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THE EFFECT OF RACE AND EXPERTISE ON SOURCE CREDIBILITY RATINGS

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ABSTRACT

By

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Source credibility affects our daily interpersonal interactions in various ways yet our understanding of credibility is still limited. Expertise is one of the most often listed factors of credibility and until recently, the definition and measurement construct has received little attention by persuasion scholars. Also, it has been suggested that race may play a role in credibility ratings. This study assessed the relative influence of race and expertise on credibility judgments. The sample consisted of 403 white undergraduate students at a large Midwestern university. Technical and practical competencies were found to be independent constructs, each with significant effects on credibility ratings. When both competencies are high credibility ratings will be maximized. Race had no effect on the judgments of competency or credibility. Limitations of the study and implications for future research were discussed.

DEDICATION

I gratefully dedicate this dissertation to Arnetta Cage and Dr. Lawrence Redd, who helped me begin this process, my family who loved and supported me before and throughout this process, to my committee for their guidance, and my GOD who granted me the fulfillment of a life-long dream.

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INTRODUCTION

Understanding Source Credibility

Source credibility affects our daily interpersonal interactions, decision-making, the diffusion of innovations, and our judgment of the persuasiveness of speakers with their various messages. We observe the importance of a credible source as we discuss the effectiveness of politicians, product spokespersons, salespersons, and a multitude of other 'persuasive' individuals. Scholars believe that receivers' schemas about different groups of people like males/females, blacks/whites, gays/straights, etc., all influence judgments of source credibility, yet despite over 50 years of research on credibility, our understanding of the construct and its effects on related constructs is limited.

One limitation of our understanding of source credibility is the belief that we fully understand the construct. Some scholars believe that as a field, our "intense level of inquiry has apparently fostered the belief that few questions regarding the persuasive effects of source credibility remain unanswered. As a result, interest in this topic has waned" (Sternthal, Phillips, & Dholakia, 1978). McCrosky and Young (1981) contributed to the belief that scholars have definitively defined credibility; a belief made apparent as they stated, "we believe it is time, once and for all, to call a halt to the proliferation of factor analytic studies of source credibility; that is, those intended to 'discover' its dimensions" (p. 34). They concluded by suggesting "factor analysis must be preceded by careful conceptualization and construct delineation, or the product of even the most massive research effort...will lead to nothing, or worse, to inappropriate knowledge claims" (McCrosky & Young, 1981). So despite the fact that the literature is

filled with contrasting claims, various factors of source credibility, and unclear effects, some scholars believe that source credibility is a fully explicated construct.

A second limitation, which follows from the first, is the lack of consistent definition of the construct. Hovland and his colleagues (1953) defined source credibility as the combination of "the extent to which a communicator is perceived to be a source of valid assertions" and "the degree of confidence in the communicator's intent to communicate the assertions he considers most valid" (p.21). Markham (1968), following in the footsteps of Anderson and Clevenger (1961), suggested that source credibility is simply Aristotle's construct of ethos. Aristotle defined ethos as a "listener's evaluation of a speaker's intelligence, character, and good will (p. 361)" (Delia, 1976). Berlo and colleagues (1969-70) chose not to utilize the term 'source credibility' because they believed that the variable would be viewed as a property of the source rather than the receiver. To alleviate this problem, they created "dimensions for evaluating message sources" and utilized Hovland and associates' definition of credibility as the foundation for their work. McCroskey and Young (1981) defined the construct as "the attitude toward a source of communication held at a given time by the receiver" (p. 24). Many scholars simply neglect to define the term in their research, assuming that readers have a working definition of the construct or will consistently identify a 'credible' source.

The final limitation in our understanding of source credibility is found in the factor structure of the construct itself. Generally, scholars are unsure how many factors compose the variable "source credibility," what names those factors should have, and how those factors should be measured. For example, most scholars suggest that both trustworthiness and expertise are aspects of credibility (Applbaum, & Anatol, 1973;

Chaiken, & Maheswaren, 1994; Hovland, Janis, & Kelly, 1953; Posner, & Kouzes, 1988; Sobczak, & Bowers, 1993; Sternthal, Phillips, & Dholakia, 1978; Tuppen, 1974; Wu, & Shaffer, 1987). However, some scholars accept trustworthiness as a key factor contributing to credibility judgments (Heyman, 1992; Hovland, & Weiss, 1951; Markham, 1968; Powell, & Wanzenried, 1995) while others maintain that expertise is a key factor (Giffin, 1967; King, 1976; Nosek, Fuhrer, & Hughes, 1991; Swenson, Nash, & Roos, 1984). Other scholars select different naming schemes leading to remaining factors that are often cited for influencing judgments of credibility, such as reliability (Chaiken, & Maheswaren, 1994; Wu, & Shaffer, 1987), dynamism (Posner, & Kouzes, 1988), competence, character, sociability, composure, and extroversion (McCrosky, & Jenson, 1975; Powell, Wanzenried, 1995).

One consistently suggested component of credibility which until recently, has received little attention within the persuasion literature, is expertise. While the trustworthiness and expertise as dimensions of source credibility judgments are frequently noted, the conceptualization and definition of the construct, 'expertise,' have just begun to be examined in depth. Recently, Farr (2003) argued that expertise can be perceived in two distinct ways: technical competence and practical competence. This dissertation will further examine judgments of expertise (type of competence), and how expertise, together with race, influence perceived source credibility. The following is a brief review of the expertise literature leading to a discussion of the potential effects of race.

Role of Perceived Expertise

Cognitive psychologists have long sought to define expertise and determine how it is acquired. Typically, they focus on expertise as an intrinsic characteristic, which suggests that expertise is an inherent feature of the source. In pursuit of defining the characteristics of expertise, three overlapping yet distinct perspectives of expertise have emerged in the cognitive psychology literature.

The first perspective of expertise, developed by Ericsson and Smith (1991), focuses on distinguishing outstanding versus non-outstanding individuals in a domain. Outstanding individuals are determined by outstanding performance within a given domain or sphere of expertise. Exemplars of outstanding performance are faster response times for tasks in the domain, superior ability to plan ahead, superior memory performance, highly developed perceptual/attentive abilities, a strong sense of what is relevant, an ability to simplify complex problems, ability to effectively communicate their expertise, ability to handle adversity, selectivity in choosing decision problems, appearing outwardly confident, and having an extensive and up-to-date content knowledge (Ericsson & Smith, 1991; Shanteau, 1988).

The second expertise perspective focuses on an individual's accumulation of knowledge, with special emphasis on the type of knowledge held. Rosenberg (1997) states that "expertise results from amassing both great amounts of knowledge and the ability to perform pattern-based retrieval during many years of experience in a specific area" (p.37).

In the third perspective, expertise is determined by factors such as training, ability (Bimbaum & Stegner, 1979; Cusella, 1982; Hovland et. al, 1953; McGuire, 1969) nomination by peers, experience, and hands-on experience (Perez, Johnson, & Emery, 1995). In 1964, Fitts proposed a model containing three stages of expertise development through practice of tasks within a given domain. The first stage is the "cognitive stage" and is "characterized by an effort to understand the task, its demands, and to learn what information one must attend" (Ericsson & Smith, 1991). The second stage is the "associative stage" which involves "making the cognitive process efficient to allow rapid retrieval and perception of required information" (Ericsson & Smith, 1991). The final stage is the "autonomous stage" in which "performance is automatic and conscious cognition is minimal" (Ericsson & Smith, 1991).

In summary, these three cognitive psychology perspectives of expertise have several common factors. Each perspective suggests that experts are knowledgeable, have extensive experience, and are outstanding in their domain of expertise. In contrast to the cognitive psychology perspective, when studying expertise from the persuasion literature, the focus is on the perceived expertise of a message sender, rather than on the internal characteristics related to expertise. In this literature, expertise is often manipulated without being defined or without verification of the success of the manipulation on receivers.

For example, some scholars will manipulate level of training, experience, role status, attraction and the presence or absence of a diploma (Swenson, Nash, & Roos, 1984) as a representation of expertise level. In a study by Nosek, Fuhrer, and Hughes (1991), expertise was manipulated by stating that one set of counselors had doctoral

degrees and professional practices in counseling, whereas the contrasting group of counselors had jobs of an unspecified nature and volunteered their services as counselors at an independent living center. Norman (1976) portrayed the expert source as a professor of physiological psychology at a large Canadian university who had recently co-authored a book. His low expert counterpart was portrayed as an undergraduate in a general arts program at a large Canadian university (Norman, 1976). Another expertise manipulation described an individual with 15 years of experience in a field, publications of articles in the field, as well as maintaining a private practice as an expert while the low expertise condition described an individual who has worked one year after recently completing his/her degree and is beginning to establish his/her research career (Swenson, et al., 1984). In each of these studies, the condition with the "expert" resulted in greater perceived credibility as compared to the condition labeled "non-expert." Yet, the construct "expertise" was never formally defined, just manipulated.

In both the cognitive psychology literature and the persuasion literature, expertise seems to have two major characteristics, the first being, practical competence and the second, technical competence. For example, in the cognitive psychological literature, experts were thought to have in-depth knowledge, training, and experience. Similarly, in the persuasion literature, those labeled experts were those who either had symbols (e.g., academic degrees) or experience (e.g., experience in a field). It appears that all of these expertise definitions or manipulations fall into two categories – practical competence and technical competence. Each construct is briefly defined below.

Technical Competence Technical competence is skillfulness by virtue of possessing special knowledge. It is achieved through training, reading, formal education,

and scholarly pursuits. A technically competent expert will often be perceived as being on a different social, power, or authority level than those with whom they interact. When manipulating the technical competence aspect of expertise, many scholars manipulate the level of degree earned, social status, training, formal education, and title which usually places the expert on a different social, power, or authority level than those by whom they are rated. The focus on the manipulation of technical competence suggests that technical competence leads to perceived expertise.

Practical Competence In contrast, practical competence, or experienced expertise, is developed through direct observation or participation in an event. For the purposes of this study, practical competence will be defined as skills that result from direct participation in events or activities. This type of competence is developed through practice, experience, or trial and error. The practically competent individual does not necessarily understand the body of literature, mechanical workings, or expert language of the field, but is an expert primarily through their experiences in the field. Their practical experience makes others perceive them as an expert.

Research on Competence. Farr (2003) demonstrated that both technical and practical competencies are relevant to the measurement of perceived expertise. When practical competence was low, technical competence had little effect, but when practical competence was high, the addition of technical competence greatly increased perceived credibility. This study sought to replicate this finding by manipulating both technical and practical competencies, to reaffirm their impact on credibility ratings, as well as examine the influence of race on perceptions of expertise.

Role of Race

Affirmative Action has long been a topic for debate. Currently, the nation is again considering the question of race as a factor in decision making for university entrance and other hiring considerations. If race is in fact, a non-issue, as some claim, then scholars should be able to observe the lack of a relationship between race and credibility. Surprisingly, the variable race has received only cursory attention in the source credibility literature. Therefore, one purpose of this dissertation is to examine the effects of race on judgments of source credibility. In today's increasingly diverse world, it is important to understand the influence that race might have on perceived credibility. If a relationship is observed between race and credibility, the explanation for why this may be the case will be a question which remains outside of the scope of the current work. For this purpose of this paper, however, the question is simply, does race make a difference on ratings of source credibility? Following is a brief review of the effects of race on various outcomes.

The Effects of Race. Despite affirmative action and other civil rights laws, the destruction of Jim Crow and other segregationist practices, and the growing acceptance of diversity, some believe that race still matters in people's judgments of others' credibility, qualifications, etc. (West, 1993). Despite the belief that race matters, scholars have not addressed the general question of how race affects credibility ratings on a daily basis in larger society. Some scholars, being aware that evaluations are important for tenure and job retention, have addressed the specific question of race and instructor credibility. Hendrix (1998) found that students believed that it would be more difficult for a Black professor to establish credibility in the classroom, especially when they were teaching courses unrelated to their race. The students also believed that Black professors

have to work harder to perform successfully within the academic system. Conversely, Patton (1999) found that African American instructors were more credible than European instructors.

While studying credibility of a salesperson from the perspective of a consumer, scholars found that the race of the consumer will affect the credibility rating of the salesperson, especially related to likeability (Jones, Moore, Stanaland, & Wyatt, 1998). White consumers felt that the salespeople portrayed in the study were more likeable than did Black consumers. From the perception of consumers, the Black salespersons were considered more likable, most trustworthy, most attractive, and highest on expertise, with perceptions of white females following, and white males rated lowest (Jones, et al., 1998). Although this finding sounds promising on the face of it, the authors (Jones, et al., 1998) contend that these results might not indicate a boost in the credibility of Black or women, but rather represent a discounting or backlash against the White male salesperson who may have primed negative stereotypes against the "typical" salesperson (i.e. pushy, aggressive, and forceful).

When attempting to diversify a sales force, credibility may not be the strongest issue, but race can cause the hiring and retention process to become a challenge due to discriminatory practices. Several scholars have found that in the 1980s and 1990s, black men in the United States were suffering a 12 to 15 percent loss in earnings due to labor market discrimination (Darity, Guilkey, & Winfrey, 1996; Darity, & Mason, 1998; Gottschalk, 1997; Rodgers, & Spriggs, 1996). Others have found that having a black racial identity and a darker skin tone will reduce an individual's chances of working by 52 percent after controlling for education, age, and criminal record (Johnson,

Beinenstock, & Stoloff, 1995; Darity, & Mason, 1998). It has also been reported that sales managers tend to "screen out" African American and female applicants to select instead equally qualified White male applicants (Jolson, 1983). In contrast, a slightly more recent study was unable to observe discrimination in hiring (Marshall, Stamps, & Moore, 1998).

When African Americans are hired, they often still face challenges in excess to those required by the job. African Americans reported experiencing exclusion by White colleagues in networking activities such as golf outings at "restricted" country clubs (Comer, Nicholls, and Vermillion, 1998; Thomas and Wetlaufer, 1997). Also, African Americans have had problems working with their customer base that range from "awkwardness in initial person-to person meetings (after telephone contacts), to loss of the sale, to overt messages that 'Black salespeople are not welcome'" (Comer, Nicholls, and Vermillion, 1998; Lucas, 1996). Essentially, the role of race on perceptions of credibility has yet to be determined. Some scholars suggested that race affects credibility ratings whereas, others suggest that race does not matter. The goal of this paper is to determine if race affects credibility ratings.

Summary

This study seeks to extend the credibility literature by examining the effects of individual race on perceived credibility and expertise ratings, although this study will be limited to two races-- African Americans and Whites. If race does not affect people's perceptions, then we would expect to see no significant difference between the credibility and/or expertise ratings due to race manipulations.

As we consider the perceived credibility ratings of both African Americans and Whites, one component of expertise that may vary between the groups is perceived expertise. Whites have greater numbers of college educated individuals as well as more individuals reaching higher levels of education, which suggest that Whites should have an expertise advantage. The real question of interest is not if Whites have greater expertise, but when expertise is controlled, will they receive higher ratings of perceived expertise, and subsequently higher credibility ratings?

Method

Design

A 3 (Black, White, and no portrayal of race) x 2 (technical competence; high versus low) x 2 (practical competence; high versus low) factorial design was employed, with credibility ratings as the dependent variable. Participants were randomly assigned to one of the 12 conditions in the 3 x 2 x 2 design specified above.

Participants

A total of 403 students in communication courses at Michigan State University were recruited for the study and received extra credit for their participation, resulting in an average of 34 participants per cell. This sample size is adequate to detect differences between cells, if they in fact exist, according to conventional standards of power (beta = .80, alpha = .05, one-tailed, based on a .30 expected effect size). Given the limited number of minority participants and the improbability of equal participation across cells, all participants were White and were 36% male (N = 145), and 64% female (N = 258). Given the student's status as undergraduates, the mean age (M = 21.1, SD = 2.3) is younger than that of the general population, although it is fairly representative of the traditional undergraduate population which usually has an age range between 18 – 22 years old.

Procedure

The participants in the study entered the meeting room and were welcomed to the research project by the research assistant. At this time they completed the informed consent form. Upon receipt of the completed informed consent form, the research

assistant gave each participant a folder. The folder contained the manipulation and randomly assigned the participants to one of the twelve groups. On the outside of the folder was a fabricated job posting for a communication consultant which lists the criteria required, and skills necessary for the position. Within the folder was the race manipulation (photograph or not), and a technically competent (high vs. low) or practically competent (high vs. low) resume. Each participant was asked to complete a survey relating to the attributes of each applicant and to make the decision to offer the portrayed individual an interview (or not). Once the survey was completed, the participants were thanked, debriefed and dismissed from the study.

The Manipulations

Induction of Race. Students were randomly assigned to one of three groups. One folder contained a picture of a Black female, while another folder contained a folder of a White female, and the final folder contained no picture. All three photograph combinations were matched with an expertise manipulation (a resume). The individuals in the photographs wore white blouses, had similar makeup, jewelry, hair length, height, weight, and build so that each could be presented as equally attractive. Both photographs were head shots with the confederates smiling gently while looking directly into the camera. They were photographed against a white background to eliminate identifying features or cues of any kind. For ease of matching the general characteristics of the individuals, women were selected. Although no differences are expected based upon gender, future studies could replicate this study with men to ensure that gender does not affect the manipulations.

Induction of Technical Competence. Technical competence is based upon the accumulation of knowledge through scholarly pursuits, reading, or training, so in the high

technical competence condition, the participant received the resume of a recently graduated Ph.D. in Communication. The work experience category of this resume held only one year at McDonalds, a position which she held during high school and is not relevant to the position she is currently seeking. She was presented as having received her bachelors degree in Communication from Illinois State University, her MBA from Northwestern University, and her doctorate degree from Illinois State University in Communication, and was seeking her first professional work experience with the Success Consulting Group in Chicago. In the low technical competence condition, the applicant has earned a B.A. in Communication from Illinois State University with the same lack of work experience presented previously.

Induction of Practical Competence. Practical competence is based upon the idea that experience is necessary for expertise, so to manipulate high practical expertise, the participant received the resume of a high school graduate who documented ten years of work experience with a (fictional) consulting agency in Chicago. The resume presented a woman who began working with a consulting agency in her high school work-study program. Upon graduation from high school, she accepted a job within that agency as a part-time Consultant's Assistant, then received a promotion to full-time Consultant's Assistant, with her most recent promotion making her the Consultant's Assistant to one of the highest ranking consultants in the agency. She listed several speaking engagements. She too, was seeking her first full consultant position with the Success Consulting Group in Chicago. In the low practical competence condition, the same high

school graduation listed 4 years of work experience rather than ten years, with all other aspects of the resume remaining the same.

Pilot Tests. The manipulations were piloted and refined until the high and low technically competent resumes received significantly different ratings on the technical competence scale and the practically competent resumes received significantly different ratings on the practical competence scale (high versus low). A confirmatory factor analysis was run on the data to determine if there is in fact a three factor solution which represents credibility, practical competence, and technical competence. Specifically, confirmatory factor analysis procedures outlined by Hunter and Gerbing (1982) were used to test first-order and second-order unidimensionality of the scales and constructs. The scales were internally consistent and achieved parallelism (APPENDIX B).

Manipulation Checks

Practical Competence. After being exposed to the induction, four items were used to assess the participant's perception of the practical competence of the source. The participants were asked to rate on a 5 item semantic differential the following items: practiced, realistic, experienced, and participant. The items were selected from items previously used within the credibility literature and which through face validity measured practical competence. These items were then averaged to create a mean score. The standardized item alpha for this scale was .84.

An independent subjects t test was performed to insure that the variable had been manipulated as expected. A significant main effect for practical competence was found

on the practical competence measure, t (1, 15) = 2.17, $p<.05$. This finding suggests that practical competence was manipulated such that those reading the high practical competence message believed the speaker to be more practically competent (M = 3.94, SD = .59) than those reading the low practical competence message (M = 2.97, SD = 1.12).

As a confound check, we tested the practical competence manipulation against the technical competence scale and it was non-significant [t (1, 15) = .55, $p>.05$, n.s.], suggesting a clean manipulation for practical competence.

Technical Competence After being exposed to the induction, three items were used to assess the participant's perception of the technical competence of the source. The participants were asked to rate on a 5 item semantic differential the following items: educated, competent, and intellectual. The items were selected from items previously used within the credibility literature and which through face validity measured technical competence. The items were then averaged to create a mean score. The standardized item alpha for this scale was .83.

An independent subjects t test was performed to ensure that the variable had been manipulated as expected. A significant main effect for technical competence was found on the technical competence measure, t (1, 15) = 2.19, $p<.05$. This finding suggests that technical competence was manipulated such that those reading the high technically competence message believed the speaker to be more technically competent (M = 4.22 SD = .62) than those reading the low technically competent message (M = 3. 36, SD = .84).

As a confound check, we tested the technical competence manipulation against the practical competence scale and it was non-significant[t (1, 15) = -.64, p>.05, n.s.], suggesting a clean manipulation for the technical competence manipulation.

Outcome Measures (Dependent Variables)

Credibility To measure credibility, 10 items from Ohanian's (1990) source credibility semantic differential scale were used. The scale which Ohanian (1990) developed was well constructed, well tested, and reported high reliability coefficients. Consistent with the high reliability coefficients reported by Ohanian (1990), when utilizing the scale to address the current data, the scale received an standardized item alpha of .78.

The items used measure the attractiveness and trustworthiness factors of source credibility. The items utilized to measure attractiveness were "attractive-unattractive, classy- not classy, beautiful-ugly, elegant-plain, [and] sexy-not sexy" (Ohanian, 1990). The items selected to measure trustworthiness were "dependable-undependable, honest-dishonest, reliable-unreliable, sincere-insincere, [and] trustworthy-untrustworthy" (Ohanian, 1990). All items were mixed into a series of five-point semantic differentials from which a credibility score was developed. The obtained scores for all of the items were averaged to create a credibility rating for each participant. This single score credibility rating was then utilized as a data point for the ANOVA analysis.

Results

Credibility ratings were analyzed with a technical competence (high vs. low) x practical competence (high vs. low) x race (white, black, no picture) between subjects factorial analysis of variance. An alpha level of .05 was used for all statistical tests.

As noted in the discussion about manipulation checks, both practical and technical competencies were manipulated cleanly in the pilot test. Another way to verify the strength of the manipulation is to note the strong uncorrected correlation between the manipulation of practical competence and high ratings on the practical competence scale ($r = .51$). Likewise, there is a strong uncorrected correlation between the manipulation of technical competence and high ratings on the technical competence scale ($r = .71$). Given that both technical and practical competencies are measuring expertise, it is expected, and noted that we observed a strong uncorrected correlation between the competencies ($r = .64$). Also, the uncorrected correlation from the practical competence scale to the credibility measure was strong ($r = .76$) as was the uncorrected correlation from the technical competence scale to the credibility measure ($r = .81$) (APPENDIX C).

Correcting the correlations for error in measurement, the correlations increased in strength such that the correlation between the manipulation of practical competence and high ratings on the practical competence scale ($r = .56$) is stronger. Likewise, with the correlation between the manipulation of technical competence and high ratings on the technical competence scale ($r = .78$). The correlation from the practical competence scale to the credibility measure was decreased ($r = .4$) as did the corrected correlation from the technical competence scale to the credibility measure ($r = .36$) (APPENDIX C). Overall,

using the practical and technical competence measures, credibility scores can be predicted with significant accuracy, $F(1, 4) = 301.53$, $p < .01$, $R = .87$ (APPENDIX C).

From this position, a path model has been proposed (APPENDIX D) which fits the data well. As practical competency was increased, scores on the practical competency scale also increased as noted through the path coefficient ($\beta = .56$). As technical competency was increased, scores on the technical competency scale also increased as noted through the path coefficient ($\beta = .78$). As predicted, both practical and technical competencies affect credibility ratings, as evidenced by the path between the practical competence scale and credibility ratings ($\beta = .41$) and the technical competence scale and credibility ratings ($\beta = .69$). As credibility ratings increase, people are more likely to recommend that the candidate receive an interview ($r = .82$). Given the predictive power of all aspects of the model, we submit this model for further consideration and testing.

An independent subjects t test was performed to insure that the variables had been manipulated as independently. A significant main effect for practical competence was found on the practical competence measure, $F(1, 399) = 169.21$, $p<.01$, $\eta^2 = .27$. We then tested the practical competence manipulation against the technical competence scale which was also significant $F(1, 399) = 67.00$, $p<.01$, $\eta^2 = .11$. A significant main effect for technical competence was found on the technical competence measure, $F(1, 399) = 455.82$, $p<.01$, $\eta^2 = .52$. We then tested the technical competence manipulation against the practical competence scale which was also significant $F(1, 399) = 29.29$, $p<.01$, $\eta^2 = .03$, suggesting that the manipulation of one variable impacts the manipulation of the other.

Results also showed a significant main effects for technical competence on credibility, $\underline{F}$ (1, 391) = 161.83, $\underline{p}$<.01, η^2 =.29 and significant main effects for practical competence on credibility were found, $\underline{F}$ (1, 391) = 66.99, $\underline{p}$<.01, η^2 =.15. There was not a main effect for race $\underline{F}$ (1,2) = .13, $\underline{p}$>.05, η^2 =.001, n.s., nor were any of these main effects affected by interaction effects between race and practical competence, $\underline{F}$ (2,391) = .99, $\underline{p}$>.05, η^2 =.005, n.s., race and technical competence, $\underline{F}$ (2,391) = .329, $\underline{p}$>.05, η^2 =.002, n.s., practical and technical competence, $\underline{F}$ (1,391) = .17, $\underline{p}$>.05, η^2 =.005, n.s., or the combination of race, practical and technical competence, $\underline{F}$ (2,391) = 1.03, $\underline{p}$>.05, η^2 =.005, n.s. Overall, credibility is a good predictor of the recommendation to interview the applicant (R = .73). The technical and practical competence scales also functioned well as predictors of the recommendation to interview (R = .77), but having all three measures increased predictive power to its maximum (R = .78).

Significant main effects for credibility were observed on recommendations to interview the applicant, $\underline{F}$ (1, 17) = 12.87, $\underline{p}$<.01, η^2 =.39. Significant main effects were also observed for manipulations of practical competence on recommendations to interview the applicant, $\underline{F}$ (1, 349) = 20.72, $\underline{p}$<.01, η^2 =.06. Significant main effects were observed for manipulations of technical competence on recommendations to interview the applicant, $\underline{F}$ (1, 349) = 4.3, $\underline{p}$<.05, η^2 =.01. These main effects were not affected by interaction effects between credibility and the technical competence manipulation, $\underline{F}$ (1,12) = 1.52, $\underline{p}$>.05, n.s., nor the credibility, manipulation of technical, and practical competence combination, $\underline{F}$ (1,7) = 1.02, $\underline{p}$<.05, n.s. There was an interaction between credibility and the manipulation of practical competence on recommendation to interview the applicant, $\underline{F}$ (1, 14) = 2.04, $\underline{p}$<.05, η^2 =.08, such that as

practical competence increased, the recommendation to interview the applicant also increased.

When examining the cell means related to the significant main effects for practical and technical competence, we observe that when both practical and technical competence are presented as high, students rate the speaker more credible (M = 4.15, SD = .51) as compared to the low technical and low practical competence speaker (M = 2.99, SD = .55) d = 1.67. Alternatively, when practical competence was high and technical competence was presented as low, students rated the speaker as slightly less credible (M = 3.52, SD = .56) than the high technical and low practical competence speaker (M = 3.77, SD = .60) d = .36. In sum, the higher the perceived competence (both practical and technical), the stronger the credibility ratings. However, when isolating each competency, perceived technical competence produces stronger credibility ratings than perceived practical competence.

Race, being manipulated through the presentation of a picture of a Black woman, a White woman, or no picture, did not play a significant role on measurements of credibility. The participants were asked to report 'from memory' the race of the 'applicant' after they completed their credibility ratings. As expected, in conditions where a picture accompanied the resume, the participants were almost perfect in their report of race, when participant were reporting the race of the pictured white applicant three of the 132 participants reported incorrectly, and when reporting the race of the pictured Black applicant, seven of the 132 participants reported incorrectly. All ten of the participants who answered incorrectly failed to respond to the item, or wrote that they could not remember the race of the applicant. In the control (no picture) condition, 95 of

the 132 participants answered the item incorrectly, while 37 answered correctly. All 95 of the participants who responded incorrectly reported that the applicant was White, while the 37 who gave correct responses selected other, skipped the item, or wrote that they did not know the answer. This suggests that the majority of the participants assumed that the non-pictured applicant was a white candidate. Despite the assumption, the role of race on measurements of credibility was nil.

To increase the internal consistency of the credibility measure, the participants were asked to assess how strongly they believed that the applicant was an expert consultant, and if the applicant had the necessary experience and the necessary education to be a good consultant. Each of these items were strongly correlated with credibility such that the stronger the belief of expertise ($r = .71$), experience ($r = .67$), and education ($r = .70$) the higher credibility ratings the applicant received. Not only were these items strongly correlated with credibility, they were also strongly correlated with each other. The stronger the beliefs about experience ($r = .76$) and education ($r = .65$), the greater the belief that the applicant was an expert consultant. Also, the more the applicant was believed to have the education necessary to be a good consultant($r = .55$), the greater the belief that the applicant also had the necessary experience to be a good consultant. Using these three items to predict credibility ratings would allow for good a prediction ($R = .80$), but not as effective as the technical and practical competency scales ($R = .87$). Also, as ratings of credibility increased, the applicants were more likely to recommend that the applicant receive an interview ($r = .73$). In sum, the more experience and education an applicant is perceived to have, the greater their expertise and credibility

ratings. This also suggests that as credibility ratings increase, the likelihood of being recommended for an interview will also increase.

Discussion

The assertion that technical and practical competencies have independent effects on credibility ratings was consistent with the data, although the hypothesis that when practical competence was low, technical competence had little effect, but when practical competence was high, the addition of technical competence greatly increased perceived credibility was unsupported by the data. These finding are consistent with the conceptualization of expertise as being domain specific. In certain domains, it is more important to have technical competency to be perceived as an expert, whereas in other domains the reverse is true.

The fact remains that those who are both high in technical and practical competencies will be perceived as the most expert and credible. This is also consistent with the literature's portrayal of an expert as being someone who is an outstanding individual within a domain as determined by outstanding performance within a given domain or sphere of expertise(Ericsson & Smith, 1991), who has both great amounts of knowledge and the ability to perform pattern-based retrieval during many years of experience in a specific area (Rosenberg, 1997), who is well trained, has great ability (Bimbaum & Stegner, 1979; Cusella, 1982; Hovland et. al, 1953; McGuire, 1969) is nominated or respected by peers, and experienced (Perez, Johnson, & Emery, 1995).

We can conclude that across domains, the higher one is in both competencies, the more credible they will be perceived. This increase in credibility also leads to increased desirability, as observed by the increasing recommendation to interview a candidate based upon their perceived credibility. These findings suggest that academic understanding alone is not sufficient to create expertise; one must also have practical experiences to support and balance the education that is received, a finding which is particularly important for those in training or educational roles. It is not enough to have a student population which can regurgitate theories, or pass standardized tests. It is also

imperative that students have opportunities to become experienced within their field which will increase their ability to practically apply the material they have learned to new and different situations. Although it is unreasonable to assume that a novice student will progress to the autonomous stage of processing (Fitts, 1964) through a brief period of practical application, it is plausible that the novice could progress from the cognitive stage through their educational experiences into the associative stage through the integration of their experiences with their understanding. Creating programs which include both academic and practical components will lead to a more expert student population, which in turn will increase the credibility of both the student and the institution, and ultimately increase the employment rates of graduates which can also increase the credibility of the institution from which these experts were developed. Because expertise is domain specific, it is important that we determine within which domains technical competence may be of greater import than practical competence. As scholars create methods to determine within which domains technical competency is more important and within which domains practical competency is of greater importance, training programs and educational institutions will be able to use their research to focus on the most appropriate competency for their domain, while understanding that both competencies are imperative, and produce experts who are the strongest possible representation of their field of study.

The understanding that both technical and practical competencies are necessarily to perceptions of expertise should also be salient to budding scholars and new instructors. As we present new material to our student population, it is not enough to break down theories into digestible bites, then expect the students to present their understanding on exams or through papers. We must also incorporate an experiential aspect to the learning environment, both through the presentation of our own experiences, and through projects which will require the students to have experiences related to the theories they have studied. As instructor, if you are able to explain the intricate workings of a theory, yet

are unable to give a personal example of the theory in action, given the findings of this study, your credibility will be reduced with your students. Although a class cannot be built upon personal antecedent alone, personal antecedents can highlight the fact that the instructor is practically competent in the subject matter they are teaching, which should lead to higher ratings of credibility. This increased credibility should ultimately increase student evaluations, which is a goal for which we all strive.

Another aspect of this study, the effects of race on perceived credibility, produced hopeful results. The effect of race on expertise and credibility was not significant. Although this resonates within some of the literature such as Patton's (1999) finding that African American instructors were more credible than European instructors, many would find this result strange. This study was limited by the lack of racial diversity among participants. As previously noted, the world is quite diverse and becoming increasingly so by the day. This study did not account for the voices of the minority population due to limited access at the large Midwestern University. So future research should seek minority participants and compare their responses to those presented in this work. Also, this study limited race to black and white 'applicants' only. The work could be extended by adding other races and comparing those findings to the ones reported in this work.

Although this study has limitations, as all studies do, the limitations do not explain the nature of the results observed. The undergraduates sampled in this study did not alter their credibility and expertise ratings using race as a guide, so perhaps, as they become the decision makers of tomorrow, they will continue to assess the qualification of candidates without emphasis being placed upon their race. Despite the fact that this is a hopeful result for the future, it is also a non-representative result given the current population of decision makers. Undergraduates, generally seem to be more liberal in their views as opposed to the larger society. Undergraduates also tend to be idealistic in their views, due to their lack of experience. For future research, it would be intriguing to replicate this study on a non-undergraduate sample. We should hold on to the hope that

the current undergraduate population is equitable in their decision making practices, but a test within the current decision making population would better assess the current state of the use of race in hiring decisions.

Although race was not a factor determining the credibility or expertise of the hypothetical job applicant, there was an interesting, yet unwarranted assumption that was frequently reported. The assumption that an applicant without a photograph was white was prevalent, yet unwarranted. Future research could seek to understand the cognitive processes underlying the assumption, what caused people to assume that the applicant was white? It is possible that the education and experiences presented, as well as the name "Jennifer Johnson" were consistent with the participants' experiences of White applicants. Through the utilization of the growing body of literature relating to expectancy violations, future research could consider the question of how racially related expectancy violations may change (or not) credibility ratings.

Through this study, we can be more confident that technical and practical competencies are independent constructs, but when both competencies are high credibility ratings will be at their highest. This study is consistent with the previous explication and measurement of practical and technical competence as components of expertise with technical competence being skillfulness by virtue of possessing special knowledge which is achieved through training, reading, formal education, and scholarly pursuits and practical competence, or experienced expertise being skills that result from direct participation in events or activities which is developed through practice, experience, or trial and error. The literature has long supported the notion that expertise is a component of credibility (Applbaum, & Anatol, 1973; Chaiken, & Maheswaren, 1994; Hovland, Janis, & Kelly, 1953; Posner, & Kouzes, 1988; Sobczak, & Bowers, 1993; Sternthal, Phillips, & Dholakia, 1978; Tuppen, 1974; Wu, & Shaffer, 1987). We can conclude that expertise, when well measured, is a strong predictor and necessary factor of credibility and that credibility can influence the desirability an applicant.

APPENDIX A

Survey Instrument

Thank you for your feedback toward our applicant. All feedback that we receive is important, and we value your input.

Before you begin the survey, please list everything that you remember about the applicant, and your impressions of how his/her skills will meet the needs of our organization.

Our applicant would like to have your advice concerning the best way to create a resume. What information would you include, change, or delete from the resume that you were presented? What should the applicant do to enhance his/her resume?

Please circle the response which best matches your feelings about the Applicant.

Classy	5	4	3	2	1	Not Classy
Trained	5	4	3	2	1	Untrained
Biased	5	4	3	2	1	Unbiased
Educated	5	4	3	2	1	Uneducated
Elegant	5	4	3	2	1	Plain
Realistic	5	4	3	2	1	Idealistic
Qualified	5	4	3	2	1	Unqualified
Skilled	5	4	3	2	1	Unskilled
Informed	5	4	3	2	1	Uninformed
Able	5	4	3	2	1	Inept
Sexy	5	4	3	2	1	Not Sexy
Intelligent	5	4	3	2	1	Unintelligent
Objective	5	4	3	2	1	Subjective
Reliable	5	4	3	2	1	Unreliable
Beautiful	5	4	3	2	1	Ugly
Honest	5	4	3	2	1	Dishonest
Expert	5	4	3	2	1	Inexpert
Believable	5	4	3	2	1	Unbelievable
Competent	5	4	3	2	1	Incompetent
Sincere	5	4	3	2	1	Insincere
Credible	5	4	3	2	1	Not Credible
Intellectual	5	4	3	2	1	Narrow
Empathic	5	4	3	2	1	Not Empathic
Practiced	5	4	3	2	1	Beginning
Dependable	5	4	3	2	1	Undependable
Participant	5	4	3	2	1	Observer
Attractive	5	4	3	2	1	Unattractive
Trustworthy	5	4	3	2	1	Untrustworthy
Experienced	5	4	3	2	1	Inexperienced
Authoritative	5	4	3	2	1	Not Authoritative
Understanding	5	4	3	2	1	Judgmental
Knowledgeable	5	4	3	2	1	Not Knowledgeable

Please answer each of these questions about the applicant based upon their resume which was provided and our job description.

1. I would recommend that this applicant receive an interview by members of your organization.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

2. I believe that this applicant is an expert consultant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

3. I believe that this applicant has the experience necessary to be a good consultant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

4. I believe that this applicant has the education necessary to be a good consultant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

5. I believe that this applicant has the skills necessary to be a good consultant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

6. I believe this applicant has presented presentations as a consultant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

7. I believe this applicant has had consulting experiences.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

8. I would be more likely to recommend someone who is highly educated instead of someone who is highly experienced.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

9. I believe that natural talent is more important than educational experience.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

10. I believe that experience and education are equally important.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

11. I believe that I would like this applicant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

12. I believe that I am similar to this applicant.

Strongly agree Moderately agree Barely agree Disagree Disagree strongly

Without referring to the application materials, please answer the following questions.

What was the ethnicity of today's applicant (please circle one)?

Caucasian African-American Hispanic

Asian Multi-ethnic Other _____

What was the approximate age of the applicant? _____

What was the sex (male/female) of the applicant? _____

What was the name of the applicant? _____

How much education did the applicant have? _____

How much work experience did the applicant have? _____

Were there any mistakes in the resume document? Yes No

If yes, how many mistakes did you find? _____

Please tell us a little about yourself. Remember, all of your responses will remain confidential.

1. What is your sex? Male Female

2. What is your age? _____

3. What is your ethnicity (please circle one)?

Caucasian African-American Hispanic

Asian Multi-ethnic Other _____

APPENDIX B

Confirmatory Factor Analysis for Credibility, Practical and Technical Competencies

Predicted

	1	2	3	4	5	6	7	8	9	10	11	12	501	502	503
1													0.77	0.72	0.77
2	0.6												0.78	0.8	0.78
3	0.54	0.55											0.7	0.63	0.89
4	0.32	0.32	0.29										0.41	0.29	0.31
5	0.44	0.44	0.4	0.23									0.57	0.51	0.41
6	0.46	0.47	0.42	0.25	0.34								0.7	0.65	0.62
7	0.6	0.61	0.55	0.32	0.45	0.55							0.72	0.85	0.59
8	0.47	0.48	0.43	0.25	0.35	0.44	0.57						0.63	0.67	0.55
9	0.6	0.61	0.55	0.32	0.45	0.55	0.72	0.57					0.73	0.85	0.62
10	0.57	0.58	0.52	0.31	0.42	0.39	0.5	0.4	0.5				0.69	0.49	0.76
11	0.53	0.54	0.48	0.28	0.39	0.35	0.46	0.37	0.46	0.53			0.82	0.73	0.7
12	0.69	0.7	0.62	0.37	0.51	0.46	0.6	0.48	0.6	0.69	0.64		0.81	0.63	0.91

Error Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	501	502	503
1													0.77	0.72	0.77
2	-0.11												0.78	0.8	0.78
3	-0.1	-0.07											0.7	0.63	0.89
4	0.08	0.1	0.09										0.41	0.29	0.31
5	0.12	0.07	0.08	-0.28									0.57	0.51	0.41
6	-0.08	-0.11	-0.07	0.02	-0.08								0.7	0.65	0.62
7	0	-0.05	0.07	0.1	0.09	0.04							0.72	0.85	0.59
8	0.02	-0.05	-0.01	0.03	-0.04	-0.06	0.01						0.63	0.67	0.55
9	0	-0.06	0.04	0.11	0.06	0.01	-0.07	0.04					0.73	0.85	0.62
10	-0.03	0.05	-0.25	0.19	0.22	-0.06	0.18	0.09	0.08				0.69	0.49	0.76
11	-0.08	-0.15	-0.13	-0.05	-0.02	-0.18	-0.12	-0.17	-0.11	0			0.82	0.73	0.7
12	0.07	0.08	-0.11	0.08	0.14	-0.03	0.11	0.03	0.13	0	0		0.81	0.63	0.91

Items have been assigned to factors as follows:

Credibility	=	1	2	3	4	5
Practcomp	=	6	7	8	9	
Techcomp	=	10	11	12		

Factor correlations

	Credibility	Practcomp	Techcomp	alphas:	Average correlation within clusters:
Credibility	100	92	98	0.78	0.42
Practcomp	92	100	78	0.84	0.57
Techcomp	98	78	100	0.83	0.62

Item and factor correlation matrix

	1	2	3	4	5	6	7	8	9	10	11	12	501	502	503
1	0.6	0.71	0.64	0.24	0.32	0.54	0.6	0.45	0.6	0.6	0.61	0.62	0.77	0.72	0.77
2	0.71	0.61	0.62	0.22	0.37	0.58	0.66	0.53	0.67	0.53	0.69	0.62	0.78	0.8	0.78
3	0.64	0.62	0.49	0.2	0.32	0.49	0.48	0.44	0.51	0.77	0.61	0.73	0.7	0.63	0.89
4	0.24	0.22	0.2	0.17	0.51	0.23	0.22	0.22	0.21	0.12	0.33	0.29	0.41	0.29	0.31
5	0.32	0.37	0.32	0.51	0.32	0.42	0.36	0.39	0.39	0.2	0.41	0.37	0.57	0.51	0.41
6	0.54	0.58	0.49	0.23	0.42	0.42	0.51	0.5	0.54	0.45	0.53	0.49	0.7	0.65	0.62
7	0.6	0.66	0.48	0.22	0.36	0.51	0.73	0.56	0.79	0.32	0.58	0.49	0.72	0.85	0.59
8	0.45	0.53	0.44	0.22	0.39	0.5	0.56	0.45	0.53	0.31	0.54	0.45	0.63	0.67	0.55
9	0.6	0.67	0.51	0.21	0.39	0.54	0.79	0.53	0.73	0.42	0.57	0.47	0.73	0.85	0.62
10	0.6	0.53	0.77	0.12	0.2	0.45	0.32	0.31	0.42	0.57	0.53	0.69	0.69	0.49	0.76
11	0.61	0.69	0.61	0.33	0.41	0.53	0.58	0.54	0.57	0.53	0.49	0.64	0.82	0.73	0.7
12	0.62	0.62	0.73	0.29	0.37	0.49	0.49	0.45	0.47	0.69	0.64	0.83	0.81	0.63	0.91
501	0.77	0.78	0.7	0.41	0.57	0.7	0.72	0.63	0.73	0.69	0.82	0.81	1	0.92	0.98
502	0.72	0.8	0.63	0.29	0.51	0.65	0.85	0.67	0.85	0.49	0.73	0.63	0.92	1	0.78
503	0.77	0.78	0.89	0.31	0.41	0.62	0.59	0.55	0.62	0.76	0.7	0.91	0.98	0.78	1

APPENDIX C

Correlation Matrices

Original Correlation Matrix

	practcomp (manipulation)	techcomp (manipulation)	practcomp (scale)	techcomp (scale)	credibility	interview
practcomp (manipulation)	1					
techcomp (manipulation)	-0.02	1				
practcomp (scale)	0.51	0.31	1			
techcomp (scale)	0.17	0.71	0.64	1		
credibility	0.32	0.5	0.76	0.81	1	
interview	0.43	0.31	0.73	0.66	0.73	1

Corrected Correlation Matrix

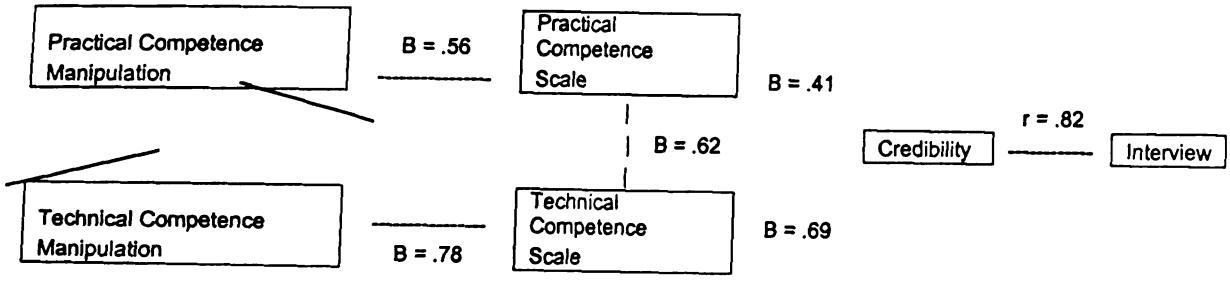
	practcomp (manipulation)	techcomp (manipulation)	practcomp (scale)	techcomp (scale)	credibility	interview
practcomp (manipulation)	1					
techcomp (manipulation)	-0.02	1				
practcomp (scale)	0.56	-0.01	0.84			
techcomp (scale)	-0.02	0.78	-0.01	0.83		
credibility	0.22	0.53	0.4	0.68	0.78	
interview	0.18	0.44	0.33	0.56	0.82	1

Reliabilities

	1
	1
	0.84
	0.83
	0.78
	1

APPENDIX D

Proposed Path Model



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