linear increase in BSST knowledge scores,  $F(1, 58) = 4.92$ ,  $p = .031$ ,  $\eta^2 = .08$ . Although no linear effect was predicted for the control group, it exhibited a nearly significant linear decrease in BSST scores,  $F(1, 72) = 3.78$ ,  $p = .056$ ,  $\eta^2 = .05$ , although this did not reach significance at the  $p = .05$  level (see Table 3 for means). When outliers on the BSST were removed, similar results were obtained,  $F(1, 56) = 8.40$ ,  $p = .005$ ,  $\eta^2 = .13$  for the experimental group;  $F(1, 72) = 3.78$ ,  $p = .056$ ,  $\eta^2 = .05$  for the control group.

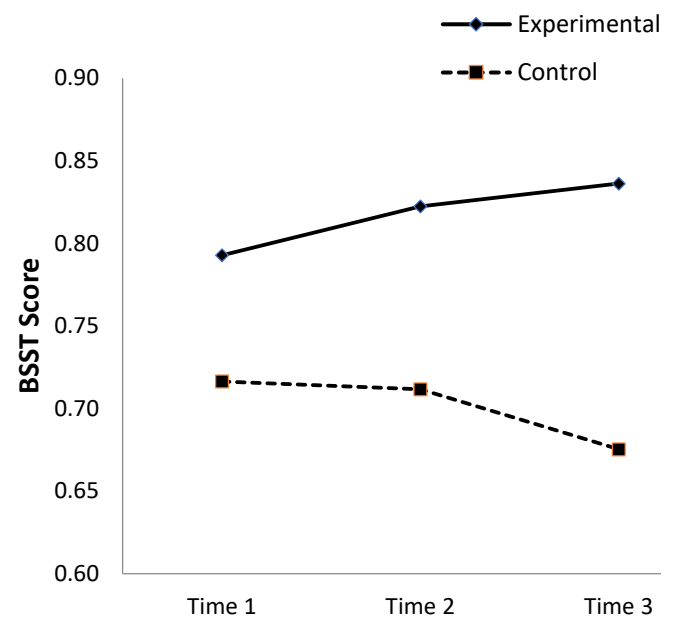


Figure 1. BSST Scores by Group at Each Time Point.



### Explicit Bullying Attitudes

Consistent with Hypothesis 2, there was a significant positive linear trend in MABS scores for the experimental group over time,  $F(1, 60) = 8.59, p = .005, \eta^2 = .13$ , but no linear effect for the control group,  $F(1, 68) = 0.04, p = .842, \eta^2 = .001$ . Results did not change when outliers were removed,  $F(1, 56) = 9.64, p = .003, \eta^2 = .15$  for the experimental group;  $F(1, 66) = 0.27, p = .609, \eta^2 = .004$  for the control group.

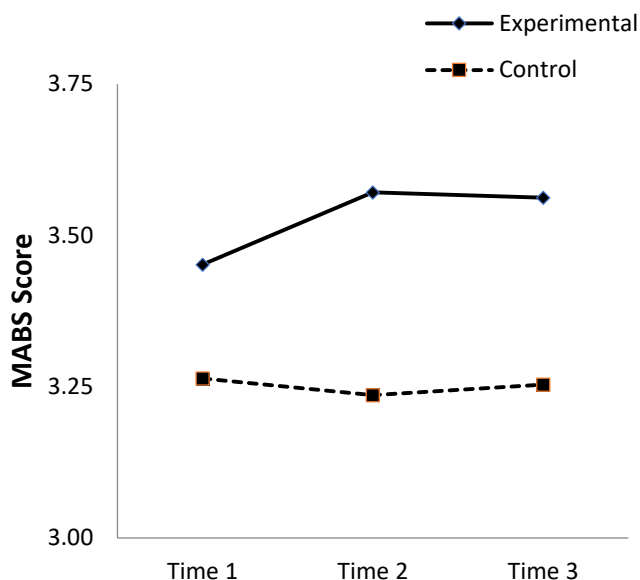


Figure 2. MABS Scores by Group at Each Time Point.

### Implicit Bullying Attitudes

There was no significant linear effect of time on SDS scores for the experimental group or the control group,  $ps > .05$ . Therefore, Hypothesis 3 was not supported (see Figure 3). Results obtained when outliers were removed were the same,  $F(1, 49) < .001, p = .99, \eta^2 < .001$  for the experimental group;  $F(1, 68) = 1.55, p = .218, \eta^2 = .02$  for the control group.

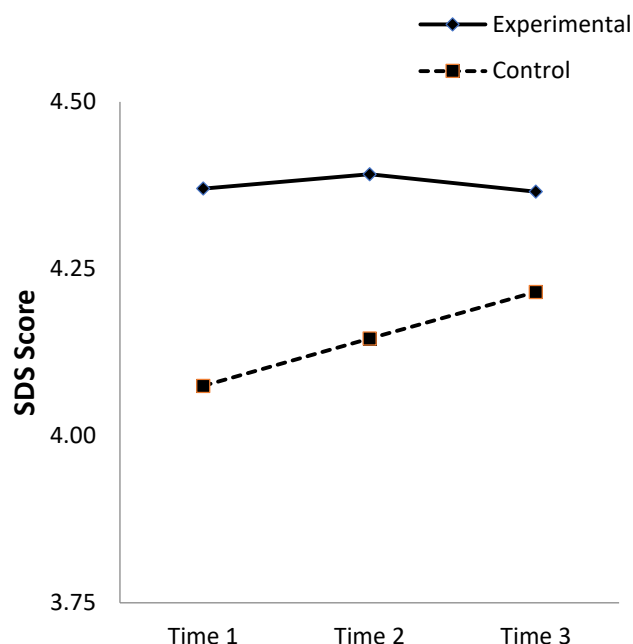


Figure 3. SDS Scores by Group at Each Time Point

### Discussion

The present research examined whether the KOB intervention improves elementary school students' knowledge of and explicit and implicit attitudes about bullying. It was hypothesized that students who viewed the KOB puppet show would report significant improvements in knowledge, explicit attitudes, and implicit attitudes about bullying, while students in the waitlisted control group would not report significant improvements in knowledge or attitudes toward bullying. Accordingly, it was predicted that the experimental group would exhibit a linear increase over time in scores on the BSST, MABS, and SDS, respectively. It was also hypothesized that there would not be a significant linear increase in the waitlisted control group's scores on the BSST, MABS, and SDS. Results provided some evidence of significant but small improvements in knowledge and explicit attitudes but not for improvement in implicit attitudes.

Consistent with Hypothesis 1, students who viewed the KOB puppet show exhibited a significant linear increase on the BSST knowledge measure while the control group did not, suggesting that students gained knowledge about bullying from the intervention. Support was also found for Hypothesis 2, which was that students who viewed

the KOB puppet show exhibited a significant linear increase on the MABS knowledge measure while the control group did not, suggesting that students improved in explicit bullying attitudes across time. Hypothesis 3 was not supported, with no significant improvements in implicit attitudes toward bullying being evident.

Results provided partial support for the efficacy of the KOB program because students who saw the intervention displayed increased knowledge of bullying and more prosocial-explicit attitudes toward bullying over time. These findings support KOB's continued use in schools as a one-time bullying intervention. It should be noted that effect sizes were relatively small. For the experimental group, 8% of the variance in BSST scores and 13% of MABS scores was attributable to the linear effect of time. Some improvements were still occurring approximately two school weeks after the intervention, supporting the idea that changes in knowledge and explicit attitudes are lasting, at least to some degree. However, again, results did not support the program's effectiveness in improving implicit attitudes about bullying.

The linear increase in bullying knowledge, and explicit attitudes over the three weeks following the KOB show, could reflect a steady increase due to a gradual change in school and/or class climate. This is consistent with bullying theories such as Bandura's SCT. Bandura (1986) stresses the role of abstraction, cognition, and integration of information extracted from a range of social experiences, which is most often the exposure to behavior of models. There may be a delay between observing modeled behaviors and the integration of this information to the degree that an individual enacts the modeled behaviors (Prati, 2012). The linear increases on the BSST and MABS for the experimental group could also be due in part to practice effects. However, this possibility is reduced because the control group did not demonstrate such an effect, and participants were not given feedback about their performance on the measure at any point.

Results do not support the hypothesized improvement in implicit attitudes about bullying. There are two possible reasons for this finding. First, it is possible that the semantic-differential scale used to measure implicit attitudes lacked precision to detect these differences. Additionally, semantic differential scales can be difficult to understand for children. Helwig and Avitable (1995) recommend exercising caution using semantic differential scales with children when applied to abstract concepts, such as bullying.

Second, KOB may be affecting explicit but not implicit attitudes, so it may be beneficial for KOB to focus on ensuring that students are internalizing the messages from the show regarding prosocial attitudes toward bullying. The gains in explicit attitudes may reflect greater knowledge of what the socially desirable responses to items are rather than an actual change in attitude. Anti-bullying research supports the use of school-wide anti-bullying programs that not only model prosocial knowledge and attitudes toward bullying, as KOB does, but also engage students firsthand in various ways (Olweus, 1999). These school-wide programs include experiences such as empathy training and assertiveness skill development (Hall, 2006), learning to effectively problem-solve to prevent conflict (Garrity, 1997; Kochenderfer & Ladd, 1997; Newman-Carlson & Horne, 2004; Olweus, 1993), in addition to peer mediation training as to facilitate understanding of conflict resolution (Garrity, 1997). Perhaps the addition of some of these other empirically supported methods might increase KOB's impact on implicit attitudes.

### Implications

The results of this study provide some evidence that schools that need to address bullying may benefit from implementing KOB. The KOB intervention seems to be effective in fostering knowledge and prosocial explicit attitudes to some degree. A benefit of KOB is that it can be implemented quickly and easily relative to many other anti-bullying programs. Despite the one-time nature of the intervention, KOB has been demonstrated to influence knowledge and explicit attitudes for at least three weeks.

Prior to this study, there has been little research to date regarding the effects of brief presentation-based anti-bullying interventions. Results suggest that these brief interventions might be an efficient way to influence student knowledge and explicit attitudes about bullying.

As discussed above, this research suggested that affecting implicit attitudes about bullying is an area where KOB might improve. Additional elements might be added to the program to help students internalize positive values and attitudes about bullying.

### Limitations

There are some limitations of the current study that should be addressed when interpreting these results. First, this research design was necessarily quasi-experimental, and not a true experiment, because test groups were determined by pre-existing classes. Other unmeasured vari-

ables may have contributed to students being organized into classes as they were and cannot be completely ruled out as causes of observed group differences. Second, this study did not measure bullying behaviors before and after the KOB puppet show, as ethical concerns were raised by the district office of the target school. The proposed measure of bullying behaviors would request students to cite instances of prior bullying but would not provide follow-up regarding the involvement of these students. Future studies may wish to explore the option to utilize such a measure if possible. Third, it is impossible to know whether gains in student bullying knowledge, and pro-social attitudes toward bullying, will be maintained over time unless measured longitudinally. External validity of this study is limited by the fact that all participants in this study came from one school of low socioeconomic status (National Center for Educational Statistics, 2013), and most were African American.

### Future Directions

Based on the findings of this study, further research is needed to examine changes in bullying in elementary school when exposed to an anti-bullying intervention. One element of a future study of this nature that could be of benefit would be including a self-reported measure of bullying behavior. Such a measure would allow one to track student bullying behavior before and after the KOB puppet show, which could also be compared to the control group, determining the effectiveness of this intervention. Future research should also replicate the results of this study with more groups of students equally academically gifted to the students that were subjects of this study.

Student bullying knowledge and attitudes toward bullying could be optimally examined using a longitudinal study assessing participants throughout the course of a school year. While this study did measure bullying knowledge and attitudes at three points over the range of approximately three school weeks, a longitudinal design would allow for measure of time-related changes within the same group of students, as well as between experimental and control groups.

Forensic vocational experts, especially those who do work in employment law areas, need to have a clear understanding of the impact of childhood bullying and how it can affect adult workplace issues. Early intervention is still unusual but can be greatly effective. How is the worker effected at the work site later in life by these issues? Can workplace conflict later in life be mitigated through early intervention? Where is the Vocational Expert on these issues and how could such past experiences effect the expert's view of a case? The impact on em-

ployment law cases needs to be looked at and resolved in future articles and by continued research into these areas. Clearly this article shows that addressing such issues in primary school has a positive effect on the future and mental health of adult workers.

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# Household Chore Damages Assessment

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**Abstract.** *Accurate and practical assessment of the monetary damages associated with disability, in terms of household chores, is a concern for vocational experts, rehabilitation counselors, forensic economists, life care planners, psychologists, accountants, and finance professionals. Such assessment requires consideration of pre- and post-injury tasks and capacities, and estimation of their financial value, which is less obvious in the case of household chores than with work-related duties or tasks. The methodology presented here results in a realistic dollar estimation of damages that offers a thorough consideration of the specific offset factors that are involved and is more practical than more complicated, expensive, and labor-intensive methods that too often discourage professionals from considering household chores at all.*

*The method presented utilizes three tools:*

- *a checklist to help determine the ability of the evaluatee to perform tasks at home*
- *an instrument for estimating the number of productive hours a person who is not disabled spends around the home and for estimating the value of the activities performed*
- *a software application that integrates the information from the checklist and the hours/value estimate instrument to yield an Excel spreadsheet that allows application of the appropriate offset to the dollar damages.*

## Household Chores Damages Assessment

Over my 43 years of practice, I have developed a practical and convenient approach for making clear, understandable household chore damages determinations for workers who are disabled. Vocational experts, rehabilitation counselors, forensic economists, life care planners, psychologists, accountants, and finance professionals can all benefit by using this method to help their clients. I use three tools: The Functional Capacities Checklist (FCC), the Dollar Value of a Day (DVD), and Damages Advocate software. Together, these three tools help me determine realistic and understandable damage amounts for loss of ability to perform household chores.

### Determining Functionality

First, I use the FCC to help me determine the evaluatee's present ability to carry out tasks around the home (Burke & Dillman, 1984); some experts use K. W. Reagles and Associates's checklist to determine problems, which involves 306 tasks. This is comprehensive but does not pro-

vide a level of competency (in terms of number values) for each task. The U.S. Bureau of Labor Statistic Table 8B states, "Time spent in primary activities for the civilian population 18 years and over by presence and age of youngest household child and sex, 2019 annual averages, employed," and only provides 7 activities, with no competency levels. The DVD also does not provide competency levels. The FCC reveals the impact of the disability on adult living activities and household chores on a very practical level, using no equations or formulas.

A more complicated and time-consuming approach would be to take Department of Labor Dictionary of Occupational Titles (DOT) data for each task involved in all the tasks pertaining to household chores. This would involve performing a worker trait factor analysis on 24 DOT occupations (representing chores) using Dr. McCroskey's (McCroskey et al., 2002) Vocational Quotient Systems (MVQS) using all 24 worker traits: General Education Development—

Reasoning (R), Math (M), and Language (L); Spatial perception (S); Form perception (P); Clerical perception (Q); Motor coordination (K); Finger dexterity (F); Manual dexterity (M); Eye/Hand/Foot coordination (E); Color disc (C); Physical Capacities—Strength level (PD1), Climb/balance (PD2), Stoop/kneel (PD3), Reach/handle (PD4), Talk/hear (PD5), and See (PD6); Environmental Tolerances—Work location (EC1); Other Tolerances—Extreme cold (EC2), Extreme heat (EC3), Wetness/humidity (EC4), Noise/vibration (EC5), Hazards (EC6), and Dusts/fumes (EC7). All this information would then need to be cross referenced with the 7 activities in the U.S. Bureau of Labor Statistic Table 8B regarding household activities, purchasing goods and services, and caring for and helping household members to obtain the number of hours allotted to each task. Establishing this would be very time-consuming, and while it would be more accurate and add more dollar value, the professional's invoice would be significantly, perhaps prohibitively, greater. This method would most likely be the better choice if in the future the buyer of services wished to obtain a higher damage without concern for the billable hours.

The FCC describes the impact of a disability in laymen's terms, showing to what degree the disability decreases the individual's ability to accomplish chores or day-to-day activities around the home or even at work. (Not all vocational experts or forensic economists make this determination, e.g., if they work for insurance companies the defense does not want to present more damages or does not know how to provide an offset). Because I specialize in workers who are disabled, I provide this for most of my cases. I have found that many vocational experts and forensic economists do not know the FCC exists or that it can be used to assess this type of economic damage in cases where the worker can be evaluated as to what he or she can still perform in terms of household chores.

Forensic economists usually take the results of vocational evaluations from a rehabilitation counselor and life care planner and use them to do their calculations of monetary damages, but they do not use the tools that would let them determine the offset to total damages associated with limitations in day-to-day living (the offset means what a person can still perform post-injury). Also, life care planners need this information to complete their life care plans. For example, a worker may have a low-back injury that will impact him/her as an offset to economic damages for total disability – the person may have taken an hour to rake the leaves pre-injury but now can only do such work for 20 minutes a day and may take a week to finish the job. To be more accurate, this result of injury,

i.e., what the person can still perform, should be included in the damage dollar amount awarded at settlement or trial.

When a judge, jury, attorney, or claims person can see the degree to which a disability has changed a worker's ability to perform household chores, it is easier to understand the full impact of the injury. This practical understanding is more meaningful than using percentiles. The decrease in people's ability to take care of themselves is extremely important because it impacts the quality of life and the individual's ability to be independent. My approach results in a realistic dollar estimation of the individual's damages that is not refined to the penny but offers a more thorough consideration of the specific offset factors that are involved. Rather than just asking broad questions, such as, "Do you have problems with shopping," I use the FCC to obtain detailed information on individual elements of a task, such as the following: unlocking and opening a car door; pulling open a door with a handle in a public place; lifting objects of relatively light weight from the floor above the waist or head; opening a purse or wallet and taking out paper money or credit card or mobile phone. By breaking more general questions down into their elements, I obtain much more precise information and feedback regarding the client's competency in each element of household chores.

The checklist asks 165 specific questions about how easy it is to do these tasks, using a response scale of 0-5: (0) I don't know, (1) no change, (2) a little more difficult to do, (3) can be done but only with difficulty or some pain, (4) very difficult to do, and (5) impossible to do or can do only with great pain. (Note that I recommend making three revisions to the original FCC instrument: 1) on line #53, "Depositing coins in a phone" should be changed to "depositing coins in a vending machine," 2) on line #62, "Opening your purse or wallet and taking out paper money" should be extended to include "or credit card or mobile phone," and 3) on line #92, "dialing a phone" should be changed to "tapping, swiping, and two-finger-zooming on a phone.")

Responses (0) and (1) indicate no impact. Responses (2), (3), (4), and (5) reveal that the injury has had the effect of slowing the person down, limiting the quality of their work, or preventing them from completing the task, depending upon pain, post-traumatic stress, restricted range of motion (pain sucks a person's energy), and depression, which in turn impacts a person's motivation. Based on my experience as a rehabilitation counselor and life care planner, I make the clinical judgment estimation that I

can make accommodations for 50% of all the (2) responses because (2) indicates minimal impact.

After administering the checklist, I add half of the total number of (2)s to the total of the (3)s, (4)s, and (5)s. For example, say a person answers 40 of the 165 questions with a (2), 50 with a (3), 10 with a (4), and 5 with a (5). When I add up the answers, I will add 20 (half of the “a little more difficult to do” answers) to 65, which is the total of all the responses of (3), (4), and (5). I then divide 85 by 165 to obtain a percentage of household chores that reflects what the disabled worker can and cannot do. In this case, .52 represents what the person cannot do, and .48 is what the person can still do.

### Quantifying Economic Implications

Once I have the functionality percentage, I can quantify the economic implications of the evaluatee’s disability using the 2011 version of Dollar Value of a Day (DVD) (Expectancy Data, 2011), a valuation of daily activities for 385 demographic groupings of persons in the United States. This instrument was derived from data regarding household chores gathered by the federal government in the American Time Usage Study (ATUS) and made more usable by the economists Kurt V. Krueger and John O. Ward. The DVD provides a series of norms for establishing what a person in each demographic grouping would theoretically have been able to do pre-injury. It provides a method accepted by professionals for estimating the number of productive hours a person who is not disabled spends around the home and the value of the activities performed. I use this instrument to determine the number of hours that the particular evaluatee normally spent around the home pre-injury.

To apply the FCC percentage to the Dollar Value of a Day data, I use the economic software application Damages Advocate (ValuSource, 2020). The program provides an Excel spreadsheet that permits ready calculation of the findings from the FCC that one determines and, then, incorporates into the DVD data, which allows me to apply the appropriate offset to the dollar damages. This calculation will provide what the person who is disabled can still do, thereby providing a total sum of the dollar damages suffered by the worker. (Unfortunately, updates to DVD that will work with Damages Advocate are no longer available from Expectancy Data, which means that you need to use DVD 2011 in order to apply the findings of the FCC percentage to the DVD data using Damages Advocate. Perhaps in future Expectancy Data will find a way to share information as they have done in the past, making it easier for professionals to establish more accurate determinations for workers that are disabled. A

positive agreement between these two companies would be a win-win if they also included my methodology. This would be more practical than using a more recent version of DVD and having to set up a new Excel sheet to complete the calculation. The need to develop a new Excel sheet for each new case places a financial burden on the buyer of services, which would not be necessary if Damages Advocate could be used with an updated version of DVD.)

I enter the evaluatee’s marital status, employment status, spouse’s employment status, and age of youngest child, then enter a beginning date for damages (date of trial or date of injury) and ending date (e.g., date of death [my preferred choice] or five years prior to death [date used by Gerald Martin (Stephenson et al., 2003)]). Once this data has been entered, the percentage of what the person can still do (as shown in the results from the Functional Capacity Checklist) is multiplied by the number of pre-injury hours indicated by the DVD data. (It is important to purchase the DVD to be able to understand the data and answer questions in a deposition or trial.) After this calculation is completed, I choose the county and state where the person lives, and the dollar value of damages estimate for household chores is shown.

### Reaffirming

If the person on whom I am doing the assessment is alive, I submit a letter to the treating physician indicating the client’s stated physical capacities to determine whether the physician agrees. When I am preparing for deposition and trial, I also conduct a functional capacities evaluation (FCE) and share the results with the treating physician. The FCE and the FCC provide the opportunity for triangulation of my vocational testing. I ask questions that the physician can answer in four different ways: yes, no, possibly, or probably. I also use this information when developing a life care plan. When using the Damages Advocate program for the pre-injury assessment, I make sure to focus only on the chores that the person performed pre-injury.

### Conclusion

If you are a vocational expert, forensic economist, or lifecare planner who is not sure about doing what I have described above, you can try out the Damages Advocate for a month for free and just play around with it. You will see how easy it is to use and understand. The FCC costs just \$15. So, break out of your box, and try it. If you find that it is useful, then you can consider adding the DVD (\$199), or the Damages Advocate software (\$495-\$1,095).

Then, you too will be able to determine household chores damage amounts with greater confidence and accuracy.

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# Vocational Expert Qualifications: Ethical, Practical, and Professional Considerations

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**Abstract.** *This article documents that while the vast majority of Vocational Experts (VEs) have many years of Vocational Rehabilitation Counseling (VRC) experience, possess national certifications relating to Vocational Rehabilitation (VR), and have completed graduate level degrees in Rehabilitation Counseling (or closely related fields), a small percentage of those who claim expertise are retained by attorneys, despite lacking all necessary qualifications. With review of historical foundations of Vocational Rehabilitation and Vocational Forensics, qualifications published by government agencies (and endorsed by professional associations), requirements of national credentials possessed by most VEs, and published surveys of VEs, this article will document that individuals performing vocational forensics who lack what the majority of VEs possess can be considered outliers. Individuals purporting expertise (in any field), who do not meet widely accepted minimum requirements in the subject field, may have their testimony as an expert rejected by the trier of fact. If accepted, the opinion of the atypically qualified VE may be given less weight than an expert with typical credentials. Professional and ethical considerations, regarding those with atypical qualifications, for practicing VEs, professional associations, attorneys, agencies, and other consumers are discussed.*

## Introduction

The terms “Vocational Expert” (VE) and “Vocational Rehabilitation Expert” are often utilized interchangeably by attorneys seeking forensic vocational services. Utilization of VEs has increased dramatically over the last half century. VEs are retained in a wide variety of case types and venues including:

- Personal injury
- Professional Liability
- Product Liability
- Workers’ Compensation
- Social Security Disability
- Long-term Disability
- Employment/Wrongful Termination
- Disability in relation to Pensions
- Divorce/Matrimonial

In each of the above venues, the VE must be qualified and prepared to address the impact of objective (or alleged/subjective) physical and mental work limitations, as well as other potential significant barriers to employment. While individuals generally do possess objective—or alleged—physical or mental work limitations in most cases where a VE is retained, this is less often true in certain venues, such as in marital dissolution and employment cases. However, VEs who practice extensively in those venues recognize that such work limitations, as well as a variety of other work barriers, are often identified in employment and divorce cases, as well. Methodology utilized by VEs in employment and divorce cases—in relation to transferability of skills, access to occupations, labor market analysis, and assessment of earning capacity—is the same as that utilized by VEs in injury cases. Issues which often arise in divorce and employment, such as diligence of job search effort, time required to find work, and geographic area of labor market, among others, also arise in injury cases.

There is also no case type/venue in which a retained VE can fail to utilize standard vocational rehabilitation/vocational evaluation methodologies, standard vocational tools and labor market resources. No venue will provide a VE with an opportunity to avoid questions from attor-

neys and judges regarding essential vocational rehabilitation counseling (VRC) fundamentals, which include questions pertaining to job analysis, educational and training requirements of occupations, skill level and aptitude requirements of occupations, impact of physical or mental work limitations (or other significant barriers) in relation to accessing occupations, adjustment issues, labor market survey, and probability of successful training and job placement outcomes, etc. Any ve is, at core, expected to be a vocational rehabilitation expert.

### Historical Foundations of VE Services

Multiple authors over several decades have reviewed the many historical events of importance relating to use of VEs (Matkin, 1980; Matkin, 1985; Harper, 1985; Blackwell et al., 2005; Weed & Field, 1994 and 2012; Barros-Bailey, 2014). Briefly summarizing, some key events of most import to the VE field include, but are not limited to the following:

- Workers' Compensation Legislation in the US during the early 1900s
- Smith-Fess Act of 1920 (counseling, training, prosthetic appliances and job placement to physically disabled from industrial injury)
- 1935 Social Security Act (Established State/Federal Vocational Rehabilitation Program) (P.L. 74-271)
- Hill-Burton Act of 1954 (services for severely disabled, graduate training and research, etc.) (P.L. 83-565)
- 1956 amendment to the Social Security Act providing cash benefits to workers with disabilities
- *Kerner v. Fleming (1960)* which led the Social Security Administration (SSA) to develop criteria for VEs in the provision of testimony on the existence of appropriate jobs in the labor market
- Initiation and substantial growth of the SSA VE Program
- SSA rulings and Code of Federal Regulations (CFR) specific to transferability of skills, Residual Functional Capacity (RFC), evaluation of disability, numbers employed in occupations in the national economy, and skill requirements
- Development of standard methodologies for assessment of access to occupations and transferability of skills (which trace back to the CFRs relating to SSA)
- Credentialing including Certified Rehabilitation Counselor (CRC) in 1973 and American Board of Vocational Experts (ABVE) in 1980
- Increased demand for and utilization of VEs by attorneys in venues other than Social Security, initially primarily in Workers Compensation (WC) and Personal Injury cases, and thereafter in relation to Employment, Marital Dissolution and other case types
- A period of increasing membership in Professional associations such as the National Association of Rehabilitation Professionals in the Private Sector (NARPPS) (now known as International Association of Rehabilitation Professionals (IARP) and the American Board of Vocational Experts (ABVE))
- A growing percentage of private sector Rehabilitation Counselors providing or indicating interest in potentially providing VE testimony
- Development of specialty groups within professional associations such as the IARP Forensic Section, IARP Social Security Vocational Expert Section and others, along with development of forensic-oriented conference programs and active forensic member forums

This brief review of key events and developments related to VRC and VEs, reveals that the sub-specialty of VE, Vocational Forensics—or “Forensic VR,” as it is often described—arose out of 1) VRC, in both the public and private sectors, and 2) SSA’s VE Program, which led to key standard methodologies used in all forensic settings by most VEs. However, some individuals who have never worked as VRCs, with unrelated degrees and alternative certifications (or no certifications), offer services as VEs and are sometimes retained as such. We will explore the question of whether individuals professing to be and retained as VEs, who lack key credentials possessed by most practicing VEs, are likely to have their testimony rejected at pre-trial—as well as whether their opinions may be afforded less credence by the trier of fact, if they are not rejected during pre-trial. The criteria VEs are expect-

ed to meet—in terms of education, specialized training, VR experience, and national certification—is explored.

### Typical Educational Qualifications of Vocational Experts

As demonstrated in the brief history outlined above, rehabilitation legislation played a major role in establishing graduate training programs for VRC. For decades, the US government has recognized that Vocational Rehabilitation Counseling requires specific skills and has supported graduate-level education in the field. The US government has, in fact, underwritten the cost of such education through the Rehabilitation Services Administration (RSA). RSA awards grants to colleges and universities providing scholarship assistance to students seeking Master's in Rehabilitation Counseling. The RSA website ([rsa.ed.gov](http://rsa.ed.gov)) indicates:

[The RSA] provides leadership and resources to assist state and other agencies in providing vocational rehabilitation and other services to individuals with disabilities to maximize their employment, independence, and integration into the community and the competitive labor market. RSA is a component of the Office of Special Education and Rehabilitative Services (OSERS) within the U.S. Department of Education. The mission of OSERS is to improve early childhood, educational, and employment outcomes and raise expectations for all people with disabilities, their families, their communities, and the nation. OSERS' vision is that all Americans with disabilities will live and thrive with their disabilities in their own communities.

Public and private employers of VRC generally require (or prefer) that a counselor has a Master's in RC, or closely related field, such as counseling or psychology.

Government publications, such as the US Bureau of Labor Statistics Occupational Outlook Handbook (OOH) and state Labor Market Information Systems (LMIS), inform the public, including those considering Rehabilitation Counseling, that a master's degree in the specific or related field is typically required by employers. Specifically, the current OOH refers to VE testimony as follows:

Some (rehabilitation counselors) may provide expert testimony or assessments during personal-injury or workers' compensation cases....Some rehabilitation counselors deal specifically with employment issues. These counselors, sometimes called *vocational rehabilitation counselors*, typically work with older students and adults.

There are abundant accredited master's programs in RC. Graduate RC programs were, until recently, accredited by the Council on Rehabilitation Education (CORE). In mid-2017 CORE merged with the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The most recent CACREP Annual Report, 2018, documents that master's programs in RC exist in most US States, and several states, in fact, have multiple RC programs. Thousands of students are enrolled in rehabilitation, clinical rehabilitation, or dual clinical rehabilitation/clinical mental health counseling master's programs. Over 1,300 students graduated from such programs in 2018.

There is no shortage of available training options for students wishing to prepare for a career as an RC (or for those students thinking of someday becoming a VE). Furthermore, experienced RCs and VEs, wishing to bring their educational level more in line with that possessed by most RCs and VEs, there are abundant master's level RC educational options. There are also abundant options for students to obtain related master's degrees in counseling or psychology. There are additional educational options for graduates of those similar programs to also take additional coursework specific to RC, in order to prepare to qualify for national certification (CRC). Articles, texts and handbooks routinely indicate that RCs and VEs are recommended or required to possess a master's degree in RC or closely related field (Blackwell 1992; Deutsch & Sawyer, 1995; Weed & Field, 1994; Blackwell et al., 2005).

Government agencies that contract with VEs require, or will soon require, such a master's degree. The SSA VE program, as noted above, is a historic foundation of VE services. At a recent conference (ABVE, 2019, Tucson, AZ), a former Associate Chief Administrative Law Judge (ALJ), Paul Lillios, presented findings that the SSA hearings process represents, in sheer numbers of cases, likely the largest disability adjudication process (if not largest "court" proceeding process) in the world. He indicated how very important VEs are to ALJs in coming to decisions. On the SSA hearings and appeals website ([ssa.gov/appeals](http://ssa.gov/appeals)), it is noted that:

The Social Security Administration's (SSA) administrative appeals operation is one of the largest administrative judicial systems in the world. SSA issues more than half a million hearing and appeal dispositions each year.

In an SSA memorandum, "Availability and Use of Vocational Experts," dated 05/30/12, it was found that VEs



are utilized by ALJs in SSA hearings 76% of the time. At the time of that memo, there were over 1000 Blanket Purchase Agreements (BPAs), or contracts for VEs, and it was noted that some BPAs had more than just one VE.

Many authors (Blackwell, 1992; Weed & Field, 1990 and 1994, etc.) have discussed the SSA VE program in context with VE work as a whole. Most practicing VEs were or are qualified to someday become Social Security VEs (SSVE). Even VEs who are not now, nor have ever been, SSVEs generally have professional knowledge of SSA Disability, and likely utilize standard methodology which is based upon CFRs relating to SSA Disability in other cases. Some VEs not contracted as SSVEs also provide VE services at request of claimant attorneys in SSA hearings. In personal injury and other types of cases it is not uncommon to be asked to consider documents relating to an individual's application for Social Security Disability.

In terms of sheer volume, SSA is therefore likely the single largest consumer or contracting entity of VE services in the US. No single attorney or law firm's retention of VEs compares to the hundreds of thousands of cases in which VEs are retained every year by SSA throughout the US. Since the SSVE program is of such predominant importance in any discussion of VE work, a review of the educational qualifications required to be a VE under contract with the US Government is relevant to any review of standard educational qualifications of VEs in general. What the US Government requires serves as a model for what is required or desired by other consumers of VE services. Historical significance in the development of the VE specialty, vast numbers of VEs with current or prior SSVE experience, and the genesis of standard methodology for transferability of skills, based upon such federal regulations (**20 CFR 404.1568**) should suggest to any would-be VE that what a typical SSVE possesses, in terms of education, would pave the way to be seen and accepted as a VE in any venue.

As a VE, I was under contract with Social Security for over three decades and testified in thousands of hearings. As with many other VEs, I possessed a Master's in RC, and a CRC, at point of entry, had considerable experience in private vocational rehabilitation in relation to WC and other clients, and had some limited experience doing VE work on WC cases where an injured worker was claiming permanent or total disability. When first contracted in the mid-1980s as an SSVE, educational requirements for SSVEs were vague. SSA solicitations for VEs in years past described VE requirements as follows:

**Vocational Expert** – An individual who is trained and skilled to render impartial opinions relevant to evidence at the hearing level of the Social Security disability claims process. Areas of expertise should include current knowledge of: working conditions and physical demands of various occupations; transferability of skills; knowledge of the existence and numbers of jobs *at all exertional levels* in the national economy; and involvement in or knowledge of placing adult, handicapped workers into jobs.

However, most all SSVEs selected and providing testimony in the local hearing office at that point (as well as today) had a master's degree at minimum, typically in RC or related counseling or psychology fields. At local and national professional association conferences, most SSVEs, and those performing other VE work, had comparable credentials. As years became decades, contracted rates for SSVE services remained static, unlike what typically occurs with other professional work where rates gradually increase. In response to this trend, I co-created a group of SSVEs within IARP, which later became the IARP SSVE section.

As part of the group's aim of encouraging SSA to revise rates to market value, it was determined that the group needed to better measure VE demographics. Surveys were sent to all contracted SSVEs at the time (over 800). With 478 responding, this was the largest survey of VE demographics at that point. Results were published (Stipe et al., 2008), indicating that the vast majority of VEs had a master's (75.5%) or doctorate (17.8%) degrees. Regarding major in highest degree, the majority (52%) had vocational rehabilitation or vocational evaluation degrees, while most remaining (36%) had related degrees in other fields, such as counseling or psychology. Clearly, the vast majority of VEs contracted by the US government (the largest consumer of VE services) were documented to not only hold a master's degree, at minimum, but were also found to possess a degree specific to VRC or related social science programs. Another important finding was that the vast majority (82%) of respondents also did VE work in other venues aside from SSA; most SSVEs were determined to also be VEs in general.

Another, similar survey was conducted by the IARP SSVE group in 2009 in relation to compensation and availability of VEs (IARP, 2009). Again, an excellent response rate was achieved with a sample of 508 VEs. 75.6% of respondents had a master's and 19% had doctorates. Highest degree majors were 61.4% relating to VR, and 29.2% in counseling and psychology. Clearly, VEs lacking a master's—or lacking a Master's in RC or close-

ly-related field—are in the minority. Texts, handbooks and primers (Weed & Field, 1994, 2012; Blackwell et al., 2005; and others), routinely referred to by individuals interested in becoming VEs, recommend a baccalaureate in behavioral sciences and master’s or higher in a specific vocational rehabilitation field.

In 2019, after years of government relations efforts directed toward SSA, the SSVE group within IARP completed a “whitepaper” to submit to SSA (IARP, 2019). That document recommended (in terms of education) that VEs should be required to possess: “A master’s degree in Rehabilitation Counseling or other related master’s degrees such as counseling, psychology, education, human services or another behavioral science.” National certification and VR experience were also recommended. Prior to submission to SSA, it is important to note that the whitepaper was submitted to the boards of both IARP and ABVE, those two professional associations most specifically focused upon VE services and having significant numbers of practicing VEs as members and board members. Both boards indicated support for the whitepaper. As such, it would be illogical for IARP or ABVE professional members (or board members) to argue that an expert practicing in one venue should have more, less or different education than that officially recommended by a government agency.

In 2019, following submission of the whitepaper, SSA released a new solicitation for VEs which embraced many recommendations made in the whitepaper. Required qualifications included possession of a CRC or ABVE certification. The new requirements are as follows:

VEs must be individuals with the ability to provide impartial expert opinions relevant to the evidence contained in the claim file, other evidence provided by OHO, and testimony provided at an ALJ hearing. Areas of expertise must include current knowledge of working conditions and physical and mental demands of various occupations; transferability of skills; knowledge of the existence and numbers of jobs *at all exertional levels* in the national economy; and involvement in or knowledge of placing individuals with disabilities into jobs. To ensure all individuals serving as a VE have the knowledge, skills and ability to provide expert opinions, all VEs must meet and maintain all of the following requirements:

1. At least five years of direct experience providing vocational rehabilitation services to individuals with disabilities,

2. Current national certification as either a Certified Rehabilitation Counselor (CRC) by the Commission on Rehabilitation Counselor Certification (CRCC), or National certification as a fellow or diplomate by the American Board of Vocational Experts (ABVE), and
3. Meet the continuing educational requirements of their national certifications from either the CRCC or ABVE.

The BPA Holder shall also submit documentation of CRCC or ABVE certification for new VEs working under their BPA at least 30 days in advance of the first hearing in which the new VE will participate or at least 30 days in advance of the interrogatory due date. On an ongoing basis, the BPA holder shall submit documentation of every VE’s CRCC or ABVE certification renewal so that SSA always has documentation of the current CRCC or ABVE certification for each VE.

The solicitation also included language to transition the minority of VEs not meeting the CRC or ABVE/D or F requirement as follows:

SSA acknowledges that some individuals who are currently performing successfully as a VE for SSA do not meet the CRCC or ABVE certification and continuing education requirements in Section 4.1, above. Individuals who have at least five years of direct experience providing vocational rehabilitation services to individuals with disabilities and at least five years of recent experience serving as a VE for SSA have until March 31, 2023 to meet the certification and continuing education requirements in Section 4.1, above. SSA will not permit any VE who has not met the CRCC or ABVE certification requirement by March 31, 2023 to perform under an SSA VE BPA after that date.

Five years of recent experience serving as a VE discussed above means:

- A total of 60 months experience within the last 10 years providing service as a VE for SSA, and
- A total of 30 of those months of experience must have occurred between 2015-2019.

Any VE working under these transitional requirements shall submit a signed self-certification swearing or attesting that he or she, or any VE working under his or her BPA who does not meet the CRCC or ABVE certifica-

tion requirements, has the requisite months of experience serving as a VE for SSA required above.

It is important to note that CRC and ABVE both currently require master's level education in vocational rehabilitation—or related fields—as well as adherence to ethical codes and continuing education. *Therefore, possession of such a master's degree in Rehabilitation Counseling or a closely related field is implicit to SSA solicitation for VEs.* A small percentage of VEs granted CRC decades ago, prior to qualifications changes by CRCC, may have nursing or other degrees. Current VEs not meeting these new certification qualifications (which we know from the surveys mentioned above make up only a distinct minority of SSVEs) can apply to be grandfathered in as VEs, but only for a three-year period, which ends March 2023. At that point, those VEs grandfathered in will need to meet the requirement of having CRC or ABVE (diplomat or fellow). Clearly, what was once relatively vague (or simply implied based upon what the majority possessed), in terms of educational requirements, is now clear.

Regarding professional associations and education, IARP does not specifically require a level of education to be a member of the association, but ABVE does (for professional members). An individual with interest, who lacks the credentials to apply for Fellow or Diplomate Certification with ABVE, can be an "Associate Member" but cannot simply put "ABVE" after their name to imply a certification. In terms of education, the ABVE bylaws downloaded from the website indicate a requirement of "a master's or doctorate degree in vocational rehabilitation counseling or in a comparable human services or related field from an accredited institution" in order to be considered a diplomat or a fellow. The ABVE website indicates that, to apply as a fellow or diplomate, an individual must: hold a master's or doctorate degree from an accredited institution in a human service field, specializing in vocational rehabilitation, psychology, vocational counseling, etc. Also, the ABVE application materials contain a somewhat different list, which indicates the necessity of a master's or doctorate in school psychology, psychology, rehabilitation, social work, therapy/family therapy/counseling, health-related field, education, vocational counseling, or vocational rehabilitation. The ABVE Journal, *The Journal of Forensic Vocational Analysis*, states that: "Persons who have attained Diplomate or Fellow status have advanced academic preparation in the areas of rehabilitation, psychology or counseling and hold advanced degrees from an accredited institution of higher education."

The "health-related field," listed only on the ABVE application, is inconsistent with the ABVE bylaws, other information about ABVE certification on the ABVE website, as well as the ABVE journal. This leaves qualifications vague, over-general, and open to much interpretation. It could leave the door open for a medical doctor, a dentist, OT, or masters level RN (so long as other specific vocational experience requirements are met), however unlikely. Such an individual would likely be an outlier within ABVE ranks, as most members possess a more typical RC or similar counseling or psychology master's degree.

Judges, jurors, and attorneys are not VEs. Yet another way to look at how VEs are perceived, generally, is to look at the way they are described in other than strictly professional publications. We have already noted the listing above in the OOH, one source often used by the public, but there are many other sources used by the public. For example, VE is described on Wikipedia the following way:

A vocational expert is an authority in the areas of vocational rehabilitation, vocational and earning capacity, lost earnings, cost of replacement labor and lost ability/time in performing household services. They perform evaluations for purposes of civil litigation, as an aspect of economic damages. Vocational experts identify what the person could have earned prior to the incident, compared to what they are likely to earn following the incident. Economic experts calculate the value of those earnings over time, so the difference, if any, between the two income streams is clearly understood. Those who act as vocational/economic experts blend the two disciplines and offer testimony in both arenas. A vocational "expert" is designated by an attorney as an expert who testifies in court, whereas a vocational "consultant" does not testify. Qualifications to testify in court as an expert in the field of vocational rehabilitation are fairly strict and related to state certification and licensure. Typically, a graduate degree in counseling or psychology plus certification/licensure will suffice. Ultimately, the rules of evidence in the jurisdiction presiding over the civil case prevail.

The above description provides the inquiring public with basic information that a VE is also an expert in VR; that the VE has a graduate degree in counseling or psychology; and certification is also mentioned. Even this popular tool can be used to put a question in the trier of fact's mind(s) as to any professed expert who lacks what is obviously *typical* of other experts in his/her field of expertise.

Therefore, regarding educational degree (as well as major field of study), there is overwhelming evidence that an expert possessing a master's degree or more in VR—or related field—is rightfully considered *more qualified* than an individual professing expertise without these credentials. “Experts” retained who do not possess the necessary credentials pose a financial and legal liability to attorney and client. If most VEs have a graduate degree, and that degree is in rehabilitation counseling, vocational rehabilitation, or a related field, and the attorney fails to perform careful review of educational qualifications, electing to retain an outlier as an expert witness, this could diminish the likelihood of a positive outcome in a case. There is no appropriate justification for an attorney retaining any forensic expert in any field possessing atypical or “non-traditional” educational background.

To legitimize oneself as a VE, an individual who already possesses substantial VR experience, but does not have a graduate degree in the field, should immediately seek to complete an RC master's program, or a similar degree (counseling or psychology), plus the additional courses specific to RC for eligibility to apply to become a CRC.

### Certifications

Many of the forensic rehabilitation/VE services' texts mentioned, here, describe the need for national credentials, particularly those requiring a master's degree in VR—or closely related—field. CRC is often characterized as the “gold standard” for VRC. Another certification, ABVE (Diplomate or Fellow), is uniquely specific to vocational forensics, requiring not only graduate level vocational or related education, but also documented experience in provision of testimony, as well as peer-reviewed work product. Both CRC and ABVE/D or F also requires passing an examination and continuing education credits to renew. While other certifications exist, such as those available via American Rehabilitation Economics Association (AREA) or Certified Vocational Evaluators (CVE), numbers of individuals with these certifications are quite small. CRC and ABVE (Diplomate or Fellow) are presently, and will likely remain, the primary certifications among VEs.

As reviewed above, the fact that the largest single consumer of VE services, the US government (SSA), has now mandated (upon recommendations developed by leaders within IARP and then approved by the boards of both ABVE and IARP) a requirement of either an ABVE/D or F (Diplomate or Fellow) or CRC, will likely have profound impact upon how a VE, in virtually any venue, is perceived generally. Increasingly an individual without

such national certification will likely not be perceived as a VE.

The surveys described above (Stipe et al., 2008; IARP, 2009) clearly document that most VEs have national certification. In the 2008 survey, more than two thirds (68.7%) had CRC. 12.4% were ABVE certified. A large percentage had more than one certification. In the 2009 survey, 81.5% had CRC. 93% had two or more other certifications or licenses. As noted earlier, the surveys also documented that VEs who do SSVE work also, concurrently, did VE work in other venues.

As noted above, the US government has historically supported and underwritten the cost of VRC graduate programs. These programs prepare graduates specifically for CRC certification and practice (as well as eventual ABVE certification if the RC with VR experience elects to transition to vocational forensics/ VE). The US Government in publications such as OOH, noted above, also specifically refers to certification for RCs (and indicates that some RCs provide VE services).

Our key credentialing bodies promote certification. Our key professional associations, those with most focus upon VF, IARP, and ABVE, promote and/or provide members with training opportunities which assist in maintaining certification, as well as training specific to enhancement of forensic VE skills. Our texts, handbooks, and university programs promote or describe certification. Our government agencies, such as the US Bureau of Labor Statistics by way of OOH, indicate that certification is available and may be required by employers. Our government supports programs (and students within programs) that prepare students for CRC certification. Our government now requires national certification for experts it retains, aside from a small minority being grandfathered in, who must obtain certification relatively soon. Attorneys are taught and inclined to seek out experts (in any field) who possess “board certification,” as this involves a high level of specific training, experience, examination, and often (as with ABVE) peer-reviewed scholarship. Based upon surveys highlighted, here, most practicing VEs have one or more national “board certifications.”

There are VEs who possess the requisite education and experience to obtain certification but do not feel the need to obtain certification or have allowed it to lapse. Regardless of rationale on the part of the VE, lack of appropriate certification is unacceptable and should be a warning to an attorney considering or cross examining a VE. Often such a VE simply does not engage in or wish to be required to complete the continuing education required

for CRC or ABVE/D/F, which is negligent, given the ongoing development of resources and methodology in the field. The expert with substantial VR experience and RC or related graduate degree, but lacking certification, should immediately prepare to apply for CRC and ABVE certification, as it is required in both RC and VE work.

### Professional Experience

The concept that an individual can somehow be a VE, without having practiced as a VRC, strikes many VEs as preposterous and illogical. Experience and skills possessed by RCs include but are not limited to:

- Interviewing individuals as to vocationally relevant information
- Interpreting government and other labor market information
- Administering and interpreting vocational testing
- Analyzing occupations
- Performing job analyses with workers and employers
- Analyzing transferability of skills utilizing standard methodology
- Assessing impact of specific physical and mental work limitations on access to occupations
- Assessing adjustment to disability and impact on employability
- Performing labor market surveys
- Accurately projecting current and projected earning capacity
- Researching formal, vocational, and on-the-job training and apprenticeship options
- Writing individualized re-training and or placement plans
- Monitoring such plans
- Providing job placement services
- Work-site modification and adaptive equipment options

- Assisting employers with worker placement

The highly experienced RC, therefore, does have the experiential knowledge to answer many of the questions which are likely to be directed at a VE, regarding employability, demands of occupations, re-training and placement plans, labor market issues, earning capacity, and related issues.

One of the most, if not the most, widely accepted methodologies for approaching a case as a forensic VE, *RAPEL* (Weed, 2000), focuses on rehabilitation plans and placement, both domains of the RC. *RAPEL* includes: “Rehabilitation Plan” (R), “Access to the Labor Market” (A), “Placeability” (P), “Earning Capacity” (E) and Labor Market Participation (L). VEs and most RCs are experts concerning these components. As described above, many types of legal cases in which a VE may be retained involve disability issues. Those that do not, however, do routinely involve other potential barriers to employment such as age, extended absence from the labor market, past terminations, dated employment, limited training, etc. RCs have expertise and experience and are all about how best to overcome such barriers, where possible.

An RN, physical therapist, occupational therapist, medical doctor, psychologist, marriage counselor, chiropractor, claim examiner, HR manager, or economist has valuable skills and may have certain limited experience in a few of these areas. But few could adequately discuss job placement of individuals with work limitations and other barriers to employment. Few could discuss experience developing training plans or utilizing complex government occupational and labor market data specific to the unique individual, following standard transferability-of-skills methodology. There certainly are some exceptions. Some nurses and psychologists, for example, have developed VR-related skills via on-the-job training and additional university training. Some supplement their education by taking key coursework specific to VR. But it is rare to see an RN, MD or DC, who has, for example, training and experience in vocational testing, writing training plans and performing job placement. It is also rare for a psychologist to perform significant VR work, aside from the testing and adjustment components. An economist can describe general wage information, as it correlates to level of education, but this is of little value in assessment of the employability and earning capacity of an individual (N=1). A PT or OT will generally be lacking in job placement experience, vocational testing, training plan development, and Transferable Skills Analysis (TSA). These

other professionals may be exceptionally well qualified in their primary profession/field of training, be highly intelligent, be kind and truly concerned about the well-being of others and have interesting and valuable insights and skills. They may be drawn to VR or VE work based upon their own dissatisfaction, struggles in or “burn-out” with their primary profession, but this does not enable such a professional to be a VE or RC.

The new qualifications for Social Security VEs require five years of VR experience in addition to standard qualifications. This is the requirement of an agency of the US government, the largest consumer of VE services, in line with both ABVE and IARP in endorsement of the white-paper, that to be a VE an individual must have significant (five-or-more years) VR experience. Additionally, ABVE diplomate and fellow statuses require significant experience in various standard VR and VE domains. While a graduate of an RC master’s program is qualified to sit for the CRC examination, others with related master’s degrees must not only take additional graduate level VR coursework but must also document several years of VR experience.

The two surveys from 2008 and 2009 found that most VEs possessed CRC, and it has been implicit within CRC requirements that those with certification also have work experience in VR and/or RC. In its journal, ABVE also indicates that it represents “both the private and public sectors of the rehabilitation enterprise.” Both private rehabilitation and the public state/federal VR programs, or “enterprises,” focus specifically on VR. Hence, by “representing” such rehabilitation—and requiring advanced degrees in rehabilitation, psychology or counseling, as well as specifically identifying VR experience as a requirement for application, it is unclear how ABVE certification would be achieved without VR experience or VE qualifications.

Individuals with atypical qualifications, and no or little VR experience, claim that VR experience is irrelevant to divorce or employment cases. As noted above, any VE who practices in those venues knows that such cases often involve physical or mental limitations on the part of the plaintiff, as well as multiple other potential barriers to employment. In addition, these cases routinely require assessment of transferability of skills, access to occupations, potential need for retraining, analysis of earning capacity, and assessment of time needed for placement in new employment. VEs are retained in employment cases involving ADA to evaluate emotional distress relating to termination, methods used and quality of job search, as well as time needed to find work (Heitzman et al., 2014).

Heitzman et al., indicated specifically that VRCs play a crucial role in assisting the court in employment cases. Kohlenberg (2014) indicates that methodology used for vocational evaluations in family law cases are like those used in general rehabilitation casework and other litigated venues. Therefore, whether an employment or marital dissolution case, the methodology used is essentially the same as in any other type of case in which a VE is retained.

Every venue has distinct attributes which may be more or less of a focus than in another venue. There is no basis to suggest that an individual lacking in VR experience, or one without other typical VE qualifications, would be equivalent to or more capable in a divorce or employment case than a VE possessing all typical qualifications and substantial VR experience. Again, given that the vast majority of VEs practicing *in any case venue* do possess that which an individual with atypical qualifications lacks, the atypical expert—and the attorney retaining such an individual—will always be at a disadvantage.

**Issues Encountered by the Vocational Expert.** Any highly qualified expert will encounter situations in which he or she cannot take a case for a variety of reasons; they may be too busy with other deadlines; scheduling conflicts might make accepting the case impossible; the VE might even already be retained on the specific case by opposing counsel. In these situations, an attorney or paralegal may ask the VE for names of other VEs. In that instance, providing the name of an individual without substantial VR experience, RC or related master’s degree, and without national certification, reflects poorly on the recommender. The expert has a responsibility to recommend professionals who possess attributes that meet industry standards. The VE who possesses attributes consistent with the majority of VEs will undoubtedly be asked by the retaining attorney what they have that the other expert lacks. The VE may need to critique and rebut another expert’s report. An expert with non-traditional qualifications invites scrutiny.

Mentorship is another potential problem area in relation to individuals without typical qualifications, as mentoring individuals who lack minimum standard qualifications are a liability to mentees. The qualified VE should instead first encourage the RC (and future “would be” VE) with great VR experience, but lacking a graduate degree, to first obtain an RC or related degree. The VE asked to mentor an RC with a MBA, Master’s in Divinity, Master’s in Nursing, or another unrelated field, should be encouraged to do the same. If national certification is the only missing qualification, remedy should be the

recommendation prior to mentoring. Mentors who do not advise mentees to follow the path of standard credentialization set mentees up for failure. As RCs, we are careful to educate clients to look to those qualifications most incumbents (of any occupation) possess. We utilize these benchmarks to measure access to occupations and probability of successful placement. If the individual lacks education, work experience and/or a common certification or license, this is a problem that needs to be addressed. The same basic situation exists if asked to mentor an individual with atypical qualifications.

#### **Issues Encountered by Professional Organizations.**

Because most associations seek and promote new membership, many professional associations are motivated to bring members of tangentially related professions into the fold. This tendency necessitates precaution. Associations must be cautious of holding factions of members to different standards than others, especially if that association endorses a certain level of education, professional experience and certification—as did both boards of ABVE in the SSVE whitepaper.

In terms of certification, ABVE is unique in that it is both a professional association and a credentialing body. If ABVE, on one hand, elected to approve/endorse a set of professional qualifications (as it and the IARP board did with the whitepaper), ABVE should not approve an applicant with lesser qualifications, for example “other health profession,” or an individual with no VR experience. To do so would be absurd and fly in the face of what the majority of VEs possess, what the US government requires and what its own board, as well as the IARP, endorsed. Should either association wish to reverse, revise or abandon their prior endorsement of the qualifications that most VEs already possess, it could negatively impact those associations, as well as attendance of professional conferences.

VE work is a niche of the VR profession, and there will always be a place in associations for conference presentations aimed at providing training to assist in the transition from VR to VE. Associations must, however, guard against presentations aimed at individuals lacking in very basic, fundamental VR and VE domains. For instance, most vocational testing requires a certain level of graduate testing coursework. There would be ethical problems with an association providing testing fundamentals to an accountant or RN who has never had requisite graduate coursework and has no idea how to administer, score or interpret test results. Navigation of DOT, basic information about the components of a rehabilitation or retraining plan and how to conduct a basic vocational interview

are examples of information that should only be acquired through official channels. Any VE with VR experience comes in the door to VE work with this knowledge and experience.

**Issues Encountered by the Attorney.** Often, attorneys seem surprised to learn that, while the vast majority of VEs have very similar educational backgrounds, VR experience, and national credentials, there are individuals who claim to be VEs who are not adequately credentialed. Attorneys are accustomed to retaining experts in specialty areas such as orthopedic surgery, neuropsychology, professional engineering, accountancy, etc., who have the same license or certification and very similar work experience and degrees. Attorneys often tend to assume the same is true for VEs, but this is not necessarily the case. Individuals performing VE work who lack standard qualifications may suggest that anyone who is accepted as an expert by trier of fact is, in fact, an expert. However, attorneys know that the acceptance of an expert’s testimony does not necessarily place that expert’s opinion on equal footing with a qualified expert. If the expert retained by the opposing counsel is a qualified VR, it is likely that their testimony will be stronger. It is incumbent upon the attorney to document that the expert retained meets requisite qualifications and compares favorably to other experts in the same specialty. Therefore, attorneys must be familiar with typical VE certifications. ABVE D and F, and CRC are relatively difficult to obtain, in terms of education, documented experience, professional recommendations, and examination. ABVE D and F also require a peer-reviewed work product, while CRC does not. While similar certifications exist, the attorney must take it upon themselves to identify when a potential VE does not meet industry standards. This article, among others addressing VE qualifications, can be utilized as a guide to vetting potential VE witnesses. A few sample questions follow:

- a. *Do you hold a master’s degree in vocational rehabilitation or a similar field?*
- b. *If no master’s or an unrelated degree: Do the majority of VRC/Es hold a master’s degree in RC or related field?*
- c. *Do most VEs have one or more national certifications?*
- d. *How many certifications do you have, and what are they?*

- e. *If no national certification: Why don't you have one?*
- f. *What constitutes a transferable skill?*
- g. *What types of vocational testing do you do?*
- h. *Do most VE have many years of VR experience, counseling, training in terms of placement of people with disabilities—and other barriers to employment—in jobs? Do you have that?*
- i. *Does the US Government retain VEs? Are they required to possess CRC certification or ABVE certification? Are they required to have 5-or-more years VR experience?*

**Issues Encountered by the Government.** Issues faced by government agencies are like those faced by attorneys when it comes to retaining a VE. As documented above, the agency has a clear model for what to seek in a VE by way of what the largest government agency, the largest consumer of VE services in the world, the US government (SSA) will require: a national certification (CRC or ABVE Diplomate or Fellow), at least five years of VR experience, and RC, VR or closely related graduate level degree.

**Issues Encountered by the Attorney's Client.** The injured worker convinced they can no longer work, the individual who can no longer engage in their life-long vocation after an MVA, the individual claiming wrongful termination, the long-time homemaker going through a divorce—any individual being evaluated—tends to trust their attorney to retain a qualified VE. A professional VE should present a CV that documents their qualifications. A qualified VE will welcome questions about how their qualifications compare to other experts, and they will be willing to fully explain standard methodologies and assessment procedures. If the client is not content that the retained expert compares favorably to the majority of qualified VEs, this concern should be discussed with the attorney. The client may not have an obligation to be evaluated by an expert who lacks customary qualifications in the field of expertise. The same is true for the defense attorney's client. The employer, corporation, or insurance claim examiner approving their attorney's request to retain a certain expert must be assured that the expert meets industry qualifications and compares favorably to other experts in the specialty area.

## Conclusion

There is nothing to suggest that an individual lacking in education, specific VR experience, and national certifications possessed by the vast majority of VEs should be retained by attorneys—or other consumers—for VE services. There is also no evidence that an unqualified individual should be accepted as a VE by trier of fact. Should an individual being evaluated note that the evaluator lacks what most experts in the field possess, this should be discussed with the attorney. The individual claiming VE expertise, yet lacking any of the necessary qualifications, is not a VE and must either seek to remedy deficiencies in qualification or discontinue work in a VE capacity. The VE community and profession, as well as associations and credentialing bodies, should seek to better understand the key demographics of incumbent VEs via routine and frequent surveying. A better understanding of what most VEs possess will not only provide protection of the profession from poorly qualified interlopers, but it will also better assist students and VR professionals interested in transitioning to VE work.

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# Choosing A Damages Expert: Current Literature and Considerations Pertaining to Life Care Planning and Vocational Rehabilitation

**Dan Thompson**

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**Abstract.** *This paper will address the importance of choosing the right damages expert to address the Life Care Planning (LCP) and Vocational Rehabilitation (VR) needs of a claimant, and it will briefly address relevant history of LCP and VR. Further, it will explicate the importance credentialization plays in the court's determination of whether testimony by an expert witness is admissible, depending on the jurisdictional variation of Daubert and Frye standards, as well as the process through which the veracity of expert opinions will be tested by comparison to current peer-reviewed information regarding reasonable projection of needs. Case studies will be used to illustrate how to understand and use appropriate tactics in defense, which consider, specifically, the area of life care planning.*

**Keywords:** *quadriplegia, tetraplegia, spinal cord injury, Daubert, Frye, National Statistics, Vocational Rehabilitation, Life Care Planning.*

## Introduction

The testimony of a damages expert not only allows a plaintiff's counsel to assess fair compensation for injuries, but it is also a critical factor in the success of the plaintiff's case. While the assessment of liability is critical to the establishment of a viable claim, there are various determinations to be made—in terms of damages—of equal importance. For example, if a plaintiff claims the need for goods and services due to injury, a life care plan (LCP) must be prepared by a certified life care planner (CLCP). Often, a plaintiff will petition for compensation of loss of earnings, which necessitates the expertise of a vocational rehabilitation (VR) expert. Finally, determination of a plaintiff's financial losses, due to injury, requires expertise in forensic economics. Historically, these damages are often assessed by a team of expert counsel/witness; the CLCP and VR supply the economist with data to accurately assess damages. Considering this, and insurance companies' increasingly frequent requests for the submission of a budget prior to the retention of experts, more VRs are obtaining LCP certification and focused education in forensic economics. Regardless of whether one or three experts are employed, these three

areas of expertise are integral to building the damages component of an injury case.

## Vetting Potential Damages Experts Prior to Deposition

Ideally, a damages expert will possess the acumen to assist in the preparation of deposition questions, anticipate cross-examination, and ensure that a plaintiff's stated compensatory damages are reasonable and necessary. Damages experts, as with any potential expert witness, will be assessed in pre-trial by a modification of either the *Daubert* and/or *Frye* standard, depending on the jurisdiction.<sup>1</sup> A *Daubert* challenge, calling into question the ability of an expert witness and the admissibility of their testimony may be filed by the opposing counsel, resulting in a hearing conducted by the judge. The expert is required to demonstrate that their methodology and reasoning are scientifically valid and can be applied to the facts of the case, according to several criteria. To meet the *Frye* challenge, evidence presented to the court must be interpreted as “*generally accepted*” by a meaningful segment of the expert's peers. This applies to procedures, principles or techniques that may be presented in the proceedings of a court case. A quali-

fied and capable damages expert will be able to assist in the preparation of deposition questions, and anticipate cross-examination, to ensure that a plaintiff's request for compensation is not only reasonable and necessary but that the expert's methodology is sound. Questions to ask when vetting an expert witness include:

- Were three quotes obtained to ensure that their pricing is reasonable?
- Did they consult the plaintiff's treating physicians to ensure there was a medical basis to their recommendation?

In addition, in the case of a CLCP, the expert witness should demonstrate ease of communication with the plaintiff's treating physicians and should have at least three quotes from appropriate medical professionals to clearly establish reasonable cost of treatment. At a recent Defense Research Institute (DRI) Product Liability Conference, speakers emphasized that experts must be experienced and articulate enough to provide more than yes-or-no answers.<sup>2</sup> In short, a damages expert should not only be familiar with the assessment of damages within their specialization, but they must also be prepared to present this assessment as a component of a larger litigation strategy.

### Life Care Planning: From Fledgling Industry to Scientifically Based Trade

The origins of the field of vocational rehabilitation can be traced to 1637, when the Hotel-Dieu in Québec became the first hospital to offer rehabilitative services through the establishment of an education program with the goal of preparing the hearing impaired to enter the workforce. The treatment of those with hearing impairment as full, capable members of society was revolutionary for the time and, eventually, led to the development of American Sign Language (ASL) and the field of VR, as we know it today. LCP, on the other hand, is relatively new.

### Case Studies

*Lawing v. Univar, USA, Inc.*, 2015, arose out of an explosion and fire at Engelhard in Seneca, South Carolina, which occurred when slag from a welding operation met pallets of sodium bromate. The three plaintiffs sustained severe burns and were treated at the Augusta Burn Center for several weeks after the accident. Univar, a leading chemical distributor, sold the sodium bromate to Engel-

hard. The plaintiffs claimed that the bags of sodium bromate were not properly labeled, under DOT and OSHA or packaged, as woven plastic bags were not sufficiently ignition resistant. The trial was consolidated and bifurcated—all three plaintiffs' cases on liability began on October 20, 2008, in Oconee County, South Carolina. On November 17, 2008, the jury returned a verdict in favor of Univar on fifteen of eighteen causes of action and found in favor of the plaintiffs only on the claim for express warranty as to labeling.

The damages phase began on December 1, 2008. The jury returned a verdict for \$6.1 million on December 12, 2018, to all three plaintiffs, including two loss of consortium claims. This was a victory for the defense, because the medical bills and economic loss claims exceeded \$7 million, claims for projected future medical expenses were \$4 million, and plaintiffs' counsel asked the jury for \$50 million. Also, Univar's co-defendants settled before trial for \$4.5 million, which should result in a set-off for most of the jury verdict. The key to this defense win? An experienced damages expert.

In the 2020 case, *Gusman v. Encana Corp. et al.*, most of the defendants were dismissed from the case on summary judgement; however, despite a substantial offer before trial, the plaintiffs insisted on a multi-million-dollar settlement, and that was partly fueled by their LCP, which exceeded \$13 million. Mr. Gusman sustained complete quadriplegia as a result of his injuries, and the plaintiffs argued that not only would he die if he did not receive the \$13 million outlined within their LCP, but that he would never work again. This case was primarily predicated on liability; however, any jurors who were determined to award a judgement solely based on the severity of injuries and not on the liability facts were quickly swayed by compelling testimony. For example, Mr. Gusman's past medical costs fell far short of the needed amount according to the plaintiffs' experts. In addition, much of the LCP's requirements were speculative at best and, although they based their life expectancy projections on the University of Alabama's National Spinal Cord Injury Statistical Centre (NSCISC), anticipated lifetime costs, as explicated on the NSCISC Fact Sheet, were not considered.

### Compensation Evaluation of *Gusman v. Encana Corp. et al.*

The average yearly expenses (health care costs and living expenses) and the estimated lifetime costs that are directly attributable to spinal cord injury vary greatly based on education, neurological impairment, and pre-injury employment history. These estimates do

not include any indirect costs such as losses in wages, fringe benefits, and productivity (indirect costs averaged \$72,955 per year in 2016 dollars). See Figure 1 pp. 9.

**Figure 1.**  
*Costs of Care Following a Spinal Cord Injury*

Severity of Injury	Average Yearly Expenses (2016 dollars)		Estimated Lifetime Costs by Age at Injury (discounted at 2%)	
	First Year	Each Subsequent Year	25 Years Old	50 Years Old
<b>High Tetraplegia (C1-C4) AIS ABC</b>	\$1,079,412	\$187,443	\$4,789,384	\$2,632,164
<b>Low Tetraplegia (C5-C8) AIS ABC</b>	\$779,969	\$114,988	\$3,499,423	\$2,152,458
<b>Paraplegia AIS ABC</b>	\$526,066	\$69,688	\$2,341,988	\$1,536,976
<b>Motor Function at Any Level AIS</b>	\$352,279	\$42,789	\$1,600,058	\$1,129,365

Note: “Costs of care following spinal cord injury,” by DeVivo, et al., 2011, *Topics in Spinal Cord Injury Rehabilitation*, 16(4), 1-9. Copyright 2011 by the American Spinal Injury Association.

Also See: “Copyright ability of tables, charts, and graphs” by Gulshko, B. 2011, *Deep Blue*, University of Michigan Publishing. <https://deepblue.lib.umich.edu/handle/2027.42/83329>. In the Public Domain.

the 1980s and remain significantly below life expectancies of persons without spinal cord injury. Mortality rates are significantly higher during the first year after injury than during subsequent years, particularly for persons with the most severe neurological impairments. See Figure 2 pp. 10.

**Life Expectancy.** The average remaining years of life for persons with spinal cord injury have not improved since

**Figure 2.**  
*Life Expectancy Following a Spinal Cord Injury*

Age at Injury	For Persons Who Survive the First 24 Hours						For Persons Surviving at Least 1 Year Post-Injury				
	N	AIS D— Motor Function at Any Level	Par a	Low Tetr a (C5-C8)	High Tetr a (C1-C4)	Ventilato r Depend e nt Any Level	AIS D— Motor Function at Any Level	Par a	Low Tetra (C5-C8)	High Tetr a (C1-C4)	Ventilato r Depend e nt Any Level
20	59.6	53.0	45.9	40.3	34.0	10.6	53.4	46.4	41.3	35.3	18.1
40	40.7	35.3	29.8	25.0	20.9	8.5	35.6	30.3	25.8	22.2	13.0
60	23.2	19.6	16.0	13.3	11.1	3.7	19.8	16.5	14.1	12.5	7.9

Note. “An analytic method for longitudinal mortality studies” by Strauss, D., et al., 2000, *Journal of Insurance Medicine*. 32, 217-225. Copyright 2000 Journal of Insurance Medicine.

Also See: “Copyright ability of tables, charts, and graphs” by Gulshko, B. 2011, *Deep Blue*, University of Michigan Publishing. <https://deepblue.lib.umich.edu/handle/2027.42/83329>. In the Public Domain.

What is intriguing is that the average yearly expenses (health care costs and living expenses) and the estimated lifetime costs that are directly attributable to spinal cord injury vary greatly based on education, neurological impairment, and pre-injury employment history. Those estimates do not include any indirect costs such as losses in wages, fringe benefits, and productivity, so indirect costs averaged \$74,509 per year in 2017 dollars. Upon further inspection, it is interesting to discover that several studies were included in the synopsis of the research methodology used for the NSCISC’s Fact Sheet (NSCISC, 2017). For example:

- Costs were from their 2011 study and adjusted to 2016 U.S. dollar amounts. For example, the NSCISC 2017 Spinal Cord Injury Facts and Figures Cost Data were drawn from a 2011 University of Alabama study, and the costs were adjusted to 2016 U.S. dollars using the Consumer Price Index. (NSCISC, 2017)
- Direct costs were defined as charges directly related to the spinal cord injury and the total study population was 735 individuals with spinal cord injury. (NSCISC, 2017)
- The study population included a random sample of 508 people treated within the University of Alabama’s model system. Data included all charges during a calendar year that were directly resulted from the spinal cord injury. (DeVivo, 2011)
- Charges were verified through third-party confirmation. (DeVivo, 2011)
- Free goods and services were costed using fair market value data. (DeVivo, 2011)
- An additional cohort of 227 people with spinal cord injury were randomly enrolled in the study to provide first-year-after-injury data on EMS, acute care, and rehabilitation hospital expenses. In addition, new data was incorporated from NSCISC’s database with regard to acute care charges for people treated within the University of Alabama’s model system. (NSCISC, 2017)

- Attendant care hours per day were based on participant’s reports. The cost of attendant care was based on the 2009 national average cost per hour for home health aids at \$21.00 per hour, daily nursing home rates were based on the 2009 National Average of \$198.00 per day. Those costs were adjusted to 2016 U.S. dollar values for their 2017 report. (NSCISC, 2017)
- A total of 430 re-hospitalizations were identified. Hospital costs were based on a case-weighted statewide average cost-to-charge ratio considering urban and rural costs in the state where re-hospitalization occurred. (DeVivo, 2011)
- The results were sectioned into four neurologic categories: C1-C4 ASIA “A” and “B”; C5-C8, ASIA “A”, “B” and “C”; T1-S5, ASIA “A”, “B” and “C” and ASI “D” at any level. People requiring ventilation were placed within the C1-C4 category, regardless of injury level. (DeVivo, 2011)

What is significant from this information is that even SCISC’s data is skewed because it takes into consideration cost of living, which people would have to incur regardless of an injury. Again, having an expert who can identify the data and interpret it, is critical to success.

### Tactics and Understanding

In my experience, the most effective deposition took less than an hour, because the lawyer emphasized all the elements that a damages expert could not espouse on such, as a diagnosis or prognosis, whereas tactics such as the plaintiff bar’s Reptile Theory resulted in an eight-hour ordeal. A less experienced expert may get trapped into biting on hypotheticals or bullied into providing a plaintiff-friendly answer purely due to the repetitiveness of their questions.

In some instances, a doctor may testify that the plaintiff needs expensive, ongoing, psychological counseling due to a post-traumatic stress disorder (PTSD), and yet, the patient’s file will not reflect that diagnosis. In addition, research identifies that PTSD can be treated and resolved with a few weeks or months of trauma specific therapy, undercutting the argument that any plaintiff with PTSD would need intensive counseling for life.

Sometimes, pricing is reflected in U.S. dollars, because the plaintiff was injured in the United States, without recognizing that the person had long since moved back

to China, where goods and services are less expensive if projected in Chinese renminbi.

In a case where \$300 million was at stake, and defendants who were being sued in a head-injury case, the CLCP testifying for the injured party was also the administrator of the long-term care facility recommended in his plan. It's a conflict of interest for CLCPs connected to service providers to use their reports as a way of sending themselves business, so that conflict of interest disqualified him and his expert testimony. Adding another and even uglier level of malfeasance, the facility he ran and wanted to subject the plaintiff to had numerous patient-abuse charges pending against it. Once those facts were presented, the basis for the \$300 million claim evaporated.

A case may hinge on the mechanics of a sports' wheelchair versus chair designed for daily use. The plaintiff had tumbled out of his sports chair in a parking lot and was seeking a huge sum from the parking lot owner to cover the cost of treating his injuries and their aftermath. The plaintiff used a wheelchair in the first place as he had suffered a spinal cord injury more than three decades earlier, and he had been living with paraplegia since then. His sports wheelchair came equipped with small casters and a 10-inch back. Based on that configuration, he possessed great balance, and if he had he used a chair with larger casters, his wheel would not have caught in the pavement, and he would not have fallen to cause his injuries. None of that was initially mentioned when he sued an office supply chain after a wheel of his chair caught in a crack at a store parking lot and he fell forward, landing on his knee.

Plaintiffs create day-in-the-life videos to illustrate how horribly affected the person's life is due to their injuries. However, these videos can lose their power when questioned. For instance, a video that shows a plaintiff, a preacher, being treated by his physiatrist—who is a paraplegiac, loses much of its effect when the defense asks why the preacher could not continue his inspiring ministry from a chair. If his own doctor could maintain his practice after sustaining paraplegia, surely, he could rely, as he always had, on the power of his voice?

Sometimes this is a matter of knowing that Medicare has created *L codes* to identify costs for specific *prosthetic* components; and therefore, it is easy to identify if the plaintiff's CLCP's cost projections are reasonable and necessary. Controlling damages is a vital part of any sound defense strategy. Determining what services are needed and what they should cost is a complex field

into which no defense team should wander without a knowledgeable guide. Hiring the right damages expert can significantly increase the likelihood that a defense team will win their case.

### **The Evolution of Vocational Rehabilitation in Response to Technological Development**

In a discussion of the increased specialization and sophistication of expert witnesses—in this case, damage experts in particular—it seems prudent to briefly acknowledge developments at the intersection of VR and technology. Broadly, VR is a dynamic process that begins with a referral, consists of a sequence of services and assessments related to the total needs of a person with a disability, and ends with successful placement of the individual in employment. This definition is heuristic in nature, applicable to a wide range of individuals, conditions, and occupations, and flexible enough to remain relevant despite the effects of technological development on labor. Surprisingly, the U.S. Department of Labor's Dictionary of Occupational Titles (U.S. DOL, 1991) does not include new occupations such as bloggers, vloggers, and other emergent technology-based occupations. The Occupational Information Network (O\*NET) was, perhaps, the closest attempt at government support of the internet sector in the US, but it lacked the traction to prompt systemic change. Notably, the Canadian Assessment, Vocational Evaluations & Work Adjustment Society (CAVEWAS) is a professional organization dedicated to helping people with disabilities and disadvantages return to—or remain at work—and might be looked to as one model of an organization critically considering the impact of technological development on labor and legislation. Despite that legislation in the US has not yet caught up to technological development, technology in the workplace has influenced expectation about the sophistication of expert witnesses in litigation.

### **Footnotes**

- 1 With the exception of Virginia, which reaffirmed the *Spencer* standard in 2015.
- 2 In the past, the DRI encouraged CLCPs employed by the defense to remain tight lipped, as the quote of any potential compensatory damages by a witness called by the defense could establish a minimum amount of compensation, irrespective of ruling in regard to damages quoted by the plaintiff's attorney. In other words, if the plaintiff was seeking \$20 million in damages, but the expert witness called by the defense stat-



ed that the plaintiff only needed \$2 million, that is still \$2 million that had to be paid.

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# MVQS Worker Trait Factor Analysis

Ron Smolarski, M.A., ABVE/D, IPEC, CRC, CVE

McCroskey MVQS is now operational to **2030**. Soon, **MVQS** will be operational early in 2021. A team of MVQS users tested and used the software in 2020.

As testers and working with the original MVQS Programmer/Rehab Counselor, Dr. Wattenbarger and a new programmer, Dan Bur, we are making the software MVQS transferable skills (TSA) more user friendly and projecting data into the future.

Rehab Counselors' evaluatee's DOT#s (McDOT) McCroskey Dictionary of Occupational Titles and test scores (Input Test Data and/or select new set of tests & measurements) are easily cross walked to each U.S. Department of Labor worker trait to obtain additional data in (McPLOT) - ratings (physical capacities and environmental tolerances; Work Values, (VIPR Type) Interest Analysis, Profile View and several reports (evaluatee testing results, evaluatee physical capacity ratings, evaluatee values, evaluatee profile, evaluatee VIPR).

The rehab counselor uses the open door on each screen to move to the next or previous screen. There is a help button on each screen.

When working through your transferable skills analysis you next need to Analyze your data.

You now have competency levels for all your evaluatee's DOT work history.

The next step is to synthesize the data that you have for past work history and present vocational evaluation testing data. You will also note that there is a VQ (Vocational Quotient – Occupational Difficulty) on the line with each worker trait profile.

In the next step, you will have 4 rows of competency levels:

Work History Profile; Evaluative Profile; Pre-Profile; and Post Profile. To understand this, you will realize the first

row has a composite of worker trait competencies for the evaluatee's work history. The second row has a composite of the scores from your testing, and the results that you obtained from the treating physician. The third row allows you to incorporate clinical judgement but is also most important, what the pre-injury profile of worker traits was. The fourth row provides you with the post worker trait profile incorporating previous work history traits and the impact of injury to each worker trait by your test scores and consultations with the treating physician.

The next step is to Quantify your data.

The next screen will provide you the number of Pre and Post number of occupations (geographical area State, County, Providence) for each of the One-Digit Occupational Categories (Professional, Technical, and Managerial Occupations; Clerical and Sales Occupations; Service Occupations; Agricultural, Fishery, Forestry, and related occupations; Processing Occupations; Machine Trades Occupations; Benchwork Occupations; Structural Work Occupations; Miscellaneous Occupations).

The screen will also indicate the number of occupations searched, the total of occupations for both pre- and post- and the residual amount. Now as a vocational evaluator, you start obtaining the data that attorneys and judges want to hear. Labor Market Access pre, post, and residual. The next screen provides you with a choice of 22 reports. 1. Client Identification 2. Client Values & Needs 3. Client Worker Trait Profiles 4. Pre – Post Comparisons 5. Work History by DOT & Traits 6. Work History by Crosswalks 7. Work History x Earning Capacity (EC) 8. Job Matches by Transferable Skills 9. Job Matches by TS & Crosswalks 10. Job Matches by TS & EC 11. Job Matches by Values – Traits View 12. Job Matches by Values – Crosswalks 13. Job Matches by Values & EC 14. Job Matches by VQ – Traits View 15. Job Matches by VQ – Crosswalks 16. Job Matches by VQ & EC 17. Job Matches by SVO – Traits View 18. Job Matches by SVP -Crosswalks 19. Job Matches by SVP & EC 20. Job Matches by VIPR – Job Matches

by VIPR Crosswalks 22. Job Matches by VIPR -EC & Values.

I do about 99% personal injury work and typically use reports 3, 4, 7 & 10. As an example, I will indicate the output that I am able to provide during settlement, deposition, and trial. Report 3 provides a composite of worker traits for work history, evaluation profile, pre profile, and post profile. The report also provides important documentation that backs up the MVQS methodology.

Report 4 Provides Access to the Labor Market pre- and post-for all categories; earning capacity and training potential; and Transferable Skills (TS) Availability and Utilization pre- and post-and indicates the following: High TSkills available; Moderate TSkills available; Low TSkills Available; Few, if any TSkills Available; No TSkills Available.

Report 7 provides the following: history of past work VQ SVP Skill Level VA VIPR and value of earning capacity at the mean, 10%, 25%, 50%, 75%, and 90% ... this data is especially important when I have no W2's or 1040's.

Report 10 provides Job Matches by Transferable Skills (TS) Present Value Earning Capacity.

This report is where the rubber meets the road. It provides all the occupations your evaluatee can work at a competitive and sustained rate. Each line will provide the DOT Code Job Title, TS, VQ, SVP, VIPR, and wage capacity at the following: Mean, 10%, 25%, 50%, 75%, 90%.

### **Future ABVE Conference Information**

#### **2022 Annual Conference**

March 24-27

The Westin Tampa Waterside  
Tampa, FL

#### **2023 Annual Conference**

March 16-19

San Diego Mission Bay Resort  
San Diego, CA

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