

A NEW USE OF FRAME-OF-REFERENCE TRAINING: IMPROVING REVIEWERS'
INFERENCES FROM BIODATA INFORMATION

by

JOEL THOMAS LUNDSTROM

B.A., University of Northern Iowa, 2000
M.S., Kansas State University, 2004

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Psychology
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2007

Abstract

A commonly accepted practice in employment selection is to collect biographical information in the form of résumés. Surprisingly, little research is conducted in this area to learn how reviewers evaluate relevant biographical information and considerable less research is devoted to exploring possible methods on how to improve this evaluation process. Current research explored one possible training method that may later show great utility in improving accuracy and consistency in ratings for a number of work-related constructs. Frame-of-reference training, which is primarily utilized in the field of performance appraisal, was hypothesized to be a beneficial training technique in an effort to improve accuracy. Frame-of-reference (FOR) training attempts to create a common frame of reference among raters when assessing ratees' behaviors. Through a process of practice and feedback, FOR training tunes raters to common notions of what good or poor would be on a particular dimension. The result is often more accurate ratings with less variation between raters. Personality (conscientiousness, extraversion, and agreeableness only), general cognitive ability, and organizational citizenship behaviors were the constructs of interest. The analysis provided initial support for most of the hypotheses which suggested that frame-of-reference training would create more accurate and reliable estimates of applicant's personality, cognitive ability, and even organizational citizenship behaviors. In addition to influencing participants' estimates of applicant's scores on a number of workplace constructs, it was also found that participants were influenced as a function of type of training on their willingness to interview and overall impressions of the applicants. Limitations and suggestions for future research are also discussed.

A NEW USE OF FRAME-OF-REFERENCE TRAINING: IMPROVING REVIEWERS'
INFERENCES FROM BIODATA INFORMATION

by

JOEL THOMAS LUNDSTROM

B.A., University of Northern Iowa, 2000
M.S., Kansas State University, 2004

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Psychology
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2007

Approved by:

Major Professor
Patrick Knight

Copyright

JOEL THOMAS LUNDSTROM

2007

Abstract

A commonly accepted practice in employment selection is to collect biographical information in the form of résumés. Surprisingly, little research is conducted in this area to learn how reviewers evaluate relevant biographical information and considerable less research is devoted to exploring possible methods on how to improve this evaluation process. Current research explored one possible training method that may later show great utility in improving accuracy and consistency in ratings for a number of work-related constructs. Frame-of-reference training, which is primarily utilized in the field of performance appraisal, was hypothesized to be a beneficial training technique in an effort to improve accuracy. Frame-of-reference (FOR) training attempts to create a common frame of reference among raters when assessing ratees' behaviors. Through a process of practice and feedback, FOR training tunes raters to common notions of what good or poor would be on a particular dimension. The result is often more accurate ratings with less variation between raters. Personality (conscientiousness, extraversion, and agreeableness only), general cognitive ability, and organizational citizenship behaviors were the constructs of interest. The analysis provided initial support for most of the hypotheses which suggested that frame-of-reference training would create more accurate and reliable estimates of applicant's personality, cognitive ability, and even organizational citizenship behaviors. In addition to influencing participants' estimates of applicant's scores on a number of workplace constructs, it was also found that participants were influenced as a function of type of training on their willingness to interview and overall impressions of the applicants. Limitations and suggestions for future research are also discussed.

Table of Contents

List of Figures	ix
List of Tables	x
CHAPTER 1 - Introduction	1
Biodata	2
History	3
Biodata Validity and Utility.....	6
Résumés as Biodata Information	9
Frame-of-reference training.....	14
Accuracy Hypotheses.....	17
Hypothesis 1:	17
Hypothesis 2:	17
Hypothesis 3:	17
Interrater Reliability Hypotheses	18
Hypothesis 4:	18
Hypothesis 5:	18
Hypothesis 6:	18
CHAPTER 2 - Method.....	19
Participants.....	19
Procedure	19
Frame-of-reference training	20
INFO-Only Training	22
Materials	22
Applicant Materials.....	23
Biographical Information Blanks.....	23
Personality.....	25
General Cognitive Ability.....	26
Organizational Citizenship Behavior	26
CHAPTER 3 - Results	27

Accuracy Hypotheses.....	44
Hypothesis 1:	44
Hypothesis 2:	44
Hypothesis 3:	45
Interrater Reliability Hypotheses	45
Hypothesis 4:	46
Reliability Analysis for Evaluations of Personality.....	46
Hypothesis 5:	46
Reliability Analysis for Evaluation of General Cognitive Ability.....	47
Hypothesis 6:	47
Reliability Analysis for Evaluation of OCBs.....	47
Self-Report Evaluation for Understanding of Constructs.....	48
Other Analysis	49
CHAPTER 4 - Discussion	55
Application.....	59
Limitations	60
Future Research	61
Conclusion	63
References.....	64
Appendix A - FOR Training Biographical Information Blank Training Sheet.....	72
Biographical information blanks	72
Appendix B - Participants Rating Sheet	75
Appendix C - FOR Training	76
Appendix D - INFO-Only Training Materials	80
Appendix E - Résumé for Joan D. Smith.....	83
Appendix F - Biographical Information Blanks for Joan D. Smith.....	85
Appendix G - Résumé for Joan J. Smith.....	87
Appendix H - Biographical Information Blanks for Joan J. Smith.....	91
Appendix I - Résumé for John D. Smith.....	93
Appendix J - Biographical Information Blanks for John D. Smith	99
Appendix K - Résumé for John T. Smith	101

Appendix L - Biographical Information Blanks for John T. Smith.....	104
Appendix M - Participants Overall Rating Form.....	106
Appendix N - Big Five Inventory	107
Appendix O - The Big Five Inventory Scoring Guide.....	109
Appendix P - Organizational Citizenship Behavior Measure.....	110

List of Figures

Figure 1 Means for All Constructs for Training Conditions Compared to Target Scores for Excluded Applicant.....	38
Figure 2 Means for All Constructs for Training Conditions Compared to Target Scores for Last Applicant.....	41

List of Tables

Table 1 Biographical Information Blanks.....	24
Table 2 Demographics	27
Table 3 Evaluation Considerations for Target Score for John T. Smith.....	31
Table 4 Evaluation Considerations for Target Score for John D. Smith	35
Table 5 Descriptives for Excluded Applicant Evaluations.....	37
Table 4 Descriptives for Last Applicant Evaluations	39
Table 6 ANOVA Summary Table for All Constructs	43
Table 7 Reliability Analysis for Personality Evaluations.....	46
Table 8 Reliability Analysis for Cognitive Ability Evaluations.....	47
Table 9 Reliability Analysis for OCB Evaluations.....	48
Table 10 Descriptive Analysis of Self-Evaluations for Construct Comprehension	49
Table 11 Overall Evaluation of Applicant.....	50
Table 12 ANOVA Summary Table for Overall Evaluation and Interview Interest	51
Table 13 ANOVA Summary Table for Evaluation of the Excluded Applicant	52
Table 14 Frequencies of FOR Training Relevant Questions	53
Table 15 Descriptive Analysis of FOR Training Relevant Questions.....	54

CHAPTER 1 - Introduction

Past behavior is the best predictor of future behavior. This general notion serves as the premise for one of the oldest methods for predicting performance. The common use of biographical information can be attributed to the straightforward logical assumptions on which the approach is based on: People act in consistent ways. The best way to know how a person may act in a future situation is to assess how the person as acted in the past in similar situations (Levy, 2006). Understanding biographical information, even information on hobbies or activities that do not appear directly related to the job, can be considered potentially useful and indicative of future job performance (Mael, 1991). Biographical information, obtained through biographical information blanks (BIBs) or résumés, can cover a host of topics, such as club membership, leadership experience, family life, etc. This information has been shown to be predictive of training success, absenteeism, turnover, delinquency, substance abuse, achievement, accidents, etc. (Stokes, 1999).

Currently, employers reviewing biographical information make many inferences from biodata information that is presented to them by applicants. However, empirically little is known as to how information is processed and how employment screening decisions are made. Additionally, few techniques have been demonstrated to improve the accuracy of such inferences. Scoring the biodata information in a meaningful way can be difficult. In order for BIBs to add valuable information to the selection process, a great deal of effort is needed to ensure reliability in scoring the information provided. The proposed research will make an effort to contribute to the literature in this area and suggest that a technique from the realm of performance appraisal, called frame-of-reference training, may increase interrater reliability and

reduce the consideration given by raters to information that has been deemed invalid or not worthy of consideration, therefore increasing the accuracy of the inferences drawn from biodata information.

Biodata

Biodata is generally obtained through biographical information blanks, on which personal historical information is collected for review and for making selection decisions. Applicants are asked numerous questions about their past experiences, attitudes, hobbies, etc., painting a more complete picture of the applicant's knowledge, skills, and abilities than can be obtained through other traditional methods of personnel selection. Schmidt & Hunter (1998) have found that biographical data can predict general cognitive ability well. According to Bohlander and Snell (2004), researchers have found BIBs to add incremental validity to most traditional selection processes. Others (Mumford, 1999; Hunter & Hunter, 1984; Mumford & Stokes, 1992) suggest that biographical information has been proven to be the best available alternative to cognitive ability measures. Additionally, background data has often provided less evidence for, and concerns with, adverse impact than has cognitive ability (Hunter & Hunter, 1984; Mumford & Stokes, 1992).

In short, Levy (2006) suggests that the evidence for biodata and its validity for work performance are consistent and quite clear. Vinchur, Shipmen, Switzer, and Roth (1998) suggest, in their review of predictors of job performance, that biodata was the strongest predictor for salespeople's performance. In fact, they found very strong correlation coefficients ($r=.52$) when relating biodata and managerial assessments of sales performance. Schmitt et al. (1984) found validity coefficients consistent with Hunter and Hunter's (1984) more extensive review ($r=.32$ and $r=.37$ respectively). Using biodata to predict a variety of criteria such as leadership

performance, training, productivity, or even employee theft generally yields very acceptable validities (Asher, 1972; Ghiselli, 1973; Hunter and Hunter, 1984; Mumford and Owens, 1987; Owens, 1976; Reilly and Chao, 1982). It is clear that biodata validity is generally well established (Allworth and Hesketh, 2000). Overall, most psychologists understand the importance of biodata and agree that its validity for important work constructs is satisfactory.

History

The history of biodata can be traced back to the late nineteenth century, when questions were asked of insurance agents regarding life experiences. The Washington Life Insurance Company of Atlanta asked questions regarding previous experience, where applicants lived, and even marital status, and found success in predicting performance (Ferguson, 1961, cited in Owens, 1976). Asking respondents questions, such as number of dependents, place of residence, and marital details, allowed researchers to predict sales performance quite well (Hogan, 1994). It is important to note that many of the early approaches to the development of biodata items and scaling used this purely empirical approach, and were left lacking in theoretical support for the relationship between items and work-related constructs.

In the *Biodata Handbook* (1994), Stokes suggests that as early as 1915, Woods identified good performers in sales on the basis of application blank information. In 1917 Scott, in his *Aids in the Selection of Salesmen*, discussed the use of life histories as a valuable selection instrument. Weighting procedures for background information can be seen in Goldsmith's (1922) article describing procedures for predicting sales professionals' success. According to Stokes (1994), many studies continued to establish the importance of life histories for sales professionals (Kenagy & Yoakum, 1925; Manson, 1925) and even for other jobs (Viteles, 1932).

New formats, including the multiple-choice format developed in a military setting, showed a great deal of success in predicting training achievement from biodata information (Guilford & Lacey, 1947; Levine & Zacherty, 1951; Parish & Drucker, 1957; Roy, Brueckel, & Drucker, 1954). During the same time period, the civilian sector experienced other important revolutions in the use of biodata information, such as the weighted application blank (England, 1961, 1971; as cited in Stokes, 1994).

Stokes (1994) credits William Owens' pool of biodata items for providing, through principle components analysis, the structure of many biodata constructs that were found to be valid predictors of a number of important workplace criteria. Owens' factors were predictive of job satisfaction, career choice, and a variety of other criteria. Ward and Hook (1963) furthered the cause by identifying subgroups of applicants that moderated this predictive validity.

A fundamental shift in the history of biodata can be seen in item-generation approaches developed in response to criticisms that existed at the time suggesting that generation of items had been atheoretical in nature, and could be considered examples of "dustbowl empiricism." This criticism is still cited today as well. The basic argument stems from the nature of biodata having, at times, little logical or theoretical connection with the criterion of interest. For example, an item asking if the respondent had ever made a model airplane surfaced in World War II as one of the best predictors of pilot training success. To many practitioners, knowing that the factors are related is enough, without understanding why. However, understanding why is important for more reasons than just being scientifically sound.

The "why" question regarding the validity of biodata items is an important one that needs to be addressed. For instance, prospective employees and many employers generally have favored selection procedures that have a high degree of "face validity." Evidence for this can be

seen with a survey of over 200 human resource executives (Terpstra, 1996), in which subjects rated selection methods to their ability to produce good employees. Biographical information blanks were cited as being below average, and were the lowest rated selection instrument. It is also important to note that the second lowest ranked predictor by HR executives in this study was general cognitive ability, which of course is generally regarded as the most valid predictor for workplace performance (Hunter and Hunter, 1984; Schmidt and Hunter, 1998).

Other evidence demonstrating preference for instruments that applicants perceive as possessing high degree of face validity can be seen in the meta-analysis conducted by Hausknecht, Day, and Thomas (2004). Their findings suggest that applicants' perceptions of selection instruments correspond most to face validity issues and perceived predictive validity. Applicants' positive perceptions led to higher ratings of procedural justice, distributive justice, and attitudes toward selection tests with high face validity.

The current state of biodata measurement has little to concern itself with in regards to charges of "dustbowl empiricism." Today, most researchers and practitioners are using more rational methods for scoring and developing items for biodata measures, which in turn increases the acceptance from applicants as described above. Clearly, selection methods using job-related factors have been favored and this trend can be seen in biodata measures that first identify important constructs from a job analysis and create items appropriately. Now, most biodata measures have both theoretical support as well as statistical support for the relationships upon which they are based.

In conclusion, the history of biodata measurements for employee selection shows the robust nature of biodata and its ability to maintain a high degree of validity for work constructs, with or without theoretical support. The majority of biodata measures benefit from the logical

assumptions upon which they are based. Knowing ones' past behavior can be an excellent source of information and will reasonably predict future behavior. Using this knowledge for purposes of selection has been done for over a hundred years and is likely to continue for the foreseeable future.

Biodata Validity and Utility

Review of the literature regarding biodata shows tremendous support for the validity of this information in predicting a number of work-related outcomes. There has been an almost exclusive emphasis on research validating biodata for work performance. Due to this focus, most discussions regarding validity only look at criterion-related validity, specifically predicting performance, and thus ignore other important validity approaches that would be suitable to biodata such as construct validity and content validity. Biodata's meaningfulness could be characterized as having a great deal of untapped potential in its ability to define constructs and perhaps even identify subgroups of applicants that moderate the empirical validity.

Although a variety of biodata instruments have been used for employee selection for over a hundred years, it is sometimes considered an alternative predictor due to the widely accepted use of cognitive ability tests. Biodata has often been characterized as possibly being a source of some unique validity to an employee selection process. An excellent review of the utility and validity of predictors of job performance, and the special case of biodata, can be found in Hunter and Hunter (1984). These authors make a case for the difficulty of using cognitive ability test today in the selection of employees. Adverse impact develops strong concerns in the use of cognitive ability tests because of the differences in mean ability scores across protected classes. However, lowering cognitive ability cut scores or eliminating test bias and improving test construction is ineffective (Schmidt & Hunter, 1981). As Hunter and Hunter (1984) point out,

adverse impact charges resulting from the use of cognitive ability tests can only be eliminated by sacrificing the benefits of the tests. Their assumptions and research suggest that altering cognitive ability scores to exclude differences corresponding to racial groups also decreases the scores' predictive validity.

More recently, Potosky, Bobko, and Roth (2005) have conducted research that questions some of the assumptions about biodata's ability to reduce adverse impact. It was found that adding a biodata predictor to a cognitive ability measure actually increased adverse impact potential when compared to the cognitive ability measure alone. Also of interest is the finding that adding any alternative predictor to cognitive ability measures in an effort to reduce the likelihood of adverse impact usually results in only modest improvements. This is similar to the finding of Ryan and associates (1998), who conclude that it is difficult to use alternative predictors to reduce adverse impact.

Meta-analyses focusing on the validity of selection instruments generally draw a great deal of support for biodata measures. Reilly and Chao (1982) found that biographical inventories as a predictor for performance have an average validity of .38. A meta-analysis (Hunter & Hunter, 1984) has found average validities from .20 to .29, depending on the performance measures used, in military studies with the criterion being supervisory ratings. Dunnette (1972), as described in Hunter and Hunter (1984), in a meta-analysis study reviewing selection methods, found biographical inventories (average validity = .34) to be the only method in the range of cognitive ability (average validity = .45).

However, it is necessary to concede that the difference between biographical measures and cognitive ability is too large to disregard as insignificant. Hunter and Hunter (1984) estimate that the average validity of biodata being .37 and cognitive ability being .47 would in essence

mean a loss of near 30% of the value gained by using cognitive ability tests as opposed to no selection techniques being used. The above issue is clearly significant, but does nothing to remove biodata as the leading alternative to cognitive ability.

In other settings supervisor ratings yield average validities of .37 for biodata measurements. Biodata's average validity for promotion is .26, while training success is predicted by biodata with a average validity of .30. Tenure is also reliably predicted by biodata with an average validity of .26 commonly found. Although many of the above validity coefficients do not seem extremely impressive, biodata measures are generally only second in rank to that of cognitive ability measures. (Hunter & Hunter, 1984)

Although it is true that biodata validity is not as high as most practitioners would want, there appears to be a number of factors that may be unfairly restricting the validities of biographical information in research studies that probably wouldn't have such an impact in applied practice. Hunter and Hunter (1984) provide a list of arguments for why most research studies are likely to report lower validity coefficients regarding biodata than other selection instruments. Arguably, biodata measures are uniquely affected by these factors compared to other selection tools. First, biodata measures are commonly keyed for an individual organization or business. However, it is reasonable to assume that keying of these biodata measures are not robust to transferability issues. That is, meta-analyses cannot account for the fact that almost all biodata instruments are designed and constructed to be suitable and specialized for the organization in which they will be used. Second, it is most likely necessary that every biodata key be designed specifically for a particular criterion measure. It seems reasonable to assume that it is possible that one biodata key could predict a particular criterion quite well, but the same key could be only weakly predictive, or not predictive at all, of another criterion of interest (i.e.

Tucker, Cline, and Schmitt, 1967). Due to the specific nature of biodata measures, it should not be surprising that biodata keys may also suffer from validity decay over time. For example, Schuh (1967) found that in one series of studies the validity coefficients fell from .66 to .52 to .36 to .07. Brown (1978) used data from a biodata key that was designed for insurance salesman in 1939 (.22) and in 1970 (.08). Clearly this decay could be understood as the result of changes that occur in common life events over time. Life histories of applicants today probably would only vaguely resemble life histories of the applicants' grandparents. Changes in education, technology, leisure activities, etc. happen quickly in the 20th and 21st century, and it is therefore reasonable to expect that common life events will differ dramatically between generations.

There are a few other concerns relevant to the discussion of the validation of biodata measures. Even though most biodata research boasts large to moderate validity coefficients, this only speaks to predictability. That is, it would be incorrect to conclude that the high correlations suggest any kind of causal relationships. It is very possible that other causal relationships, or currently unmeasured factors, are creating the effects (James, Muliak, & Brett, 1982; Mumford 1999).

Résumés as Biodata Information

Brown and Campion (1994) make two strong arguments for the importance of studying biodata information from a recruiter's perspective. Their contention is based on the widespread use of application blank information and résumés, and the logical assumption that nearly every selection decision has been affected, directly or indirectly, by some evaluation or judgment made about information presented in the biodata realm. Despite the accepted use of these selection instruments, little evidence exists in the literature to suggest how employers use this information, or how they develop conclusions and make selection decisions. Research commonly focuses

more on developing processes that ensure the validity of using such an approach, usually through standardizing and structuring biodata assessments. Little evidence focuses on how employers make decisions and judgments about this information in common practice. It is likely that most of these decisions are made by reviewers who have been provided with little structure and education about how to use these measures.

Biodata information taken from résumés and application blanks has been used widely for the last half century. In 1975, Levine & Flory suggested that over one billion résumés and applications are screened every year. Today, estimates range a great deal, but it is reasonable to assume the popularity of these approaches is at the very least remaining stable.

Résumés are often collected and used as an initial step in the selection process, and are by far one of the most common practices in making selection decisions (Dipboye & Jackson, 1999). The practice of reviewing résumés can be thought of as an inexpensive, pain-free, and extremely convenient source of valuable information. Many, if not most, potential job applicants keep résumés prepared and can readily provide biographical information if called upon to do so. Reviewers can quickly evaluate and draw several conclusions based on information assessed from a rapid review of many résumés. Formal reviews and evaluation are rarely conducted, and most appraisals of information provided in a résumé can be described as superficial at best. A larger concern is that résumé evaluation training is virtually never conducted, yet could prove to be extremely useful. Résumé information also can provide a great deal of information to compare between applicants, as other sources of information may not vary a great deal. That is, education, work experiences, and other information are routinely provided in a brief summary in the résumé format.

In practice, proper evaluation of résumé information is essential to the personnel selection procedure, since errors can be disastrous for organizations, reducing the pool of acceptable and possibly high-performing candidates. The decision to advance a candidate beyond the initial step should be based on sound psychometric principles, yet little effort has been made by organizations to improve accuracy and validity of this decision. Recently, the literature has seen an advance in the breadth of research devoted to empirically improving the predictions of recruiters' impressions and the decisions they make.

An appropriate way to analyze résumé information is to assume that this information is an adequate representation of an applicants' experience. This culmination of work experience and educational attainments are presented naturally in a way that is important for the workplace domain. As discussed previously regarding biodata in general, résumé biodata provides employers with the same information, such as interests, work experience, abilities, and possibly personality. This information can of course be used to predict work-related criteria. Clearly it is difficult to quantify information extracted from résumés and therefore it may be a challenge to establish a great deal of its predictive validity. However, the basic premise behind these assumptions of validity is also equivalent for biodata in general. Past behavior is the best predictor of future behavior.

Emerging research shows the ability of résumé biodata information to predict dispositional attributes and personality. This recent addition to the literature demonstrates a great deal of promise as to the validity of using applicants' résumé biodata. For instance, Cole, Feild, & Giles (2003) found evidence to support the notion that it is possible to infer personality, and even cognitive ability, from job applicants' résumés. First, support was found testing the notion that recruiters could reliably assemble information from an applicant résumé, and would

be able to reasonably apply it to specific biodata areas. Also, recruiters' inferences of academic achievement and education background on résumés were significantly related to applicant mental ability. Divergent validity could also be seen in social/extracurricular activities not being significantly correlated with cognitive ability. Also of interest was the finding that electing to report versus not report GPA information on a résumé was a significant predictor of conscientiousness scores and cognitive ability. Likewise, applicants' résumés that report academic achievement information are more likely to be submitted by applicants high in conscientiousness. That is, the mere reporting of academic achievement apparently suggest a conscientious individual, while exclusion of academic information would suggest the individual is low in conscientiousness. Social/extracurricular scores, not surprisingly, correlated with extraversion scores. Generally, this study demonstrated the ability of résumé inferences to predict mental ability and personality. It is reasonable to assume if these authors had used a more experienced candidate pool (using an all student population creates little variance in work experience), even greater accuracy of inferences and comparisons could have possibly been found. Also, while this research is important in establishing that it is possible for organizations to infer such biographical information from résumés, it does not address possible techniques for strengthening the inferences' accuracy.

In 2005, Cole, Feild, & Stafford explored the notion that applicant information provided through the medium of résumés could provide valid information on applicant personality. It is interesting that this had not been frequently investigated in the previous research since reviewers and employers commonly make assumptions about applicant personality based on résumés. That is, employers reviewing application materials make assumptions based on an applicant's résumés as to what the person is like and could be like. These assumptions could guide future

interactions with the applicant, and directly influence the decision to allow applicants to advance in the selection process.

Cole and associates (2005) investigated whether applicant personality can be inferred from résumés. Fifty-two undergraduates pretended to be in a hypothetical hiring scenario, in which their role was to be résumé reviewers. Participants were provided with common employee selection materials, including job description. From this description, reviewers were asked to pay attention to possible knowledge, skills, and abilities that would be important for a person to perform successfully on the job. Next, participants were asked to think about how the information provided on the résumé may reflect the applicant's characteristics, specifically their personality. A lengthy lecture was used to educate the participants on the Big 5 personality traits, résumé screening procedures, and how the information could be used to determine personality of a possible applicant. Results showed that openness to experience and conscientiousness are associated with the applicants' personality self-report measure. Additionally, extraversion, conscientiousness, and neuroticism improved after the training when compared to estimates made before the training. Limitations included sample size, using undergraduates as résumé reviewers, and the lack of a control group.

The current research will in some respects expand on the work of Cole, Feild, and Stafford (2005). That is, using a control group may be a better approach than looking at before-training versus after-training effects. The within-subjects design lends itself naturally to benefit from practice affects. Additionally, the participants were undergraduates enrolled in a capstone strategic management course in a college of business. The study took place with eight weeks between time 1 and time 2. It is reasonable to assume that participants gained valuable knowledge about personnel selection procedures since many of them likely would have been

interviewing and applying for jobs themselves during the same time frame. This lag in time was probably necessary in the previous within-subjects design, since subjects would evaluate the same résumé they had received before the training. If the research had been conducted using a between-subjects design, with a control group that did not receive the training, it would have been possible to compare training versus no training more accurately. It is important to note that this research (Cole, Feild, and Stafford, 2005) was not as interested in the effect of training as they were in the general notion that résumé reviewers can draw valid inferences about applicant personality from résumé information.

It is fascinating that common business practice includes résumés and application blanks, but little is known by practitioners as to how to use these selection instruments. Employers often fail to recognize that recruiters and managers are not born with a skill set that includes making good personnel-selection decisions. More specifically, managers are not bestowed with the ability to extract the appropriate information from résumés and applications, cognitively evaluate information free of biases, assign appropriate weights, and then ultimately make the right decisions. At the same time, evaluating the biodata information is not something that is cognitively demanding, provided that reviewers have had an opportunity to practice these skills and educate themselves on possible pitfalls, and on the benefits of making these evaluations correctly.

Frame-of-reference training

A training model showing a great deal of utility in the literature and in practice is known as frame-of-reference (FOR) training. In essence, FOR training attempts to create a common frame of reference among raters when assessing ratees' behavior, most commonly the assessment is some aspect of performance. FOR training attempts to “tune” raters to common

notions of what good or poor performance behaviors are. The goal of the training would be to reduce or minimize between-rater variations, as well as within-rater variations. Typically, FOR training helps to focus evaluators on certain aspects of the information that have been shown to have predictive validity. That is, FOR training works to have evaluators correctly identify many behaviors that are important for work (i.e. OCBs, leadership constructs, etc.) or are indicative of good performance.

One of the earliest research studies to identify FOR training terminology and methodology was conducted by Bernardin and Buckley (1981). Bernardin and Buckley showed videotapes that demonstrated critical incidents of job performance. In this methodology, the videotaped incidents were illustrative of different levels of performance, including excellent, average, and unsatisfactory. Participants then made judgments and provided their justifications for those judgments. The trainer then provided feedback and correct ratings, based on normative information already collected. Any discrepancies were discussed and corrected. The results displayed greater congruence of assessments across participants following training sessions.

The basic design of Bernardin and Buckley's (1981) frame-of-reference training study was maintained in McIntyre, Smith, and Hassett's (1984) research comparing FOR training to a control group that did not receive the training. Halo error likelihood was reduced with FOR training, while accuracy of ratings increased. Basic components of FOR training were identified as information describing the job to be evaluated, practice and feedback with ratings, and behavioral rationales for ratings given by expert raters.

Research conducted by Athey and McIntyre (1987) found that FOR training improves retention of rater training information when compared to an information-only group. Also, accuracy improved in the FOR training condition compared to information-only and no training

conditions. Additionally, halo error was reduced, though no significant effect was obtained on leniency or severity. It is speculated that the critical factor in improved learning with FOR training must be the rating standards and behavioral examples of rating dimensions that are a major component to FOR training.

Frame-of-reference (FOR) training has gained popularity in recent years as an excellent method for improving rater accuracy. Although there are multiple approaches to rater training programs, frame-of-reference training has been shown to be a straightforward, simple method for establishing inter-rater reliability of ratings. A fair amount of research (McIntyre et al., 1984; Athey & McIntyre, 1987; Pulakos, 1984, 1986) has shown FOR training to be superior to traditional error training in decreasing errors and improving rater accuracy. To date, virtually no research has used frame-of-reference training principles outside the area of performance appraisal. The current research applies the lessons and approaches established from frame-of-reference techniques in the area of personnel selection in order to improve the evaluation of biodata information.

FOR training developed from a need of both researchers and practitioners to increase the reliability and validity of performance appraisal ratings. Rater training has done well to reduce rating errors, and FOR training can improve accuracy. Borman (1979, 1983), Ilgen & Feldman, (1983), and Pulakos (1986) have all focused on increasing accuracy by teaching raters to use a common mental concept or frame of reference for observing and judging what is meant by good performance. Interestingly, it appears that FOR training doesn't just train raters to make better ratings, but it may also profoundly change how raters search for, observe, and collect information that is conducive to accurate assessments (Pulakos, 1984; McIntyre et al., 1984). The latter research has suggested that FOR training can affect how we seek out information that

is relevant for future assessments we will need to make. The proposed research will attempt to use FOR training in this manner. FOR training should be able to create a mental set or cognitive orientation for the rater that will likely enable more accurate assessments of biodata information, specifically résumé and biographical information items.

Accuracy Hypotheses

Hypothesis 1:

Participants with FOR training will be more accurate in their assessment of applicant's personality than will be participants without FOR training.

Hypothesis 2:

Participants with FOR training will be more accurate in their assessment of applicant's cognitive ability than will be participants without FOR training.

Hypothesis 3:

Participants with FOR training will be more accurate in their assessment of applicant's organizational citizenship behaviors than will be participants without FOR training.

It appears that the intuitive conclusions drawn from biographical information in predicting work-related criteria may actually make it unlikely that organizations will devote resources toward making these predictions more accurate. The assumption that managers and reviewers naturally have the knowledge, skills, and abilities to analyze and extract appropriate information from résumés and biographical information blanks seems to be erroneous. However, it may be possible to train raters to attend to the appropriate information, weight information correctly, ignore irrelevant factors, and make accurate selection predictions. Frame-of-reference training may be one vehicle for developing raters who are able to do this, therefore, improving

selection procedures that had been done in a haphazard manner. Frame-of-reference training can provide reviewers with feedback and create within them an appropriate framework to evaluate candidate information. An attempt was made during the training to develop prototypes that accurately represent how candidates with certain attributes should appear on the basis of biodata information. Certain factors can be drawn from the research (Cole, Feild, and Giles, 2003) that would suggest specific biographical information and résumé information will suggest personality types, as well as specific information that has been shown to be correlated with cognitive ability. Inferring the likelihood of candidates to perform extra-role behaviors is not as commonly studied. However this is a possibility, since much attention in résumé information often speaks to past behaviors where candidates take on new projects, helping behaviors at work, as well as situations where civic virtue have been displayed.

Interrater Reliability Hypotheses

Hypothesis 4:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's personality.

Hypothesis 5:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's cognitive ability.

Hypothesis 6:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's organizational citizenship behaviors.

A great deal of logical support for the above hypotheses is readily available. It is likely that the more interaction reviewers have with each other, the more feedback received on their assessments, and more opportunities creating images or frames for high and low performance will aid in making their ratings more homogenous. Also, more interaction between the raters and the experimenter should create a learning environment that would help raters to come to more agreement. Further, if raters are creating categories and references for the important constructs that they are asked to assess, then these categories should become more defined and structured as they are given more examples of what each construct would look like when displayed in the applicant's biographical information. Logically, many reviewers may not have a well-defined framework already developed in their minds for either personality factors or organizational citizenship behaviors, so a training session devoted to the development of a framework would more than likely increase agreement.

CHAPTER 2 - Method

Participants

Participants were 105 community college students with an average age of 25 years. 15.8% of the participants were male and 84.2% were female. The community college is located on a military installation in the Midwest, thus the majority of students were active military or dependents.

Procedure

Participants completed an informed consent form followed by a brief overview of the project. All participants went through identical basic training and lecture explaining the general concepts on which participants would be asked to rate applicants. Specifically, a brief lecture

and question-and-answer period were used to inform all participants of definitions and examples of personality factors (agreeableness, extraversion, and conscientiousness), cognitive ability, and organizational citizenship behaviors. All participants were then given a list of biographical information blank items (see Appendix A) to review, from which, along with the applicant's résumé information, they would later be asked to infer applicants' characteristics. All participants were asked to evaluate the job candidates' responses to the biographical information blanks and their respective résumés on the dimensions of agreeableness, extraversion, conscientiousness, cognitive ability and organizational citizenship behaviors (Appendix B).

The first two practice trials included applicant materials for the first and second applicant, identified to participants as Joan D. Smith and Joan J. Smith respectively. Participants were then asked to evaluate the last two applicants in order, labeled as John D. Smith's and John T. Smith's materials.

Frame-of-reference training

Participants in the FOR training condition initially began as described above using materials presented in Appendix C. The FOR training included some initial references to how different evaluations may be represented in résumé information and biographical information blank responses (Appendix C). Participants in the control condition more abbreviated references to how applicant's personality could be displayed in résumé information and biographical information blank responses (Appendix D). Participants were first given the application materials for Joan D. Smith. At the participant's disposal were a résumé and a list of 10 biographical information blank responses from applicant Joan D. Smith (Appendices E and F). The application materials were then analyzed and participants made a judgment based on the materials as to how the applicant might score on a personality measure, general cognitive ability

measure, and an organizational citizenship behavior measure. Participants completed an evaluation form represented in Appendix B. Participants then discussed with each other examples of biographical information blank responses and résumé information justifying their evaluation of the applicant. Researchers explained that certain attributes are more important than others and participants should have identified certain components as most relevant for a particular dimension. Researchers gave example of evaluation using biographical information blank responses and résumés as well as the proper interpretation of results.

Application materials for Joan J. Smith were presented as the second practice session. Joan J. Smith's résumé and respective responses to the biographical information blank responses are presented in Appendices G and H and were distributed to the participants. Participants then scored the applicant on personality, cognitive ability, and organizational citizenship. Then, again participants were given the opportunity to discuss their respective interpretations and methods for extracting information. Participants then were given feedback and responses and scores were compared to actual reported scores. Discrepancies were discussed and questions were answered.

Application materials were then distributed for John D. Smith (Appendix I and J). Participants were asked once again to review the applicant's résumé information and biographical information blank responses, and then evaluate the applicant on personality variables, general cognitive ability, and likelihood of participating in organizational citizenship behaviors. Participants were no longer given an opportunity to discuss. Finally, applicant materials were distributed for John T. Smith, including résumé information (Appendix K) and biographical information blank responses (Appendix L). John T. Smith was used primarily as the unit of analysis for testing the relevant hypotheses.

INFO-Only Training

INFO-Only training was used as a control condition in the current study. Participants in this condition followed a similar sequence of reviewing applicant materials and were instructed to estimate applicant's personality, cognitive ability, and organizational citizenship behaviors in an identical fashion. Training (Appendix D) was conducted using a lecture method, followed by a question and answer period. INFO-Only training included the same two practice sessions, but participants were not given an opportunity to discuss estimates with others, and were not given frames of reference for high and low performance. INFO-Only participants also completed the overall evaluation form (Appendix B) similar to the FOR training condition. The feedback, frames of reference suggestions, and discussions were the critical difference between FOR and INFO-Only conditions.

Upon completion of either FOR training or INFO-Only training participants were asked a number of follow-up questions (Appendix M). First, participants were asked about their basic understanding of conscientiousness, extraversion, agreeableness, cognitive ability, and organizational citizenship behaviors. Participants were also asked how enjoyable they found the training provided and how useful and helpful they found the practice sessions provided. Additionally, questions were asked in an attempt to assess if people were creating frames of reference in their mind while comparing biodata information. Participants were asked "Do you feel you created an image in your head for what high or low would be for each concept?" and "When evaluating the candidates did you match new information about the candidates to your existing image in your head for what high or low meant for each concept?"

Materials

Applicant Materials

Five sets of applicant materials (1 example, 2 for practice, 2 for analysis) were compiled and distributed. Applicant materials included actual résumés and biographical information blank responses from five different people in a variety of industries. Since the current research was exploring the usefulness of FOR training versus an INFO-only training in reviewers' evaluations, it was not important for reviewers to have access to other information about the job, recruitment methods, or other information about the applicants. It is important to note that all identifiers were removed on the résumés to avoid any issues of confidentiality.

Biographical Information Blanks

Biographical information blanks were compiled from a variety of sources (e.g., Bohlander & Snell, 2004; Howard & Howard, 2001; Guion, 1998; Stokes, Mumford, & Owens, 1994) that included a diverse set of items in part relating to many of the dimensions of interest. Applicants were asked to submit their responses via email and information was organized before distribution to participants. The biographical information blanks are included below in Table 1.

Table 1 Biographical Information Blanks

Biographical Information Blank Items

1. What social clubs are you members of or have been in the past?
 2. When you were a student during your teens, you preferred homework assignment that were:
 - a. Detailed and explicit as to what was expected
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
 3. When working on a project which part do you like best
 - a. Planning it
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. Showing the finished product
 4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom
 - d. Sports
 - e. None of the above
 5. Others look to me to answer difficult questions and solve problems that they do not understand
 - a. Never
 - b. Sometimes
 - c. Often
 - d. Always
 6. Describe experiences you have speaking in front of others. Did you feel comfortable?
 7. Do you prefer reading?
 - a. Information almost only about my business
 - b. Materials based on a variety of areas
 8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.
 9. Do you attend religious services often?
 10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.
-

Personality

Applicants' personality was assessed first by the Big Five Inventory (BFI). The Big Five Inventory (see Appendix N) is a commonly used assessment instrument for measuring the five personality dimensions of conscientiousness, extraversion, agreeableness, openness to experience, and neuroticism (John and Srivastva, 1999). The scoring key for the BFI is presented in Appendix O. The current research elected to only draw inferences about conscientiousness, agreeableness, and extraversion, which have been shown to have greater implications in the workplace. That is, the decision to exclude neuroticism (emotional stability) and openness to experience has to do with their lack of validity for general work-related criteria. Clearly, these can be important for specific career fields, but generally these are regarded as less important in predicting workplace criteria. Also, exclusion of these is not due to any expected inability of biodata inferences to predict them. In fact, it is likely that biodata can provide evidence for all five of the traits. The decision to exclude neuroticism and openness to experiences was also due to the already large amount of new information to be learned by the participants. The ability of reviewers to be cognitively vigilant and astute in inferring so many constructs that they are more than likely unfamiliar with was, and continues to be, a concern. Assessing cognitive ability, organizational citizenship behaviors, conscientiousness, agreeableness, and extraversion requires an extensive review and lengthy training session in order to develop familiarity with these topics, and a basic knowledge of how biodata inferences can be made. Prior to conducting the research, it seemed that including other unfamiliar constructs may reduce our ability to make accurate measures of the effect frame-of-reference training can have on developing accurate inferences. It is important to note that participants reported a very good understanding of the constructs they were asked to evaluate after the study

was conducted (see Table 10). This finding would suggest, contrary to previous expectations, that it is likely that participants could learn to evaluate neuroticism and openness to experience in addition to the other constructs studied.

General Cognitive Ability

General cognitive ability was measured using the Wonderlic Personnel Test. The Wonderlic is a twelve-minute, fifty-question exam assessing cognitive ability. Scores are simply calculated as the number of correct answers given in the allotted time, with an average of a 21 and a standard deviation of 7.2 (Wonderlic Personnel Test, 2002).

Organizational Citizenship Behavior

Organizational citizenship behaviors were self-reported by a commonly used questionnaire (Moorman, et al., 1998) containing 22 items (see Appendix P). The items were measured on a 7-point likert scale ranging from strongly disagree to strongly agree. Sample items include the following:

1. Encourage others to try new and more effective ways of doing their job.
2. Frequently communicate to co-workers suggestions on how the work unit can improve.
3. Rarely return late from breaks or meals.
4. Always go out of the way to make newer employees feel welcome in the work group.
5. Show genuine concern and courtesy toward co-workers, even under the most trying business or personal concerns.

The organizational citizenship behaviors instrument was originally developed by Moorman and Blakely (1995). It was later refined by Moorman, et al. (1998) and was also used by Cushman (2000). Cushman (2000) reported acceptable levels of reliability ($\alpha = .93$).

CHAPTER 3 - Results

Data was obtained from 105 participants. Fifty-three participated in frame-of-reference training and 52 participated in the information-only training condition. The average age was 25.15 years (SD = 7.28). Sixteen percent of the participants were male and 84% of participants were female. Thirty-nine and a half percent of participants reported themselves as Caucasian and 60.5% of participants reported minority standing. Table 2 summarizes the above demographic variables.

Table 2 Demographics

Demographic	M	SD
Age (Years)	25.15	7.28
Gender		
Male	15.8%	
Female	84.2%	
Ethnicity		
Caucasian	39.5%	
Minority	60.5%	

N = 105

A qualitative analysis was necessary to determine a true score that would be used to evaluate the accuracy hypotheses of the participants' inferences. This estimated true score was computed by incorporating a number of considerations and factors. Table 3 includes the approximate scores that could be drawn from the applicant's résumé and biographical information item responses, as well as the measured results on each of the specific constructs'

instruments. These scores, labeled as target scores, could be considered the “correct” scores for each construct.

These target scores were determined primarily from the examination of résumé and biographical information blank responses, but also from the constructs’ respective instruments given prior to conducting the study. For example, organizational citizenship behaviors were inferred from the self-reported questionnaire (Moorman, et al., 1998), in addition to the other applicant information. Applicants were asked about their past willingness to participate in extra-role behaviors by the biographical information item, “Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.” The last applicant, John T. Smith, responded, “No, I don't believe in taking time from myself and my family working late. I feel that if an employee works hard and efficiently during business hours that they should be able to complete their work load.” This is rated as a low OCB response and is in congruent with John T. Smith’s OCB score on the 22-item questionnaire. A process similar to this was conducted to determine the applicant’s target score for each construct. (See Table 3)

For personality, the BFI was distributed and used to determine the applicants’ scores. This result, in combination with the evaluation of the résumé and biographical information blank responses indicated the applicant’s target score. John T. Smith’s BFI score indicated average conscientiousness. Appendix L shows high conscientiousness indicated by John T. Smith’s response to item number three on biographical information items; in contrast to low conscientiousness which was indicated by misspelled words and typos in his response to item number 6. For the multiple-choice item #2, John T. Smith selected the middle response, once again indicating average conscientiousness. An examination of his résumé indicates few mistakes, yet a poorly organized display of information. Appendix G shows John T. Smith’s

submitted résumé, where text is difficult to follow, bullets are not used properly, and important information is either absent or difficult to interpret. Incorporating all of the above information in the analysis, researchers determine an average conscientiousness level and a target score of 3 on the 5-point Likert scale. (See Table 3)

Agreeableness was scored on the BFI and suggested that John T. Smith was the highest of all of the applicants. Agreeableness otherwise, was indicated by the response to one biographical information item and by work experience. Research by Cole and associates (2003) indicated a negative relationship between work experience and agreeableness. John T. Smith's résumé indicated only one full-time position (lasting 3 years) in the last 15 years of work life, indicating high agreeableness. The biographical information blank involving religious experience was affirmative, once again, suggesting high agreeableness. The conclusion indicated John T. Smith to be extremely high on agreeableness. (See Table 3)

Low extraversion was indicated by no social club memberships and preferring to work alone in the first and fourth biographical information blank responses. The sixth biographical information blank asked about public speaking experience. John T. Smith indicated that is public speaking experience is mostly limited to work-related issues. At first he reported being extremely nervous, but as his knowledge of the subject matter grew, he became less anxious. This response indicates low- to middle-levels of extraversion. John T. Smith's BFI score was the lowest of all of the applicants sampled. A low score was then derived from the above information for John T. Smith on the dimension of extraversion. (See Table 3)

Cognitive ability was directly measured by the 50-item Wonderlic test. John T. Smith scored 21, which was average for the version used of the Wonderlic. John T. Smith's cognitive ability could have been indicated by academic achievement or GPA, however GPA was

unreported. There was only one biographical information blank that indicated cognitive ability directly. Item number 5 asked, “Others look to me to answer difficult questions and solve problems that they do not understand?” John T. Smith’s response was “often” which was the neutral or middle response, therefore also suggesting an average cognitive ability score. (See Table 3)

Table 3 Evaluation Considerations for Target Score for John T. Smith

Question	Biographical Information Blank Responses Response	Indication	Résumé	Target Score
Conscientiousness – BFI 30 (Middle)				
When you were a student during your teens, you preferred homework assignment that were:	Fairly specific but with a fair amount of leeway in instructions	Medium	Low to Mid	3.00
When working on a project which part do you like best	Planning It	High		
Describe experiences you have speaking in front of others.	Typos	Low		
Extraversion – BFI 27 (Low)				
Describe experiences you have speaking in front of others	Extremely nervous, but now improved	Low to Mid	Low	2.00
In your leisure time, you prefer to be involved with:	Making things in own workroom	Low		
Agreeableness – BFI 44 (High)				
Work Experience		Middle		5.00
Religious attendance	Yes	High	High	

Cognitive Ability – Wonderlic 21 (Middle)

Others look to me to answer difficult questions and solve problems that they do not understand

Often

Mid

Low to Mid

3.00

OCB – Instrument 62 (Low)

Describe activities in the past that you have done with new employees at your business that you were not asked to do.

Distributed personality measure and get to know employees better

None

None

1.50

Do you find yourself staying late after work, even though, nobody is around to notice?

No, I don't believe in taking time from my family working late.

Low

It should be noted that the following analyses used the last applicant résumé and biographical information responses (John T. Smith, Appendix K and L) only, unless otherwise noted. This decision was made since the other critical trial applicant information (John D. Smith, Appendix I and J) demonstrated ceiling effects on nearly all of the constructs (Table 4). For example, the applicant's Wonderlic score was 30 ($M = 21$), and was the highest among all of the applicants. The applicant also was the only applicant with a PhD on his résumé. Another example of the ceiling effect was this applicant's high BFI conscientiousness score. For participants, his high conscientiousness was indicated clearly by his detailed and well-organized five-page résumé, educational attainments, and biographical information blank responses. The biographical information blank item most indicative of conscientiousness was the second item, where the applicant responded that he preferred work that was detailed and explicit as to what was expected. Another ceiling effect was found for the construct of OCB. The applicant responded to the biographical information blank questions for OCB in a way that explicitly suggested a history of high extra-role behavior. For example, the applicant indicated high likelihood to participate in OCBs when describing volunteer activities with new employees at his business that he was not asked to do. He responded, "I am a constant resource for questions about anything, and not just with new employees, but seasoned veterans as well. I also always reach out to new employees to make sure that their transition is going smoothly, often asking them out to do something socially so that they feel like they 'fit in'." Additionally when asked, "Do you find yourself staying late after work, even though, nobody is around to notice?" The applicant responded, "I do not ever really consider whether someone is here or not if I work late. If there is work to do, I am here to get it done. The nature of my job is 24 hours a day, so working late or early in the morning just depends on the requirements at that point in the year."

These items indicate an extremely high score for extra-role behaviors, such as OCBs. Therefore it is reasonable to expect that FOR training would not make a difference when scores had already reach a maximum allowed by the Likert scale. It was therefore concluded that this applicant's résumé (Appendix I) and biographical information blanks (Appendix J) would not be suitable to indicate the effect of training. The above qualitative analysis was used to determine John D. Smith's target scores and is outlined in Table 4.

Table 4 Evaluation Considerations for Target Score for John D. Smith

Question	Biographical Information Blank Responses Response	Résumé Indication	Target Indication Score
Conscientiousness – BFI 43 (Very High)			7.00
When you were a student during your teens, you preferred homework assignment that were:	Detailed and explicit as to what was expected	High	
When working on a project which part do you like best	Showing the finished product	Low	
Detailed and organized five-page résumé			Very High
PhD on his résumé.			Very High
Extraversion – BFI 33 (Middle)			5.00
Describe experiences you have speaking in front of others	I was a very shy child... Then I became an RA and had to be comfortable in front of people. Thus, my shell didn't just crack, it broke off in huge pieces and I am comfortable now talking to groups.	Mid to High	Mid to High
Do you prefer reading?	Materials based on a variety of areas. YES - I like social reading on numerous areas to expand my horizons	High	
In your leisure time, you prefer to be involved with:	Social Activities	High	

Agreeableness – BFI 37 (Average)

Work experience

A lot of work experience
I try to attend at least every other week;
however, time gets away from me sometimes
and I do not make it a priority. I am trying to
make this more of a priority for this year.

Low

4.00

Religious attendance

High

Cognitive Ability – Wonderlic 30 (Very High)

PhD on his résumé

Very High

7.00

Others look to me to answer difficult questions
and solve problems that they do not understand Often

Mid

OCB – Instrument 62 (High)

Describe activities in the past that you have
done with new employees at your business that
you were not asked to do.

I also always reach out to new employees to
make sure that their transition is going
smoothly, often asking them out to do
something socially so that they feel like they
'fit in'.

Very High Very High

7.00

Do you find yourself staying late after work,
even though, nobody is around to notice?

I do not ever really consider whether someone
is here or not if I work late. If there is work to
do, I am here to get it done. The nature of my
job is 24 hours a day, so working late or early
in the morning just depends on the
requirements at that point in the year.

Very High

Table 5 below provides a summary of the descriptives for the applicant labeled as John D. Smith. John D. Smith was excluded from some of the analysis due to the ceiling effect limitations experienced on the majority of constructs. Conscientiousness (FOR: $M = 6.05$, $SD = 0.94$, INFO: $M = 5.88$, $SD = 1.25$), Cognitive Ability (FOR: $M = 6.25$, $SD = 0.94$; INFO: $M = 6.46$, $SD = 0.82$), and Organizational Citizenship Behaviors (FOR: $M = 6.02$, $SD = 0.97$; INFO: $M = 5.92$, $SD = 1.21$) all experienced difficulty achieving significance more than likely due to ceiling effects and due to the obvious evaluations that were made from the biodata provided.

Table 5 Descriptives for Excluded Applicant Evaluations

Construct	Target Score	FOR (n = 53)		INFO (n = 52)	
		M	SD	M	SD
Conscientiousness	7.00	6.05	0.94	5.88	1.25
Extraversion	5.00	5.50	1.25	6.04	1.24
Agreeableness	4.00	4.58	1.10	5.02	1.51
Cognitive Ability	7.00	6.25	0.94	6.46	0.82
OCB	7.00	6.02	0.97	5.92	1.21

N = 105

The figure below further demonstrates the ceiling effects experienced for the participant evaluations of applicant information labeled as John D. Smith. It is interesting that all but one construct exhibits FOR training scores closer to the target scores than the INFO-Only training scores. Figure 1 displays the means and their respective differences between training conditions for all five constructs, including target scores.

Figure 1 Means for All Constructs for Training Conditions Compared to Target Scores for Excluded Applicant

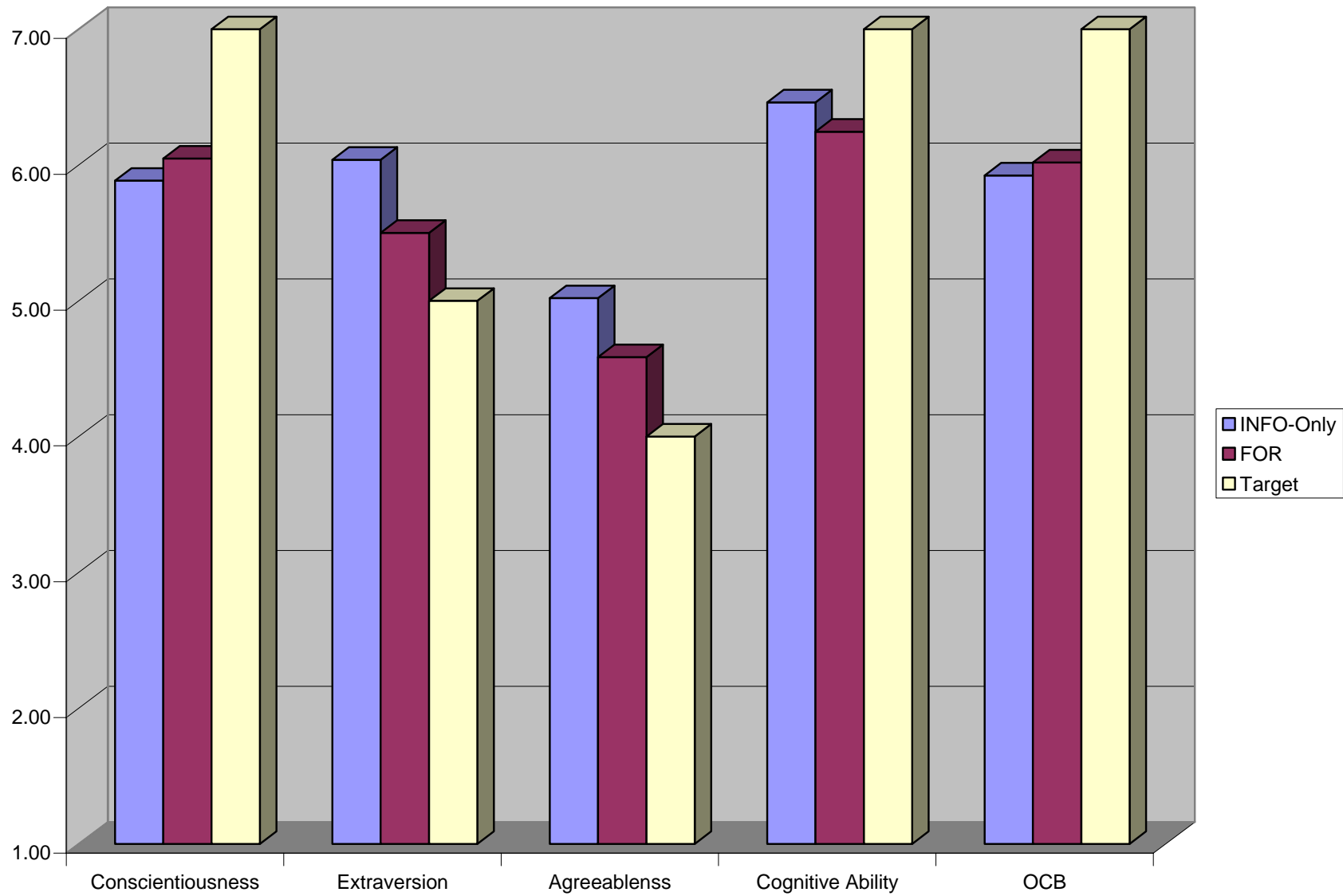


Table 4 below gives means and standard deviations for data obtained from the last application materials that were evaluated. The biographical information blanks (Appendix L) and résumé (Appendix K) were labeled as John T. Smith.

Table 6 Descriptives for Last Applicant Evaluations

Construct	Target Score	FOR (n = 53)		INFO (n = 52)	
		M	SD	M	SD
Conscientiousness	3.00	3.61	1.49	4.33	1.53
Extraversion	2.00	2.57	1.12	3.46	1.41
Agreeableness	5.00	4.74	1.50	4.12	1.23
Cognitive Ability	3.00	4.18	1.17	4.65	1.30
OCB	1.50	2.68	1.34	3.23	1.58

N = 105

The first three hypotheses addressed the question of improved accuracy resulting from frame-of-reference training. First, information was compiled regarding each applicant's scores for measures of personality, cognitive ability, and organizational citizenship behaviors. Then, the scores were compared to the average scores reported by participants reviewing the applicant résumé and biographical information blank responses. In order to determine truly if frame-of-reference training had an effect, there should be a significant difference between the frame-of-reference training group and the information-only training group.

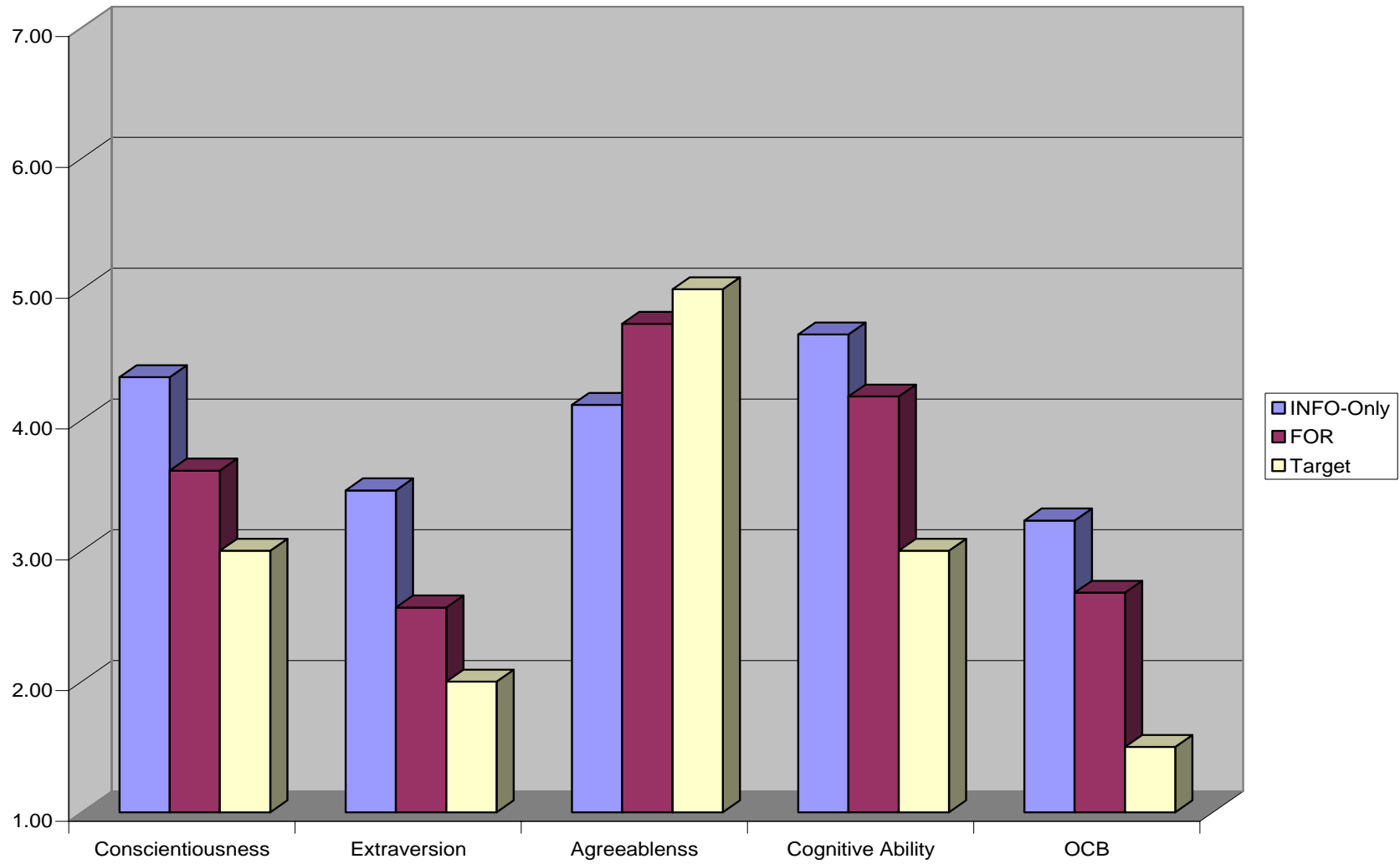
Table 4 indicates means and standard deviations for all of the constructs for the application materials labeled as John T. Smith (last set of application materials).

Conscientiousness (FOR: $M = 3.61$, $SD = 1.49$; INFO: $M = 4.33$, $SD = 1.53$) Extraversion (FOR: $M = 2.57$, $SD = 1.12$; INFO: $M = 3.46$, $SD = 1.41$), Agreeableness (FOR: $M = 4.74$, $SD = 1.50$; INFO: $M = 4.12$, $SD = 1.23$), Cognitive Ability (FOR: $M = 4.18$, $SD = 1.17$; INFO: $M = 4.65$, $SD = 1.30$), OCB (FOR: $M = 2.68$, $SD = 1.34$; INFO: $M = 3.23$, $SD = 1.58$)

= 1.30), and Organizational Citizenship Behaviors (FOR: $M = 2.68$, $SD = 1.34$; INFO: $M = 3.23$, $SD = 1.58$) all suggested differences indicating improved accuracy with FOR training compared to INFO-only training.

All five of the ratings for the last applicant were closer to the target scores in the FOR training condition than in the INFO-Only training condition. That is, participants in the FOR training condition average evaluations that were more accurate than the average evaluations of participants in the INFO-Only conditions for all five constructs evaluated. Figure 2 displays the means and their respective differences between training conditions for all five constructs, as well as target scores. It should be noted that although FOR participants were more accurate than INFO-Only participants, there was still often a difference between target scores and the average for FOR scores.

Figure 2 Means for All Constructs for Training Conditions Compared to Target Scores for Last Applicant



The second criterion test of the hypotheses of greater accuracy with FOR training compared to INFO-only training suggested that there should also be a significant difference between the two groups based on the five constructs. Results of one-way analyses of variance are reported in Table 6. Personality traits Conscientiousness ($F(1, 104) = 5.817, p < .05$), Extraversion ($F(1, 104) = 12.909, p < .01$), and Agreeableness ($F(1, 104) = 5.321, p < .05$) all report significant differences between means. Cognitive ability ($F(1, 104) = 3.822, p = .053$) and Organizational Citizenship Behavior ($F(1, 104) = 3.691, p = .06$) approached significance.

Table 7 ANOVA Summary Table for All Constructs

	Source	SS	Df	MS	F	Sig.
Conscientiousness						
	Between	13.370	1	13.370	5.817*	.018
	Within	236.763	103	2.299		
	Total	250.133	104			
Extraversion						
	Between	21.049	1	21.049	12.909**	.001
	Within	167.942	103	1.631		
	Total	188.990	104			
Agreeableness						
	Between	10.105	1	10.105	5.321*	.023
	Within	195.610	103	1.899		
	Total	205.714	104			
Cognitive Ability						
	Between	5.912	1	5.912	3.822	.053
	Within	159.316	103	1.547		
	Total	165.229	104			
OCB						
	Between	7.984	1	7.984	3.691	.057
	Within	222.778	103	2.163		
	Total	230.762	104			

* $p < .05$, ** $p < .01$

Accuracy Hypotheses

Hypothesis 1:

Participants with FOR training will be more accurate in their assessment of applicant's personality than will be participants without FOR training.

Hypothesis 1 is supported by the data obtained. Table 4 showed that all five constructs showed a difference in mean ratings in the hypothesized direction. That is, evidence suggested that FOR training improved the accuracy for applicants' personality. Also, Table 6 shows the results of a one-way analysis of variance testing differences between FOR training and INFO training for the personality factors of interest and conscientiousness, agreeableness, and extraversion showed significant differences ($p < .05$). Therefore, Hypothesis 1 was supported.

Hypothesis 2:

Participants with FOR training will be more accurate in their assessment of applicant's cognitive ability than will be participants without FOR training.

Cognitive ability was evaluated more accurately in the FOR training group compared to the INFO-only group. The means reflected a difference in the hypothesized direction of greater accuracy with FOR training compared to the INFO-only training condition. Table 6 displays the difference between training conditions in cognitive ability as it approached statistical significance ($F(1, 104) = 3.822, p = .053$). It is suggested that FOR training likely can affect participants' ability to accurately infer applicant's cognitive ability from biographical information.

Hypothesis 3:

Participants with FOR training will be more accurate in their assessment of applicant's organizational citizenship behaviors than will be participants without FOR training.

The hypothesis regarding organizational citizenship behaviors was largely speculative in nature, due to lack of previous research attempting to infer any kind of extra-role behaviors from biographical information. However, a moderate amount of support was found suggesting that FOR training can make participants' inferences from biodata more accurate. For instance, Table 4 shows differences between conditions that found means to differ in the hypothesized direction (FOR: $M = 2.68$, $SD = 1.34$; INFO: $M = 3.23$, $SD = 1.58$). Testing of significant differences failed to achieve significance at the $p < .05$ level ($F(1, 104) = 3.691$, $p = .06$), as displayed in Table 6. The accuracy hypotheses are suggesting that FOR training would lead to greater accuracy in comparison to INFO-Only training, which all of the means differed in the hypothesized directions as discussed above. In conclusion, it can be argued that Hypothesis 3 is partially supported.

Interrater Reliability Hypotheses

Intraclass correlations (ICC) were used as the measure of interrater reliability. Intraclass correlations (Fagot, 1991; McGraw & Wong, 1996; Shrout & Fleiss, 1979) are often used when researchers are evaluating agreement among judges in their evaluations of some construct or various people. MacLennan (1993) suggests that the index of the reliability for a single, typical judge should be used when raters have been trained together, but will make decisions or assessments as individuals. Then, the single-item statistic will serve as the reliability estimate for a single, typical judge. All of the following reliability analyses report the single measure intraclass correlation. The single measure ICC is appropriate, since all judges, within their

training condition, were trained together and it is reasonable to assume that similar assessment decisions in the future will be made by a single judge.

Hypothesis 4:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's personality.

Reliability Analysis for Evaluations of Personality

The table below summarizes the testing of Hypothesis 4 which focuses on the interrater reliability of personality estimates by participants under study. It was suggested that greater reliability would be obtained from the FOR training condition compared to the INFO training condition. Reliability varied between training conditions and the intraclass correlation coefficient was higher for FOR than INFO-only training (INFO: $r_1 = .111$, FOR $r_1 = .473$), thus indicating full support for Hypothesis 4 (Table 7).

Table 8 Reliability Analysis for Personality Evaluations

Training Condition	Intraclass Correlation
INFO Only	.111
FOR Training	.473

N = 105, 3 items included in analysis

Hypothesis 5:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's cognitive ability.

Reliability Analysis for Evaluation of General Cognitive Ability

The table below summarizes the interrater reliability observed from the participants' assessment of the applicants' cognitive ability. It was hypothesized that greater reliability would be obtained from the FOR training condition compared to the INFO training condition. Hypothesis 5 was supported. Information-only training estimate reliability for the typical judge (INFO: $r_1 = .599$) is lower than the same estimate for the frame-of-reference training condition (FOR $r_1 = .694$) for cognitive ability. The unit of analysis to obtain this measure was expanded to include the last two applicant evaluations in order to have more than one item on our measure of cognitive ability amongst all of the judges.

Table 9 Reliability Analysis for Cognitive Ability Evaluations

Training Condition	Intraclass Correlation
INFO Only	.599
FOR Training	.694

N = 105, 2 items included in analysis

Hypothesis 6:

Interrater reliability for participants in FOR training will be higher than participants in INFO-only training in terms of their assessments of applicant's organizational citizenship behaviors.

Reliability Analysis for Evaluation of Organizational Citizenship Behaviors

The interrater reliability of organizational citizenship behavior evaluations are displayed in Table 9. It was hypothesized that greater reliability would be obtained from the FOR training condition compared to the INFO training condition. Again, in order to compute the interrater

reliability our focus was expanded to include the last two applicant evaluations. Agreement was clearly improved from the FOR training in comparison to the INFO-only training condition (INFO: $r_1 = .684$, FOR $r_1 = .781$).

Table 10 Reliability Analysis for OCB Evaluations

Training Condition	Intraclass Correlation
INFO Only	.684
FOR Training	.781

N = 105, 2 items included in analysis

Self-Report Evaluation for Understanding of Constructs

Table 10 below summarizes the means and standard deviations of the ratings of participants' reports of their understanding of the constructs discussed at the end of the evaluation period. The questions was phrased as, "How well do you feel you understand the concept of ____." Participants were asked to evaluate their understanding based on a 5-point Likert scale ranging from "very weak understanding" to "very strong understanding." It was not formally hypothesized, but it was thought that it would be reasonable to observe a stronger understanding of the constructs from the frame-of-reference training group, when compared to the information only training group. There are no significant differences between any of the means obtained from the respondents' self-reported understanding. Conscientiousness (FOR: $M = 3.98$, $SD = 0.84$; INFO: $M = 3.87$, $SD = 0.84$), Extraversion (FOR: $M = 4.26$, $SD = 0.79$; INFO: $M = 4.31$, $SD = 0.78$), Agreeableness (FOR: $M = 4.13$, $SD = 0.90$; INFO: $M = 4.17$, $SD = 0.83$), Cognitive Ability (FOR: $M = 4.15$, $SD = 0.91$; INFO: $M = 4.21$, $SD = 0.78$), and Organizational

Citizenship Behavior (FOR: $M = 4.21$, $SD = 0.79$; INFO: $M = 4.40$, $SD = 0.66$) all report differences that are not significant.

Table 11 Descriptive Analysis of Self-Evaluations for Construct Comprehension

Training Condition	Construct	M	SD
INFO Only			
N = 52			
	Conscientiousness	3.87	.84
	Extraversion	4.31	.78
	Agreeableness	4.17	.83
	Cognitive Ability	4.21	.78
	Organizational Citizenship Behaviors	4.40	.66
FOR Training			
N = 53			
	Conscientiousness	3.98	.84
	Extraversion	4.26	.79
	Agreeableness	4.13	.90
	Cognitive Ability	4.15	.91
	Organizational Citizenship Behaviors	4.21	.79
N = 105			

Other Analysis

Subjective information regarding participants' willingness to interview the applicant and general impression of the applicant were also investigated. No hypotheses were drawn as to effects of FOR training versus INFO-only training. It was informally suggested that there may be a difference, by comparison to the previous applicant (John D. Smith); John T. Smith's applicant was much lower in most construct areas. Specifically, participants were asked, "Taking everything into consideration regarding the applicant's résumé, what is your overall

evaluation of the candidate?” A 5-point Likert response was recorded ranging from “1 = Very Negative” to “5 = Very Positive.” Participants were also asked, “How likely is it that you would be interested in interviewing the applicant?” A 5-point Likert response was used to gauge helpfulness of training from “1 = Extremely Unlikely” to “5 = Extremely Likely.” Data is summarized in the table below. It is important to note that participants displayed a general disgust toward this question in conversations during the experiment, since they were not provided any job description information. Researchers asked participants to respond to these questions assuming the applicant was applying for a job that he/she was qualified for. Table 11 shows differences between conditions that found means to differ in the suggested direction for overall evaluation (FOR: $M = 2.68$, $SD = 1.34$; INFO: $M = 3.15$, $SD = 0.72$) and interview interest (FOR: $M = 2.68$, $SD = 1.34$; INFO: $M = 3.23$, $SD = 1.58$).

Table 12 Overall Evaluation of Applicant

Training Condition	Item	M	SD
INFO Only			
N = 52	Overall evaluation of applicant	3.15	.72
	Interview interest	3.02	1.07
FOR			
N = 53	Overall evaluation of applicant	2.82	.64
	Interview interest	2.51	.78
N = 105			

In Table 12, findings regarding a one-way analysis of variance are displayed testing significant differences between frame-of-reference training and the information-only training. As previously discussed, it was suggested that there may be difference, but it was not formally hypothesized. Participants did respond differently in overall evaluation of applicant ($F(1, 104) = 6.028, p < .05$) and interview interest ($F(1, 104) = 7.787, p < .01$). That is, participants who had completed FOR training were less favorable of the applicant. Specifically, they reported they were less likely to express interest in interview the applicant and rated them lower on their overall evaluation of the applicant.

Table 13 ANOVA Summary Table for Overall Evaluation and Interview Interest

	Source	SS	Df	MS	F	Sig.
Overall Evaluation						
	Between	2.912	1	2.912	6.208*	.014
	Within	48.316	103	.469		
	Total	51.229	104			
Interview Interest						
	Between	6.822	1	6.822	7.787**	.006
	Within	90.226	103	.876		
	Total	97.048	104			

* $p < .05$, ** $p < .01$

A one-way analysis of variance was also conducted testing for differences between training conditions for the excluded applicant, John D. Smith. John D. Smith's biodata (Appendix I & J) was excluded from most of the analyses due to large ceiling effects found for

many of the constructs. Lack of differences in John D. Smith's assessments between training conditions in regards to interview interest and overall evaluation would further give support to the exclusion of his biodata information from many of the analyses. Table 13 shows no significant difference between FOR training and INFO-Only training in regards to overall evaluation of applicant ($F(1, 104) = 0.365, p > .05$) and interview interest ($F(1, 104) = 1.421, p > .05$).

Table 14 ANOVA Summary Table for Evaluation of the Excluded Applicant

	Source	SS	Df	MS	F	Sig.
Overall Evaluation						
	Between	.197	1	.197	.365	.547
	Within	55.765	103	.541		
	Total	55.962	104			
Interview Interest						
	Between	1.061	1	1.062	1.421	.236
	Within	76.901	103	.747		
	Total	77.962	104			

* $p < .05$, ** $p < .01$

Table 14 below summarizes the frequencies of responses for two questions asked after the evaluation period. The questions were an attempt to understand if the frame-of-reference training created the desirable affects among participants. 41 respondents in the information-only training reported creating an image for high or low, while 47 reported in the FOR training

creating an image. However, little difference was noticed in participants were asked about using a prototype-matching process. Similar to before, it is likely that the social desirability effect encourages respondents to answer yes to the following questions, since they feel like the “correct” response.

Table 15 Frequencies of FOR Training Relevant Questions

Training Condition	Construct	Yes	No	Maybe
INFO				
Only Training				
N = 52	Do you feel you created an image in your head for what high or low would be for each concept?	41	0	11
	When evaluating the candidates did you match new information about the candidates to your existing image in your head for what high or low meant for each concept?	39	3	10
FOR				
Training				
N = 53	Do you feel you created an image in your head for what high or low would be for each concept?	47	1	5
	When evaluating the candidates did you match new information about the candidates to your existing image in your head for what high or low meant for each concept?	41	1	11
N = 105				

The table below summarizes the means and standard deviations of two questions asked after the evaluation period. Participants were asked, “How enjoyable did you find the training provided?” A 5-point Likert response was recorded ranging from “1 = Not at all Enjoyable” to “5 = Very Enjoyable.” Participants were also asked, “How useful/helpful did you find the practice sessions provided?” and “How helpful did you find the practice sessions provided?” A 5-point Likert response was used to gauge helpfulness of training and practice sessions which ranged from “1 = Not at all Helpful” to “5 = Very Helpful.”

Table 16 Descriptive Analysis of FOR Training Relevant Questions

Training Condition	Construct	M	SD
INFO			
Only Training			
N = 52	How enjoyable did you find the training provided?	3.56	.69
	How useful/helpful did you find the training provided?	3.98	.75
	How helpful did you find the practice sessions?	3.87	.79
FOR			
Training			
N = 53	How enjoyable did you find the training provided?	3.85	.77
	How useful/helpful did you find the training provided?	4.08	.73
	How helpful did you find the practice sessions?	4.03	.74

N = 105

Table 15 shows that frame-of-reference training only made a slight improvement in respondents reporting enjoyability of training, usefulness/helpfulness of training, and how helpful the practice sessions were. However, these improvements are not significant. Specifically, enjoyability reported little change (FOR: $M = 3.85$, $SD = 0.77$; INFO: $M = 3.56$, $SD = 0.69$). Participants reported little difference between training conditions for usefulness and helpfulness of the training (FOR: $M = 4.08$, $SD = 0.73$; INFO: $M = 3.98$, $SD = 0.75$). When participants were asked about the practice sessions and their helpfulness, frame-of-reference training ($M = 4.03$, $SD = 0.74$) was slightly higher than the information-only training ($M = 3.87$, $SD = 0.79$).

In summary, frame-of-reference training led respondents to report that the training was more enjoyable and more useful and helpful, yet the difference was small and not significant. This issue is clouded since length of training clearly would affect respondents' answers to subjective items asking about enjoyment and perceived usefulness. Length of training was about 65-70 minutes for information only and 80 minutes for FOR training condition. In other words, length of training may have kept frame-of-reference training from creating an even larger difference on the above items. However, enjoyment of the training may not be important in determining frame-of-reference training applicability to analyzing biodata information, and self-assessments of helpfulness and usefulness may not be an adequate test of validity.

CHAPTER 4 - Discussion

The current research has found support for many of the hypotheses. Hypothesis 1 suggested that biodata inferences regarding applicants' personality would be better with FOR training compared to INFO-Only training in terms of accuracy. The results indicated that

accuracy was improved in the direction of the target scores. Factors such as applicants' agreeableness, extraversion, and conscientiousness are difficult to assess from biodata information such as résumés, so employers more than likely need to utilize any techniques that can increase accuracy of these assessments. Frame-of-reference training, which is relatively easy and straight-forward, can help evaluators improve these predictions.

It should be noted that personality, in this case, only refers to the three factors of interest in this study, conscientiousness, extraversion, and agreeableness, while neuroticism and openness to experience were unexplored. Students reported (Table 10) that their understanding of the conscientiousness, extraversion, and agreeableness, as well as cognitive ability and organizational citizenship behavior was good. This would suggest that it may have been possible for students to attend to additional personality constructs during the experiment. However, exclusion of neuroticism and openness to experience from the current research was also due to their lack of validity to predict most work-related outcomes. Although it is difficult to know for sure whether two more constructs would have been too many to establish a good understanding, it is likely their exclusion wasn't necessary.

Since the measure of participant understanding was a self-report item, it does make any analysis or conclusions in this area suspect. It is likely that students were not well-suited to make this judgment. It is possible that students succumbed to the social desirability effect and therefore, regardless of training condition, reported a high degree of understanding for all of the constructs included in the study. The evidence for this is reported in Table 10 which shows no significant differences between training conditions. If frame-of-reference training is effective, it could be expected that there should have been a significant improvement of understanding between the information-only training condition and the frame-of-reference training condition.

These results were surprising, considering that other indicators suggested improved accuracy of participants in the FOR training condition. Virtually no differences were reported in understanding of the various constructs studied and a one-way analysis of variance indicated no significant differences between training conditions. In hindsight, a more objective measure of understanding of constructs would have likely achieved very different results. Although, the participants session were already lengthy, researchers more than likely would have indicated having gained more insight in this area if an objective measure would have been used. Future research could include a couple of open-ended questions, asking participants to summarize the definition of each construct, or identifying examples of high or low on a particular construct. This may be a better measure of participant understanding, and more than likely would lead to differences between frame-of-reference training and information-only training, as other indicators demonstrated the effectiveness of frame-of-reference.

Although cognitive ability's predictive validity is well established, potential employees and employers have shown a dislike for this used as a selection technique. Also, general cognitive ability may raise issues of adverse impact. The current research not only gave evidence for biodata's ability to be evaluated in terms of cognitive ability, but also suggested frame-of-reference training as a method to further improve accuracy. Hypothesis 2 approached significance and Hypothesis 5 was supported, thus providing further support for the usefulness of frame-of-reference training in assessing constructs relating to specific applicants. FOR training led participants to more accuracy and to greater inter-rater reliability than INFO-Only training.

Inferences about applicants' likelihood to participate in organizational citizenship behaviors were hypothesized to be more accurate for participants in the FOR training than in INFO-Only training. This hypothesis was only partially supported by the evidence. A one-way

analysis of variance did not achieve significance; however, there was difference between the means in the direction of improved accuracy. That is, FOR training achieved a more accurate average rating than the information-only training condition, yet the difference was not large enough to support significance at the $p < .05$ level. Future research should continue to examine the ability of FOR training to improve rater accuracy, though logically it should first be established whether biographical information blanks and résumés provide enough information to allow raters to effectively infer a construct as complex as organizational citizenship behaviors. It would also be useful to expand the research to include all contextual performance or extra-role behaviors, to get a more clear understanding of the dynamics involved in these relationships.

Most importantly, it was hypothesized, and later supported, that reviewers' estimates would be more reliable in the FOR training condition compared to the INFO-only training condition. It should not be surprising that agreement among raters is higher after receiving FOR training, as this training technique is well established in the performance appraisal area. FOR training includes more interaction among participants, more review and reflection time, feedback as to accuracy or practice sessions, and more discussion on creating a frame of reference for how a high score or low score on a particular dimension should appear in the biodata. All of the above techniques, as part of the FOR training, makes it more likely that participants would develop more mainstream perspectives and assessments. All five of the constructs involved in the study identified greater agreement among FOR training participants and INFO-Only training participants.

These initial results suggest that participants' inferences improve in accuracy with FOR training. This finding gives support for the general notion, which was unexplored previously in the literature, that frame-of-reference training can be an acceptable method to improve selection

decisions and assessments specifically in the area of biodata. As discussed earlier, frame-of-reference training had been primarily investigated in the realm of performance appraisal and never been explored in the area of selection and analyzing biodata information.

Application

Most organizations are currently collecting biodata information in terms of résumés. It is logical to assume that résumés are being reviewed by largely untrained supervisors and managers who are attempting to make inferences about the applicant on dimensions they feel are important for the workplace. Organizations should recognize the need to offer training in an effort to make the inferences for applicants as accurate as possible. Inferences will be made whether organizations provide adequate training or not, so cost-effective, simply-managed training that can improve accuracy should be considered. FOR training, at least from this initial investigation, appears to be a likely candidate to fill this identified need.

Organizations are interested in applicants' personality, cognitive ability, and extra-role behaviors due to their inherent predictive validity for workplace criteria. This information is available in sources already being collected. Successful selection decisions in the future depend on the employer's ability to extract the proper information, ignore irrelevant information, and draw accurate inferences about applicant's characteristics. FOR training can help in making better selection decisions.

It was noted earlier, and is displayed in Figure 2, that a difference was still found between target scores and the average evaluations from participants in the FOR training condition. That is, FOR training participants were found to be more accurate than INFO-only training participants, yet they were still not equivalent to the "correct" scores or target scores. However, despite these differences, the improved accuracy of those with FOR training would result in

more valid normative comparisons among candidates, which is important since selection decisions are often normative.

Limitations

Clearly, having undergraduate students with little or no selection experience may not translate well to an actual employment situation. These subjects may come in as a blank slate, and therefore be more willing to accept feedback and change their behavior in compliance with researchers' directions. Although, as discussed by Cole and associates (2005), little evidence has been found suggesting that there is a difference between subjects and practitioners selection ratings (e.g., Watkins & Johnston, 2000).

The demographics of the participants in general may be a concern. The sample was obtained in a community college at a military installation. The majority of the sample is either military or dependants of the military. Additionally, the population was over four-fifths female and about two-thirds minority. Although the population demographics are disappointing, there was no evidence that would suggest that this is a problem in analyzing the information.

Researchers asked individuals providing résumé and biographical information to provide a résumé that they would actually submit in applying for a job that they were qualified for. However, all the résumés were obtained without giving a job description, salary, or even job title, so individuals chose to provide researchers with a résumé that can be described as a 'master' résumé. These résumés contained a great deal more information than would normally be provided to a prospective employer. However, since all applicants chose to include this information, it was not a concern for current researchers. It is important to note that this issue may be a concern for external validity issues.

Unfortunately, external validity and ecological validity concerns are warranted. Of course, the trade off between experimental controls and generalizability are common to this line of research, and sacrifices are always made. Since this is a new line of research and avenue to use frame-of-reference training, conclusions should be drawn only after taking into account concerns of generalizability. It may be a concern that undergraduates with no experience evaluating biodata may not evaluate information in the same manner as managers who are actually reviewing possible employees for a couple of reasons. There is no cost of an incorrect judgment or decision for our participants; however, managers who might work with an applicant in the future would clearly have an increased vested interest in making accurate judgments and conclusions.

Although it is unlikely, it is possible the difference in length of the training from the two conditions could have had an effect on the results. It may be difficult for researchers to control for this factor without compromising other issues, but it needs to be considered. Additionally, the overall length of the training session may not be important, but having multiple sessions may prove to be useful. It is likely that reviewing the constructs and establishing various “frame of references” over multiple sessions would increase practice and should, more than likely, increase the accuracy and reliability as well.

Future Research

Future research should consider the above limitations. Clearly, a more extensive body of research is called for before practical utility can adequately be established, but the initial results are encouraging. A variety of research questions are raised. Some research questions are important for biodata in general and some are specific to using FOR training to improve biodata analysis. What are the critical components to FOR training? Initial results suggest the training

of what is high or low in a particular constructs seem to be as important, if not more than, the practice and feedback, which in past research has been suggested to be the critical elements. Additionally, biographical information blank items, résumé characteristics, and applicants' personality need to be varied to explore any possible variables that may influence findings, but are currently thought to be inconsequential.

Future research could benefit from using professionals that commonly evaluate biodata information. It has been considered and discussed whether evaluators in actual practice evaluate information the same way as the participants under the current study. More commonly reviewers are not asked to evaluate applicants on specific dimensions with specific scores, but are asked to evaluate them in general terms. Researchers could remove the likert scale technique used to score the dimensions and could move to categorical identifiers. That is, reviewers typically would score high or low on a dimension when evaluating candidates, but would not likely make a specific assessment. Therefore, researchers could ask participants to score dimensions categorically rather than continuously to further reflect actual practice.

Surprisingly, little research has been conducted in an effort to learn how reviewers evaluate relevant biographical information in regular practice, and even less research has been devoted to exploring possible methods to improve this evaluation process. Current research explored one possible training method that may possess great utility in improving accuracy and consistency in ratings for a number of work-related constructs. However, it is possible that other training initiatives and possible learning theories could provide similar results and less time and resources. This may be unlikely since most materials required to conduct frame-of-reference training could be found in the results of a validation study, which should have been conducted prior to using biodata as a selection instrument.

Conclusion

Collecting and using biographical information to make employment selection decisions has been an accepted practice for the last century and will continue to be an accepted practice for the foreseeable future. Biodata provides an intuitively simple approach to making selection decisions. Past behavior is the best predictor of future behavior. Little evidence, however, has been developed in the literature, or in common practice, regarding how to improve or train employers on making more reliable and accurate decisions based on biodata information. It is evident that FOR training shows a great deal of promise in the area of evaluation of biodata information. More research in this area could and more than likely would further the argument that FOR training can create more accurate assessments from raters and employers using this approach would be encouraged from its utility and validity.

References

- Allsworth, E., & Hesketh, B. (2000). Job requirements biodata as a predictor of performance in customer service roles. *International Journal of Selection and Assessment*, 83(3), 137-147.
- Asher, E. J. (1972). The biographical item: Can it be improved? *Personnel Psychology*, 25, 251-269.
- Athey, T. R., & McIntyre, R. M. (1987). Effect of rater training on rater accuracy: Levels-of-processing theory and social facilitation theory perspectives. *Journal of Applied Psychology*, 72(4), 567-572.
- Bohlander, G. & Snell, S. (2004). *Managing Human Resources*. South-western, Thomson.
- Borman, W. C. (1979). Format and training effects on rating accuracy and rater errors. *Journal of Applied Psychology*, 64(4), 410-421.
- Borman, W. C. (1983). Implications of implicit personality theory and personal constructs for the rating of work performance in organizations. In F. J. Landy, S. Zedeck, & J. Cleveland (Eds.), *Performance Measurements and Theory*. Hillsdale, NJ: Erlbaum.
- Brown, S. H. (1978). Long-term validity of a personnel history item scoring procedure. *Journal of Applied Psychology*, 63, 673-676.
- Brown, S. H. (1981). Validity generalization in the life insurance industry. *Journal of Applied Psychology*, 66, 664-670.
- Brown, B. K., & Campion, M. A. (1994). Biodata phenomenology: Recruiters' perceptions and use of biographical information in résumé screening. *Journal of Applied Psychology*, 79(6), 897-908.

- Bernardin, H. J., & Buckley, M. R. (1981). Strategies in rater training. *Academy of Management Review*, 6, 205-212.
- Cole, M. S., Feild, H. S., & Stafford, J. O. (2005) Validity of Resumé Reviewers' Inferences Concerning Applicant Personality Based on Resumé Evaluation. *International Journal of Selection and Assessment* 13:4, 321–324.
- Cole, M.S., Feild, H.S., & Giles, W.F. (2003a). Using recruiter assessments of the presence of résumé information to predict applicant mental ability and Big Five personality dimensions. *International Journal of Selection and Assessment*, 11, 78–88.
- Cushman, J. W. (2000). Empowerment and the moderating effect of organizational citizenship behaviors on personal hygiene practices in the food service industry. Unpublished doctoral dissertation, Kansas State University, Manhattan.
- Dipboye, R. L., & Jackson, S. L. (1999). Interviewer experience and expertise effects. In R.W. Elder and M. M. Harris (Eds.), *The employment interview handbook*. Thousand Oaks, CA: Sage.
- Dunnette, M. D. (1972). Validity study results for jobs relevant to the petroleum refining industry. Washington, DC: American Petroleum Institute.
- England, G. W. (1961). *Development and use of weighted application blanks*. Dubuque, IA: William C. Brown.
- England, G. W. (1971). Development and use of weighted application blanks (Bulletin N. 55). Minneapolis: University of Minnesota, Industrial Relations Center.
- Fagot, R. F. (1991). Reliability of ratings for multiple judges: Intraclass correlation and metric scales. *Applied Psychological Measurement*, 15, 1-11.

- Ferguson, L. W. (. (1961). The development of industrial psychology. In B. H. Gilmer (Ed.), *Industrial Psychology* (pp. 18-37). New York: McGraw-Hill.
- Ghiselli, E. E. (1973). The validity of aptitude tests in personnel selection. *Personnel Psychology*, 26, 461-477.
- Guion, R. M. (1998). *Assessment, Measurement, and Prediction for Personnel Decisions*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Goldsmith, D. B. (1922). The use of the personal history blank as a salesmanship test. *Journal of Applied Psychology*, 6, 149-155.
- Guilford, J. P., & Lacey, J. I. (1947). Printed classification tests. *AAF Aviation Psychology Research Program Reports* (no. 5). Washington, DC: Government Printing Office.
- Hausknecht, J. P., Day, D. V., & Thomas, S. C. (2004). Applicant reactions to selection procedures: An updated model and meta-analysis. *Personnel Psychology*, 57(3), 639-683.
- Hogan, J. B. (1994). Empirical keying of background data measures. In G.S. Stokes, M. D. Mumford and W. A. Owens (eds.) *Biodata Handbook: Theory, Research, and Use of Biographical Information in Selection and Performance Prediction*. Palo Alto, CA, CPP Books.
- Howard, P. J., & Howard, J. M. (2001). *The Owner's Manual for Personality at Work: How the Big Five Personality Traits Affect Your Performance, Communication, Teamwork, Leadership, and Sales*. Bard Press: Austin.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96, 72-98.
- Ilggen, D. R., & Feldman, J. M. (1983). Performance appraisal: A process focus. *Research in Organizational Behavior*, 5, 141-197.

- James, L. R., Muliak, S. A., & Brett, J. M. (1982). *Causal analysis: Assumptions, models, and data*. Beverly Hills, CA: Sage.
- John, O. P., & Srivastava, S. (1999). The Big-Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives. In L. A. Pervin and O. P. John (Eds.), *Handbook of personality: Theory and research (2nd ed.)*. New York: Guilford (1999).
- Kenagy, H. G., & Yoakum, C. S. (1925). *The selection and training of salesmen*. New York: McGraw-Hill.
- Levine, A. S., & Zachert, V. (1951). Use of a biographical inventory in the air force classification program. *Journal of Applied Psychology, 35*, 241-244.
- Levine, E. L., & Flory, A. (1975). Evaluation of job applications: A conceptual framework. *Public Personnel Management, 4*, 378-385.
- Levy, P. E. (2006). *Industrial/Organizational Psychology: Understanding the Workplace*. Houghton Mifflin Company.
- MacLennan, R. N. (1993). Interrater reliability with SPSS for Windows 5.0. *The American Statistician, 47(4)*. (Nov., 1993), pp. 292-296.
- Mael, F. A. (1991). A conceptual rationale for the domain and attributes of biodata items. *Personnel Psychology, 44(4)*, 763-792.
- Manson, G. E. (1925). What can the application blank tell? *Journal of Personnel Research, 4*, 73-99.
- McGraw, K. O., & Wong, S. P. (1996). "Forming inferences about some intraclass correlations coefficients": Correction. *Psychological methods, 1(4)*, 390.
- McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological methods, 1(1)*, 30-46.

- McIntyre, R. M., Smith, D. E., & Hassett, C. E. (1984). Accuracy of performance ratings as affected by rater training and perceived purpose of rating. *Journal of Applied Psychology*, *69* (1), 147-156.
- Moorman, R., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior* *16*, 127-142.
- Moorman, R., Blakely, G. L., & Niehoff, B. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, *41*(3), 351-368.
- Mumford, M. D., & Owens, W. A. (1987). Methodology review: Principles, procedures, and findings in the application of background data measures. *Applied Psychological Measurement*, *11*, 1-31.
- Mumford, M. D., & Stokes, G. S. (1992). Developmental determinants of individual action: Theory and practice in the application of background data measures. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (Vol. III, pp. 61-138). Palo Alto, CA: Consulting Psychologists Press.
- Mumford, M. D. (1999). Construct validity and background data: Issues, abuses, and future directions. *Human Resource Management Review*, *9*(2), 117-145.
- Owens, W. A. (1976). Background data. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (1st ed.). Chicago: Rand McNally.
- Parish, J. A., & Drucker, A. J. (1957). *Personnel research for Officer Candidate School* (USA TAGO Personnel Research Branch Tech. Rep. No. 117, 1-222).

- Potosky, D., Bobko, P., & Roth, P. L. (2005). Forming composites of cognitive ability and alternative measures to predict job performance and reduce adverse impact: Corrected estimates and realistic expectations. *International Journal of Selection and Assessment, 13*(4), 304-315.
- Pulakos, E. D. (1984). A comparison of rater training programs: Error training and accuracy training. *Journal of Applied Psychology, 69*(4), 581-588.
- Pulakos, E. D. (1986). The development of training programs to increase accuracy with different rating tasks. *Organizational behavior and human decision processes, 38*(1), 76-91.
- Reilly, R. R., & Chao, G. R. (1982). Validity and fairness of some alternative employee selection procedures. *Personnel Psychology, 35*(1), 1-62
- Roy, H., Brueckel, J., & Drucker, A. J. (1954). Selection of army and air force reserve training corp students. *USA Personnel Research Branch Notes, 28*, 1-9.
- Ryan, A. M., Ployhart, R. E. & Friedel, L. A. (1998). Using personality testing to reduce adverse impact: A cautionary note. *Journal of Applied Psychology, 83*, 298-307.
- Schmidt, F. L., & Hunter, J. E. (1981). Employment testing: Old theories and new research findings. *American Psychologists, 36*, 1128-1137.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implication of 85 years of research fining. *Journal of Applied Psychology, 124*, 262-274.
- Schmitt, N., Noe, R. A., Meritt, R., & Fitzgerald, M. P. (1984). Validity of assessment center ratings for the prediction of performance ratings and school climate of school administrators. *Journal of Applied Psychology, 69*(2), 207-213.

- Schuh, A. J. (1967). The predictability of employee tenure: A review of the literature. *Personnel Psychology*, 20, 133-152.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychological Bulletin*, 86(2), 420-428.
- Stokes, G. S. (1999). Introduction to special issue: The next one hundred years of biodata. *Human Resource Management Review*, 9(2), 111-116.
- Stokes, G.S., Mumford, M. D., & Owens, W. A. (1994) *Biodata Handbook: Theory, Research, and Use of Biographical Information in Selection and Performance Prediction*. Palo Alto, CA, CPP Books.
- Terpstra, D. E. (1996). The search for effective methods. *HR Focus*.
- Tucker, M. F., Cline, V. B., & Schmitt, J. R. (1967). Prediction of creativity and other performance measures from biographical information from pharmaceutical scientists. *Journal of Applied Psychologists*, 51, 131-138.
- Vinchur, A. J., Schippmann, J. S., Switzer, F. S. I. I. I., & Roth, P. L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology*, 83(4), 586-597.
- Viteles, M. (1932). *Industrial psychology*. New York: Norton.
- Ward, J. H., & Hook, M. E. (1963). Application of a hierarchical clustering procedure to a problem of grouping profiles. *Educational and Psychological Measurement*, 23, 69-81.
- Watkins, L.M. and Johnston, L. (2000). Screening job applicants: The impact of physical attractiveness and application quality. *International Journal of Selection and Assessment*, 8, 76-84.

Wonderlic & Associates. (2002). Wonderlic Personnel Test and Scholastic Level Exam User's Manual (E. F. Wonderlic & Associates, Northfield, IL).

Appendix A - FOR Training Biographical Information Blank

Training Sheet

Biographical information blanks

1. What social clubs are you members of or have been in the past?

Extraversion – High in extraversion would be indicated by many social clubs.

2. When you were a student during your teens, you preferred homework assignment that were:
 - a. Detailed and explicit as to what was expected
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding

Conscientiousness -High in conscientiousness would be indicated by choice (a.)
-Low in conscientiousness would be indicated by choice (c.)

3. When working on a project which part do you like best
 - a. Planning it
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. Showing the finished product

Conscientiousness -High in conscientiousness would be indicated by choice (a.)
-Low in conscientiousness would be indicated by choice (d.)

4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom
 - d. Sports
 - e. None of the above

Extraversion

-High extraversion would be indicated by (b.) social activities and (d.) sports

-Low extraversion would be indicated by (a.) reading and (c.) making things in your own workroom

5. Others look to me to answer difficult questions and solve problems that they do not understand?
- Never
 - Sometimes
 - Often
 - Always

Cognitive ability -Always or often would indicate higher cognitive ability
-Never or sometimes would indicate lower cognitive ability

6. Describe experiences you have speaking in front of others. Did you feel comfortable?

Extraversion -High would feel very comfortable and would likely have more experience
-Low would feel very uncomfortable and little experience

7. Do you prefer reading?
- Information almost only about my business
 - Materials based on a variety of areas

Extraversion -Maybe high variation in interest indicates high extraversion
-Maybe little variation in interest indicates low extraversion

8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.

Organizational Citizenship Behaviors – Possible many orientation activities or time devoted would indicate high likelihood to participate in Organizational Citizenship Behaviors

9. Do you attend religious services often?

Research shows that highly religious individuals are high in agreeableness

10. Do you find yourself staying late after work, even though, nobody is around to notice?
Explain briefly.

Organizational Citizenship Behaviors - Staying late and doing extra-role activities would indicate high OCB

- Low OCBs maybe indicated by unwillingness to participate

Appendix B - Participants Rating Sheet

What is the last four digits of your social security number? _____

Candidate's Name _____

1. How would you rate this applicant on the personality trait conscientiousness?

extremely low 1	2	3	neutral 4	5	6	extremely high 7
-----------------------	---	---	--------------	---	---	------------------------

2. How would you rate this applicant on the personality trait extraversion?

extremely low 1	2	3	neutral 4	5	6	extremely high 7
-----------------------	---	---	--------------	---	---	------------------------

3. How would you rate this applicant on the personality trait agreeableness?

extremely low 1	2	3	neutral 4	5	6	extremely high 7
-----------------------	---	---	--------------	---	---	------------------------

4. How would you rate this applicant's cognitive ability?

extremely low 1	2	3	neutral 4	5	6	extremely high 7
-----------------------	---	---	--------------	---	---	------------------------

5. How likely is that this applicant will perform organizational citizenship behaviors?

extremely low 1	2	3	neutral 4	5	6	extremely high 7
-----------------------	---	---	--------------	---	---	------------------------

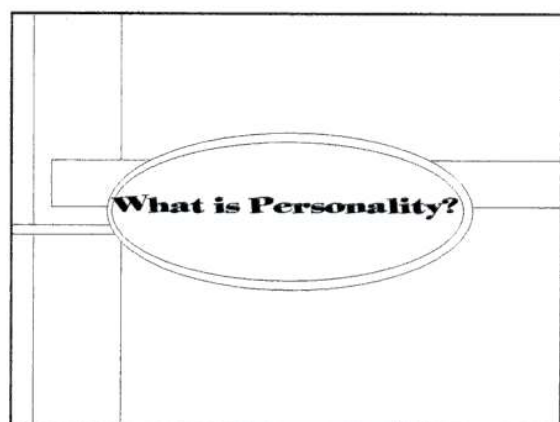
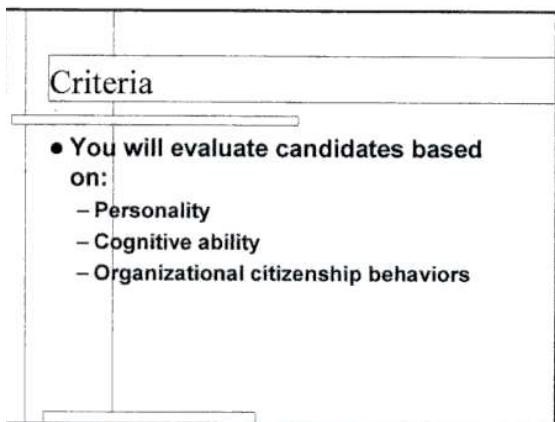
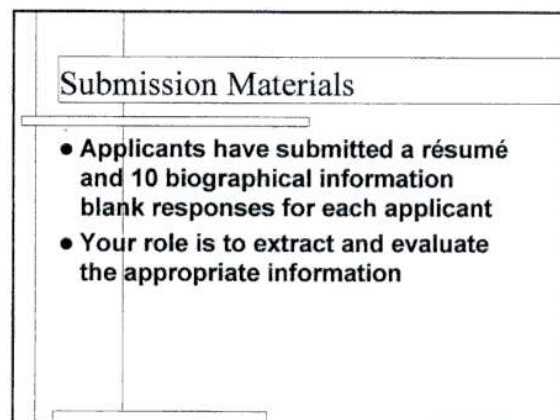
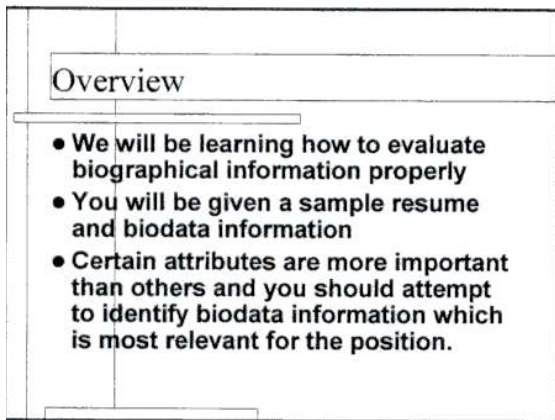
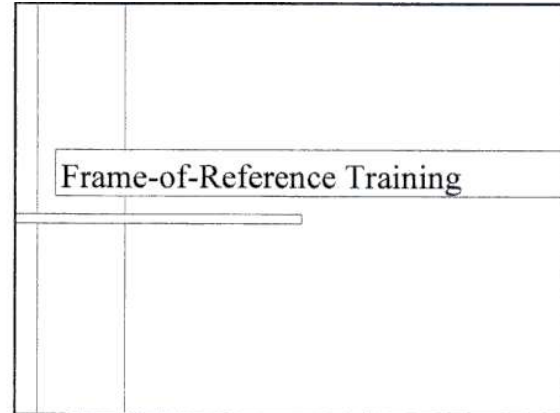
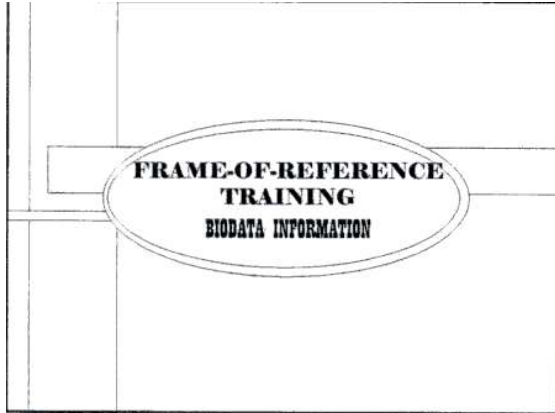
6. Taking everything into consideration regarding the applicant's résumé, what is your overall evaluation of the candidate?

very negative 1	negative 2	neutral 3	positive 4	very positive 5
-----------------------	---------------	--------------	---------------	-----------------------

7. How likely is it that you would be interested in interviewing the applicant?

extremely unlikely 1	2	neutral 3	4	extremely likely 5
----------------------------	---	--------------	---	--------------------------

Appendix C - FOR Training



What is Personality?

- Hypothetical construct
- A characteristic pattern of thinking, feeling, and behaving

The “Big Five” Personality Factors

Trait Dimension	Description
Emotional Stability	Calm versus anxious Secure versus insecure Self-satisfied versus self-pitying
Extraversion	Sociable versus retiring Fun-loving versus sober Affectionate versus reserved
Openness	Imaginative versus practical Preference for variety versus preference for routine Independent versus conforming
Agreeableness	Soft-hearted versus ruthless Trusting versus suspicious Helpful versus uncooperative
Conscientiousness	Organized versus disorganized Careful versus careless Disciplined versus impulsive

Source: Adapted from McCrae & Costa (1999, p. 1502).

Personality

- Academic achievement/education are positively related with conscientiousness

REFERENCE:

Cole, Field, & Giles (2003).

Example – Conscientiousness Indications

Example using biographical responses and résumés

- Academic achievement on resume
- Mistakes on resume

How would a High or Low person in Conscientiousness answer?

Example using biographical responses and résumés

2. When you were a student during your teens, you preferred homework assignment that were:
 - a. Detailed and explicit as to what was expected
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
3. When working on a project which part do you like best
 - a. Planning it
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. Showing the finished product

Extraversion

- Social/extracurricular activities are positively related with applicants extraversion

REFERENCE:

Cole, Field, & Giles (2003).

High extraversion vs. Low extraversion?

Example using biographical responses and résumés

1. What social clubs are you members of or have been in the past?
4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom
 - d. Sports
 - e. None of the above

High extraversion vs. Low extraversion?

Example using biographical responses and résumés

6. Describe experiences you have speaking in front of others. Did you feel comfortable?
7. Do you prefer reading?
 - a. Information almost only about my business
 - b. Materials based on a variety of areas

Agreeableness

- **Agreeableness is negatively correlated with work experience**
 - People with a lot of work experience tend to be lower on agreeableness

REFERENCE:

Cole, Field, & Giles (2003).

Example – Agreeableness Indications

Example using biographical responses and résumés

- **Agreeableness is negatively correlated with work experience**
 - People with a lot of work experience tend to be lower on agreeableness

How would a High or Low Agreeableness person answer?

Example using biographical responses and résumés

9. Do you attend religious services often?

Cognitive Ability

- **General cognitive ability (Intelligence)**
- **It is related to:**
 - Academic/Achievement
 - Education
 - GPA

REFERENCE:

Cole, Field, & Giles (2003).

How would a High or Low Cognitive Ability person answer?

Example using biographical responses and résumés

Academic achievements (scholastic awards)

-Dean's List

GPA

College degrees

How would a High or Low Agreeableness person answer?

Example using biographical responses and résumés

5. Others look to me to answer difficult questions and solve problems that they do not understand?

- a. Never
- b. Sometimes
- c. Often
- d. Always

OCBs

● **Organizational Citizenship Behaviors (OCBs) are defined as individual behaviors that are beneficial to the organization in the aggregate and are discretionary, not directly or explicitly recognized by the formal reward system.**

OCBs

● **Sample items include the following:**

- 1) I help out other team members if someone falls behind in his/her work.
- 2) I am willing to share my expertise with other members of the team.
- 3) I always focus on what is wrong with the situation, rather than the positive side.
- 4) I take steps to prevent problems with other team members.
- 5) I am willingly to give my time to help team members who have work-related problems

Example – OCBs Indications

Example using biographical responses and résumés

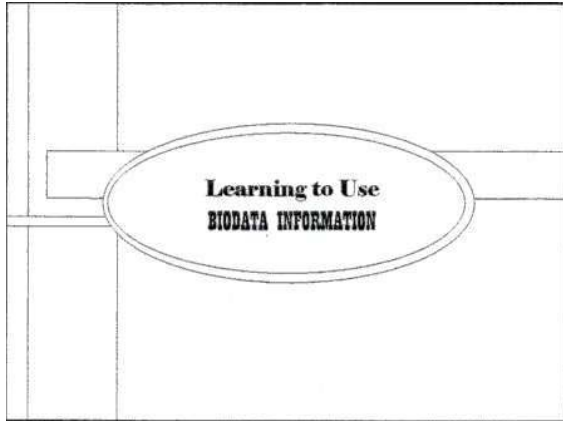
- **Volunteer work**
- **Serving on committees**
 - 8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.
 - 10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

How would a High or Low OCB person answer?

Example using biographical responses and résumés

- **Volunteer work**
- **Serving on committees**
 - 8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.
 - 10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

Appendix D - INFO-Only Training Materials



Overview

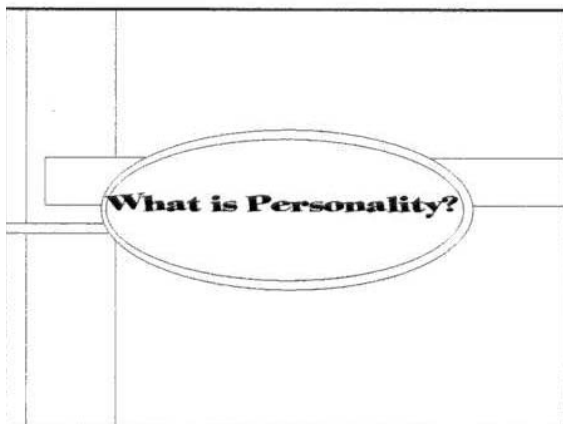
- We will be learning how to evaluate biographical information properly
- You will be given a resume and biodata information
- Certain attributes are more important than others and you should attempt to identify biodata information which is most relevant for the position.

Submission Materials

- Applicants have submitted a résumé and 10 biographical information blank responses for each applicant
- Your role is to extract and evaluate the appropriate information

Criteria

- You will evaluate candidates based on:
 - Personality
 - Cognitive ability
 - Organizational citizenship behaviors



What is Personality?

- Hypothetical construct
- A characteristic pattern of thinking, feeling, and behaving

The "Big Five" Personality Factors

Trait Dimension	Description
Emotional Stability	Calm versus anxious Secure versus insecure Self-satisfied versus self-pitying
Extraversion	Sociable versus retiring Fun-loving versus sober Affectionate versus reserved
Openness	Imaginative versus practical Preference for variety versus preference for routine Independent versus conforming
Agreeableness	Soft-hearted versus ruthless Trusting versus suspicious Helpful versus uncooperative
Conscientiousness	Organized versus disorganized Careful versus careless Disciplined versus impulsive

Source: Adapted from McCrae & Costa (1996), p. 1062.

Personality

- Academic achievement/education are positively related with conscientiousness

REFERENCE:

Cole, Field, & Giles (2003).

Extraversion

- Social/extracurricular activities are positively related with applicants extraversion

REFERENCE:

Cole, Field, & Giles (2003).

Agreeableness

- Agreeableness is negatively correlated with work experience
 - People with a lot of work experience tend to be lower on agreeableness

REFERENCE:

Cole, Field, & Giles (2003).

Cognitive Ability

- General cognitive ability (Intelligence)
- It is related to:
 - Academic/Achievement
 - Education
 - GPA

REFERENCE:

Cole, Field, & Giles (2003).

How would a High or Low Cognitive Ability person answer?

Example using biographical responses and résumés

Academic achievements (scholastic awards)

-Dean's List

GPA

College degrees

OCBs

- **Organizational Citizenship Behaviors (OCBs) are defined as individual behaviors that are beneficial to the organization in the aggregate and are discretionary, not directly or explicitly recognized by the formal reward system.**

OCBs

- **Sample items include the following:**
 - 1) I help out other team members if someone falls behind in his/her work.
 - 2) I am willing to share my expertise with other members of the team.
 - 3) I always focus on what is wrong with the situation, rather than the positive side.
 - 4) I take steps to prevent problems with other team members.
 - 5) I am willingly to give my time to help team members who have work-related problems

Appendix E - Résumé for Joan D. Smith

Joan D. Smith

Professional Experience **State University**
2007-present

Grant and Contract Administrator

- Facilitate State University's involvement in projects and programs funded by external sponsors
- Assist with budget development and formatting of proposals to meet agency requirements and guidelines
- Provide administrative oversight including negotiating terms and conditions of awards and sub-awards, and monitoring them for compliance with given standards
- Develop contracts with the major funding agencies and match potential funding sources with faculty research interests
- Coordinate the development of proposals with individuals, departments, colleges, centers, and institutes

Soup Kitchen, Anytown, USA
2005-2007

Assistant Director

- Develop and implement marketing plan to create awareness in community for nonprofit organization
- Manage and expand outreach programs to 13 counties
- Coordinate and execute promotional events including community charity golf tournament and athlete food collections
- Design and expand organization media relations through the creation of television, radio, and print advertising
- Create and give informational presentations to diverse groups and individuals including State Representatives and Senators, university students, organizations, and children
- Assist with preparation of firm budget and donation forecast
- Organize and supervise over 1800 volunteers at athletic and community events

Phil & Smith, Inc., Anytown, USA **2002-2005**

Manager/Bookkeeper

- Managed small independent boutique with 6 employees; delegated duties and daily tasks

- Performed daily audit packet of cash and sales
- Generated yearly budgets and cash flow statements
- Created advertisements for local publications
- Received inventory and priced merchandise; completed monthly payables to hundreds of vendors
- Managed Layaway and House Charge receivables utilizing QuickBooks

National Magazine, Anytown, USA 2003-2004

Public Relations Department Head (Internship, UCCS)

- Organized a team of 5 students to launch an integrated public relations campaign
- Designed a detailed media kit, which included information regarding the project
- Established and developed relationships with local media to distribute information
- Completed press releases and public service announcements targeted at public
- Solicited donations from local businesses and individuals to support event benefiting the Breast Cancer Foundation
- Created and distributed invitation to project event

Mountain Soccer Club, Anytown, USA 2002-2003

Marketing Coordinator

- Coordinated nationwide competitive soccer tournament of over 250 teams
- Consolidated and maintained company database of customers
- Researched potential target markets, developed and implemented grass roots marketing plan

Education 2004

University of Colorado, Colorado Springs, CO

- B.S., Bachelor of Science in Business Administration emphasis in Marketing

Athletic Activities

- Member of University of Colorado, Colorado Springs Club Soccer Team
- Youth Coach, Pikes Peak Soccer Club
- Trainer, Colorado Springs Sports Center

Skills

- Microsoft Word, PowerPoint, Excel, and additional office applications
- Oracle database applications, QuickBooks
- Internet Explorer, Navigator, and e-mail
- Basic office equipment; fax machine, copy machine, phones

Appendix F - Biographical Information Blanks for Joan D. Smith

Joan D. Smith
Biographical information blanks

1. What social clubs are you members of or have been in the past?
National Honor Society, Younglife, soccer, cross country
2. When you were a student during your teens, you preferred homework assignment that were:
 - a. **Detailed and explicit as to what was expected**
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
3. When working on a project which part do you like best
 - a. **Planning it**
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. Showing the finished product
4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom
 - d. **Sports**
 - e. None of the above
5. Others look to me to answer difficult questions and solve problems that they do not understand?
 - a. Never
 - b. **Sometimes**
 - c. Often
 - d. Always
6. Describe experiences you have speaking in front of others. Did you feel comfortable?

I am generally comfortable speaking in front of others, there is always a little bit of nervousness, especially around new people. But usually the more prepared I am, the less nervous I feel.

7. Do you prefer reading?
 - a. Information almost only about my business
 - b. **Materials based on a variety of areas**

8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.

I have engaged new employees on a personal level, to help make the environment comfortable.

9. Do you attend religious services often?

No.

10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

Not unless my workload requires me to stay late.

Appendix G - Résumé for Joan J. Smith

55550 Rose Circle

Phone 555-555-8022

Cell 555-555-1358

E-mail

Joan.j.smith@largebookcompany.co

m

Joan J. Smith

Professional Profile

Accomplished manager with more than 12 years experience managing varying businesses, leading teams, and consistently delivering sales, profit, and organizational improvements. Additionally, have more than 7 years multi-unit retail management experience and over 4 years of management training experience. Highly focused, enthusiastic and goal-driven professional with solid experience in management, as well as, marketing, sales, operations, and training. Organized and efficient with strong communication and liaison skills. Proven ability to adapt quickly to multiple challenges and changing environments and the willingness to assume increased responsibility. Demonstrated success in implementing test marketing programs and promoting products that consistently increase sales. Recognized for ability to achieve results through leadership, teamwork, and exceptional customer service.

Professional Experience

District Manager – Anytown, USA

Bookstore Specialty Retail 10/04 – Present

Served as Acting District Manager from October of 2004 until official promotion in February of 2005. Oversee 20 Specialty Retail Bookstores, 28 Day By Day locations and 3 separate Books On The Mall bargain store locations.

Selected accomplishments:

- In process of training and mentoring of two DM in training candidates to develop them for next level of career advancement.
- Led the region in overall sales performance during Q4 of 2006.
- Prepared and facilitated the Holiday Merchandising Set for the region in 2006 at the fall holiday kickoff meeting.
- Successfully completed the transition from SM to DM within Bookstore Group Inc. while able to drive some positive results.
- Created a strong, unified team that encourages open communication and cooperation to strive towards our common goals and vision.
- Delegated additional responsibilities to SM's this year to personally challenge and develop them to create a much stronger team of managers.
- Prepared and facilitated Learning Library certification and AM training in August of 2005.
- Assisted in coordination of Fall Regional SM Meeting and prepared and presented Merchandising Holiday Floor Set and Key Categories at the meeting.
- Initiated and assisted with some regional projects such as the creation of the Holiday Meeting in a Box, Holiday Employee Handbook, Seasonal Business DMA & SBAM roles, Merchandising Expectations, Store Visit Reviews, and Temporary Interview Guides.

- Ran several successful pilot/test programs that were implemented throughout the company.
- Recruited and trained managers to provide leadership for stores with high employee turnover and lagging sales.
- Served as primary liaison between corporate office personnel and store staffs.
- Performed monthly inventories and quarterly physical asset inventories.
- Developed and facilitated monthly manager's meetings and telephone conferences.
- Facilitated and managed resolution of all customer service issues.
- Identified and initiated cross-promotions with local businesses.
- Handled all donation and good will requests.

Business Manager / District Trainer – Anytown, USA

Moovies, Inc. 01/97 – 05/98

Promoted to larger volume store in 1997. Also promoted to district trainer.

Selected accomplishments:

- Assisted in transition of company name and all policies, marketing materials, computer programs, and all operational procedures during corporate buy out.
- Served as primary trainer for district, in so trained every new management team member hired in our district.
- Traveled to new acquisition stores to train staffs on standard procedures and computer programs.
- Assisted in new store openings, providing both operational support as well as hiring and training new staff.

Business Manager – Anytown, USA

Movies To Go/Moovies Inc. 08/95 – 12/96

Promoted from Assistant Manager to Business Manager in August 1995. Moovies Inc. purchased Movies To Go during this time.

Selected accomplishments:

- Assisted in transition of company name and all policies, marketing materials, computer programs, and all operational procedures during corporate buy out.
- Selected to pioneer a pilot project developing new account maintenance procedures that were implemented by entire company.
- Traveled to brand new stores to assist in the setup and training of entire staffs.
- Helped to coordinate several stores remodels.

Assistant Manager – Anytown, USA

Movies To Go 09/94 – 07/95

Promoted from part-time sales clerk position.

Selected accomplishments:

- Maintained 40+ hours while attending college and finishing my bachelor's degree.
- Served as positive conduit between manager and the employees.

Education

- | | | |
|---|-------------|-------------------|
| Iowa State University | 1993 - 1995 | Ames, Iowa |
| Bachelor of Business Administration | | |
| ◦ Management of Operations | | |
| University of Northern Iowa | 1991 - 1993 | Cedar Falls, Iowa |
| ◦ Business Management – Emphasis in Human Resources | | |

References

Available upon request.

Appendix H - Biographical Information Blanks for Joan J. Smith

Joan J. Smith
Biographical information blanks

1. What social clubs are you members of or have been in the past?
Sisters of Society (women's social sorority), Social Chair (UNI residence hall council), Student Council, Basketball/Football Cheerleading, Dance, Softball, Drama Club, and Spanish Club
2. When you were a student during your teens, you preferred homework assignment that were:
 - a. **Detailed and explicit as to what was expected**
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
3. When working on a project which part do you like best
 - a. Planning it
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. **Showing the finished product**
4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom
 - d. Sports
 - e. **None of the above**
5. Others look to me to answer difficult questions and solve problems that they do not understand?
 - a. Never
 - b. Sometimes
 - c. Often
 - d. **Always**
6. Describe experiences you have speaking in front of others. Did you feel comfortable?

For me it depends on the size of the group I am up in front of. I present to my group of managers which is usually between 20 - 40 people and I am completely comfortable. With a larger group, say the entire region I get more nervous. Usually I start off nervous, with my voice cracking, but as I get further into the presentation the more comfortable I feel. I speak very fast so sometimes I get anxious about how it will all come out to the audience. I like to put together presentations and I do like being able to train or teach people so I find the experience usually very satisfying.

7. Do you prefer reading?
- a. Information almost only about my business
 - b. Materials based on a variety of areas**

8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.

I let them travel to other stores with me to gain some perspective. I partner them with another top manager and usually that person comes and spends a week with them helping them get acclimated to the business. A lot of our training now is done online, but I often take the materials and go through the information one on one with the new employees as well. I set up follow-up calls weekly to discuss their progress for usually the first 3 months they are on the job.

9. Do you attend religious services often?

Mostly holidays and maybe once every 4-6 weeks. I attend more during the school year than during the summer times when things are busy.

10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

Yes - I work independently in my role in that I don't work directly with my boss or my peers. I do not have to clock in and out each day so I truly get to determine the amount of time I put in each day. So I always find myself staying up late working on my laptop, I receive calls during off hours often, I am pretty accessible 24 hours a day and of course my supervisors are located in another state so there is no one really to see my work. I believe the more you put into your job the better results you will achieve, so I do whatever it takes to get things accomplished and to meet and exceed the goals and expectations that have been set before me.

Appendix I - Résumé for John D. Smith

JOHN D. SMITH

2801 Ohio St. – RID 14
Anytown, USA 55555-4923
359-555-4432
E-mail: john.d.smith@anycollege.edu

EDUCATION

Doctor of Education	Educational Leadership: Postsecondary Education University of Northern Iowa	May, 2008 (Anticipated) ABD Cedar Falls, Iowa
Master of Science	Counseling and Student Personnel Oklahoma State University	May, 1998 Stillwater, Oklahoma
Bachelor of Business Administration	Human Resource Management University of Wisconsin-Whitewater	May, 1995 Whitewater, Wisconsin

PROFESSIONAL EXPERIENCE

Residence Life Coordinator

July, 2002-Present

Rider Hall, Department of Residence, University of Northern Iowa, Cedar Falls, Iowa

- Manage the administrative and functional operation of a traditional residence hall
- Develop and implement a plan for all aspects of residence education in the residence hall including programming and other educational opportunities
- Supervise 8 Resident Assistants, a full-time Secretary, and four to seven Desk Assistants
- Provide guidance, supervision and leadership to Senate Store Managers
- Academically advise 10-15 undecided freshmen students
- Provide short-term counseling, conflict mediation, and crisis intervention
- Facilitate on-going training and development for Resident Assistants
- Coordinate and facilitate administrative hearings for conduct issues
- Participate in campus-wide committees: Professional Staff Recruitment and Selection, RA Seminar Class, RA Conference, Fall Workshop, Winter and Spring Workshop, and Employee Searches for various departments
- Advise Hall Government
- Supervise Summer Conference Program from May, 2006 to present including overall program management

Adjunct Instructor

January, 2006-Present

Educational Leadership, Counseling and Postsecondary Education, University of Northern Iowa, Cedar Falls, Iowa

- Develop a course plan for "College Student Development Theory" and "Communication and Leadership in Higher Education" as part of the Master's and Doctoral requirements in the department
- Teach and coordinate the "Communication and Leadership in Higher Education" Course in the fall and the "College Student Development Theory" Course in the spring
- Instruct lessons incorporating participative learning and active engagement in lessons
- Utilize student feedback to change the course as necessary to meet student needs
- Complete various administrative paperwork including grading papers and assignments

Residence Director

July, 2001-July, 2002

Department of Residential Life, Oklahoma State University, Stillwater, Oklahoma

- Managed the administrative and functional operation of an upper-class apartment community of 260 students
- Created an occupancy system for the complex in order to easily facilitate moves and resident satisfaction
- Communicated with facility staff in order to clean apartments as possible around the check-in and check-outs of students
- Supervised three Community Facilitators
- Advised the Complex Government and Resident Assistant Council
- Incorporated programming to increase both social interaction among apartments and personal resident growth and development
- Provided short-term counseling, conflict mediation, and crisis intervention
- Facilitated administrative hearings for conduct issues
- Team-instructed the Resident Assistant / Community Facilitator Training Class

Residence Hall Coordinator

July, 1998-June, 2001

Noehren Hall, Department of Residence, University of Northern Iowa, Cedar Falls, Iowa

- Managed the administrative and functional operation of a traditional residence hall
- Responsible for all aspects of residence education in the residence hall including programming and other educational opportunities
- Supervised 14 Resident Assistants
- Supervised a Graduate Assistant Hall Coordinator and full-time Secretary
- Academically advised 10-12 undecided freshmen students
- Provided short-term counseling, conflict mediation, and crisis intervention
- Facilitated on-going training and development for Resident Assistants
- Coordinated and facilitate administrative hearings for conduct issues
- Participated in campus-wide committees: Hall Coordinator Recruitment and Selection, RA Seminar Class, RA Conference, and Employee Searches for various departments
- Advised Hall Government
- Team-taught a for-credit course in Career Decision Making

Residence Hall Director

July, 1995-May, 1998

Department of Residential Life, Oklahoma State University, Stillwater, Oklahoma

- Co-managed the administrative and functional operation of an upper-class / graduate residence hall of 300 students from over 70 different countries
- Incorporated elements into the programming plan for the building utilizing the wellness wheel concept with a particular focus on international student issues
- Supervised four to nine Resident Assistants
- Supervised 12-15 Desk Clerks operating a 24-hour customer service desk
- Created and advised the Resident Assistant Council
- Selected and trained both Resident Assistants and Desk Clerks
- Provided short-term counseling, conflict mediation, and crisis intervention
- Advised the National Residence Hall Honorary and community judicial board
- Facilitated administrative hearings for conduct issues
- Team-taught the Resident Assistant Training Class

Graduate Assistant, Intern

January, 1998-May, 1998

Student Conduct Office, Oklahoma State University, Stillwater, Oklahoma

- Served as primary liaison with Greek Life Judicial Boards
- Researched topics such as alcohol use of students in the Greek system and student development among college students in the Greek system
- Facilitated "Coping with the Age Law" sessions
- Assisted with the Student Conduct Committee training sessions
- Trained Greek Life Judicial Boards
- Advised Greek Life Judicial Boards during hearings
- Investigated complaints lodged against Greek organizations or individuals

Graduate Assistant, Intern

January, 1997-January, 1998

Academic Student Services for Athletes, Oklahoma State University, Stillwater, Oklahoma

- Facilitated change to the academic mentoring program
- Served as academic mentor to between two and six male athletes
- Supervised the learning center for 10-40 athletes

Staff Development Intern

August, 1994-May, 1995

Office of Residence Life, University of Wisconsin-Whitewater, Whitewater, Wisconsin

- Published and distributed monthly Resident Assistant newsletter
- Organized and directed Resident Assistant recruitment video
- Assisted with planning and implementation of training programs
- Revised evaluation process for Resident Assistants and Head Resident Assistants
- Developed evaluation for clerical assistants

Head Resident Assistant

August, 1994-May, 1995

Office of Residence Life, University of Wisconsin-Whitewater, Whitewater, Wisconsin

- Served as a senior staff member on a staff of 14 Resident Assistants
- Planned, organized, and presented bi-weekly staff developments
- Served as a liaison between Hall Director and staff
- Acted as a resource and peer advisor to six Resident Assistants
- Maintained accurate records of time off requests, work orders, and duty schedules
- Fulfilled duties of the Resident Assistant position concurrently

Resident Assistant

August, 1991-May, 1994

Office of Residence Life, University of Wisconsin-Whitewater, Whitewater, Wisconsin

- Facilitated an academic environment and social community for 30-35 male and female residents
- Provided crisis intervention, conflict mediation, and para-professional counseling
- Initiated programs to promote resident growth and development using both Wellness Model and Social Educational Enhancements Model
- Promoted diversity through multicultural programs
- Advised floor government officers

Customer Service Manager, Clerk

February, 1988-July, 1998

CUB Foods Madison West, Madison, Wisconsin

(Non-Continuous)

- Supervised shift of approximately 30 workers
- Managed seafood and deli counters
- Maintained schedule for approximately 50 workers
- Handled customer complaints and problems
- Trained new employees on register operation
- Utilized customer service techniques within a multi-line phone answering system
- Handled responsibilities in many departments of the store based on need and availability

CONFERENCE ATTENDANCE

National Association of Student Personnel Administrators National Conference	2007, 2006, 2002, 1999
Upper Midwest Region-Association of College and University Housing Officers Regional Conference	2007, 2005, 2004, 2003, 2000, 1999
Oshkosh Placement Exchange (Interviewer)	2007, 2006, 2005, 2004, 2003, 2000, 1999, 1997
Oshkosh Placement Exchange (Candidate)	1998, 1995
University of Northern Iowa Resident Assistant Conference	2007, 2006, 2005, 2004, 2003, 2001, 2000, 1999, 1995, 1993, 1992
Great Lakes Association of College and University Residence Halls Regional Conference	1994
Wisconsin United Residence Halls Association State Conference	1994

PRESENTATIONS

OPE Review Course-Resident Assistant On-Going Training, University of Northern Iowa	February, 2000; 2001; 2003; 2004; 2005; 2006; 2007
Chickering in Video-Professional Development Series, Cedar Falls, Iowa	March, 2005
Resumes for Resident Assistants-UNI RA Conference, Cedar Falls, Iowa	January, 2005
<u>Evolving Communication in Hierarchical Organizations</u>-NASPA, Boston, Massachusetts	March, 2002
Demonstrating the Hero in You, On a Resume and Cover Letter- Leadership Conference, Oklahoma State University	January, 2002
Graduate Assistantships in Student Affairs: What Can I Do?-Leadership Learnshop, University of Northern Iowa	January, 2001
Academic Mentoring-Professional Staff Development, University of Northern Iowa	April, 2000
Family Feud-Residence Hall Program, University of Northern Iowa	February, 1999; 2000
Graduate School Preparation for Student Affairs-University of Northern Iowa Resident Assistant Conference	January, 2000
Hazing Workshop-Greek Leadership Conference, University of Northern Iowa	September, 1999
Resume Building and Transferable Skills-Resident Assistant On-Going Training, University of Northern Iowa	February, 1999
Newly Roomies Game-Residence Hall Program, University of Northern Iowa	November, 1998; 1999
Earning Your Ph.D. In Partiology-Residence Hall Program, University of Northern Iowa	October, 1998; 1999
Round 'Em Up-Creative Advertising-Leadership Learnshop, University of Northern Iowa	September, 1998
Psych Week-Residence Hall Program, Oklahoma State University	February, 1998
Floor Feud- Residence Hall Program, Oklahoma State University	February, 1997
Sex Week-Residence Hall Program, Oklahoma State University	February, 1996; 1997; 1998
Personality Assessment in Group Communication-Resident Assistant Staff Development, Oklahoma State University	November, 1995
Diversity: It's in the Cards-Resident Assistant Training, University of Wisconsin-Whitewater	January, 1995
Taking You Back to Kindergarten-University of Northern Iowa Resident Assistant Conference, Top Ten Program	January, 1993
Sex Under the Influence- University of Northern Iowa Resident Assistant Conference, Top Ten Program	January, 1993
ENERGY- University of Northern Iowa Resident Assistant Conference, Top Ten Program	January, 1993

PROFESSIONAL INVOLVEMENT

<u>2007-2008</u>		<u>1999-2000</u>	
Member	Resident Assistant Selection Committee	Chairperson	Hall Coordinator Recruitment and Selection Committee, University of Northern Iowa
Member	Spring and Winter Workshop Committee		Resident Assistant On-Going Training Seminar Course Committee
Chairperson	Move-In Crew Committee	Chairperson	Resident Assistants in Special Encounters Committee
Liaison	Health Aide Program	Member	Department of Residence Dining Services
<u>2006-2007</u>		Member	Redeker Dining Center Renovation Project Committee
Chairperson	Fall Workshop Committee	Liaison	
Member	Professional Staff Selection Committee	Member	
Chairperson	Move-In Crew Committee		
<u>2005-2006</u>		<u>1998-1999</u>	
Chairperson	Fall Workshop Committee	Member	National Association of Student Personnel Administrators Major Speakers Committee for Annual Conference, New Orleans, Louisiana (1997-1999)
Member	Professional Staff Selection Committee		Hall Coordinator Recruitment and Selection Committee, University of Northern Iowa
Liaison	Dining Center	Member	Resident Assistant Seminar Course Instructor Committee, University of Northern Iowa
Reviewer	National Association of Student Personnel Administrators Conference Programs	Member	Resident Assistant Conference Committee, University of Northern Iowa
<u>2004-2005</u>		Liaison	Student Activities Office
Chairperson	Winter and Spring Workshop Committee		
Chairperson	RA Banquet Committee	Member	Resident Assistant Selection Committee, Oklahoma State University
Member	Professional Staff Selection Committee	Member	Oshkosh Placement Exchange Interview Team, Oklahoma State University
<u>2003-2004</u>		Member	Hall Director Selection Committee, Oklahoma State University
Chairperson	UMR-ACUHO Membership Committee	Member	Residence Hall Area Staff Development Committee, Oklahoma State University
Chairperson	Resident Assistant Selection Committee	Chairperson	Residence Hall Area Resource Team, Oklahoma State University
Chairperson	PDS Committee		
Member	Fall Workshop Committee	<u>1995-1998</u>	
<u>2002-2003</u>		Member	Resident Assistant Selection Committee, Oklahoma State University
Member	UMR-ACUHO Nominating and Site Recruitment Committee	Member	Oshkosh Placement Exchange Interview Team, Oklahoma State University
Chairperson	Professional Staff Selection Committee	Recruiter	Hall Director Selection Committee, Oklahoma State University
Advisor	MACURH Conference Registration and Housing Committees	Member	Residence Hall Area Staff Development Committee, Oklahoma State University
Member	Resident Assistant Selection Committee	Chairperson	Residence Hall Area Resource Team, Oklahoma State University
Member	PDS Committee		
<u>2001-2002</u>		<u>1991-1995</u>	
Chairperson	Resident Assistant / Community Facilitator Training Committee	Member	Residence Life Advisory Board, University of Wisconsin-Whitewater
Chairperson	Graduate Assistant / Residence Director Training Committee	Member	Head Resident Assistant Selection Committee, University of Wisconsin-Whitewater
Member	Graduate Assistant Recruitment Committee	Member	Residence Life Fall Training Committee, University of Wisconsin-Whitewater
<u>2000-2001</u>			
Member	UMR-ACUHO Host Committee, 2000 Conference in Des Moines, Iowa		
Chairperson	Move-In Crew Committee		
Chairperson	Resident Assistant On-Going Training Seminar Course Committee		
Member	Hall Coordinator Recruitment and Selection Committee, University of Northern Iowa		

PROFESSIONAL AFFILIATIONS / HONORS

Member	National Association of Student Personnel Administrators	January, 1998 - Present
Member	Chancellor's List	February, 2005 - Present
Member	Golden Key National Honor Society	September, 1994 - Present
Recipient	Research Award, UMR-ACUHO	November, 2005
Recipient	Outstanding New Professional Award, Master's Level, UMR-ACUHO	November, 1999
Recipient	Program of the Year, Oklahoma State University	May, 1997; May, 1998
Recipient	Advisor of the Month, Oklahoma State University	January, 1997
Recipient	JC Chalberg Award for Outstanding Student Leadership, University of Wisconsin-Whitewater	December, 1994
President	National Residence Hall Honorary	August, 1994 - May, 1995
Member	Homecoming Court, University of Wisconsin-Whitewater	October, 1994

RESEARCH/PUBLICATIONS

Smith, John D. (1998). Academic Mentoring: Increasing Academic Success of Undergraduate Student Athletes. Research paper written to fulfill graduate requirements. Oklahoma State University, Stillwater, Oklahoma.

REFERENCES

Current Supervisor:

Bob Doe

Associate Director of Residence/Housing
Redeker Center
University of Northern Iowa
Cedar Falls, IA 50614-0252
(319) 555-2333
Bob.doe@uni.edu

Past Colleague, Past Graduate Assistant:

Joe Somebody

Marketing Account Manager
Hellmann Corporation
528 Campbell Ave.
Waterloo, IA 50701
(319) 555-5555
Joe.somebody@hellman.com

Current Colleague, Past Resident Assistant:

Fran Fake

Residence Hall Coordinator
3800 Jennings Dr.
Cedar Falls, IA 50613
(319) 555-5555
Fran.fake@uni.edu

Appendix J - Biographical Information Blanks for John D. Smith

John D. Smith
Biographical information blanks

1. What social clubs are you members of or have been in the past?
Bowling teams / league, and other than that, a lot of social time surrounding my job, but no 'club.'
2. When you were a student during your teens, you preferred homework assignment that were:
 - a. **Detailed and explicit as to what was expected**
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
3. When working on a project which part do you like best
 - a. Planning it
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. **Showing the finished product**
4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. **Social activities**
 - c. Making things in your own workroom
 - d. Sports
 - e. None of the above
5. Others look to me to answer difficult questions and solve problems that they do not understand?
 - a. Never
 - b. Sometimes
 - c. **Often**
 - d. Always
6. Describe experiences you have speaking in front of others. Did you feel comfortable?

I was a very shy child through high school and freshman year of college. Then I became an RA and had to be comfortable in front of people. Thus, my shell didn't just crack, it broke off in huge pieces and I am comfortable now talking to groups.

7. Do you prefer reading?
- a. Information almost only about my business
 - b. Materials based on a variety of areas**

**YES - I like social reading
on numerous areas to expand my horizons**

8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.

I am a constant resource for questions about anything, and not just with new employees, but seasoned veterans as well. I also always reach out to new employees to make sure that their transition is going smoothly, often asking them out to do something socially so that they feel like they 'fit in'.

9. Do you attend religious services often?

I try to attend at least every other week; however, time gets away from me sometime and I do not make it a priority. I am trying to make this more of a priority for this year.

10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

I do not ever really consider whether someone is here or not if I work late. If there is work to do, I am here to get it done. The nature of my job is 24 hours a day, so working late or early in the morning just depends on the requirements at that point in the year.

Appendix K - Résumé for John T. Smith

John T. Smith

1313 Mocking Bird Lane

Anytown, USA 55555

Home: 555-555-7756 Work: 555-555-0265

EMAIL: Smith3@cox.net

OBJECTIVE:

SUMMARY OF QUALIFICATIONS:

WORK EXPERIENCE:

May we contact your current supervisor: Yes

10/20/2004 Present 40 Hours per week Construction Manager/ Family Coordinator/ Director for Self-Help Housing, Anytown, USA Joe Smith 555-555-3103

Responsible for the overall coordination of the Self-Help Housing Program to assure compliance with the purpose of the Rural Development Section 523 procedures and instructions. Supervise the Self-Help grant program efforts to carry out the housing program management from recruitment of interested borrowers to occupancy of completed homes. Assure that all program management methods were professionally implemented and executed within rural development guidelines. Responsible for all technical assistance grant expenditures are properly authorized under appropriate RD instructions. Perform supervision over the packaging of borrower applications and maintain status and availability of land suitable for building sites. Supervise bid solicitations from interested sub-contractors. Supervise the financial accountability of borrower funds. Assure the program staff provides proper assistance and supervision of borrowers while they construct their homes. Supervise the management of the two-year grant program to achieve the proposed goals set forth in the housing development program. Act as a coordinator between RD and the grant program to promote efficient and continual cooperation to accomplish the goals. Review and report program procedures and difficulties and seek solutions to these problems. Required to be knowledgeable in and understanding uniformed building, electrical, plumbing, mechanical codes. Required to oversee and evaluate all construction techniques and methods in all facets of residential constructions. Responsible for recording and evaluation all proposed bids as well as contracts. Drafted and evaluated all invitations to bid. Projected budgets for home construction costs. Keep accurate records of family work hours. Responsible for making sure all materials with regards to proper quantity and type are delivered to job site. Keep accurate track of materials delivered and returned. Oversee the advertising and marketing of the Self-Help program. Coordinate loan packaging in conjunction with RD. Evaluate financial situations and credit risk factors to approve or disapprove housing loans. Advise families of financing, financial management and advise them of other sources of available assistance. Directed and administrated financial control of supervised bank accounts, maintenance, insurance and other detail accounts. Recruitment of low-income families to enter the Self-Help Housing program. Responsible for all budgets for 523 and 502 RD programs. Packaged grant application for continuation of program. Responsible for hiring and maintaining Self-Help housing staff. Assisted in developing a cooperative program between The City of Junction City and Junction City's High School construction technologies class. The class provides students the opportunity to build a home from start to finish. Acted as the general contractor for this program. Provided instruction to high school students on several projects. Headed a committee to oversee the renovation and addition to the skate ring for the City of Junction City.

**08/01/2004 10/1/2004 25 Hours per week Farm Assistant 8.00/HR
Smith Farms Anytown, USA Frank Smith 555-555-5555**

Evaluated grazing status of bovine and cared for cow/calf operations. Determined if adequate nutritional needs are met. Analyzed health of cattle and administer medication as needed. Kept accurate records of number of cattle as well as any health related issues. Assisted the calving procedures to minimize birth risks. Tagged and marked calves. Repaired farm equipment and performed agricultural welding. Evaluated farm machinery breakdowns, order parts and complete repairs. Loaded and delivered agricultural goods. Coordinate other employees work schedules.

**12/01/2000 07/07/2004 25 Hours per week Owner/Manager
Smith Repair and Property Management Anytown, USA Self-employed**

Researched area real estate. Purchased and renovated repossessed homes. Investigated abandoned home ownership, dealt with HUD to obtain ownership, Contacted owners and organized closing procedures. Analyzed repair and cost estimates. Replaced floors, replaced outdated water lines. Fabricated and installed wood cabinets. Rewired electrical system. Installed windows, doors, vinyl siding, tile, ceiling lights, ceiling fans, trim work. Designed and build storage buildings and workshops. Installed all electrical and shelving needs. Painted interior/exterior, Installed metal roof and new trim. Maintained landscape.

**01/01/1998 03/01/2000 25 Hours per week Owner/Operator
Smith Property Management and Development Anytown, USA Self-employed**

Owned and operated a small ranch. Market and resale property analysis, Planned and designed ranch layout. Designed and fabricated metal barns, arena and pipe fencing. Installed water and electrical systems. Trained, marketed and sold Quarter Horses. Managed feeding and healthcare for horses and cattle.

**01/01/1991 08/01/2004 200 days per year Professional Rodeo Cowboy
Professional Rodeo Cowboys Association Colorado Springs, CO Self-employed**

Managed a National Competition schedule. Analyzed upcoming events and formulated most productive course, Assessed costs and risks for scheduling purposes, researched and reported on stock selections, met strict entry deadlines for 125 events per year, coordinate travel plans for 2-10 individuals, organized and scheduled flight plans and lodging accommodations, participated in media events, served as Regional Saddle Bronc Director for 5 years, competed in over 100 rodeos per year with a Top 20 National Ranking for 7 years.

01/01/1970 01/01/1995 200 days per year Smith Family Ranch, Pavillion, WY. 555-555-6229

Worked and helped manage 300 cow calf operation. Analyzed cows to determine age, pregnancy status, health condition, determine short and long term production. Calved cows preventing birthing complications. Examined calves for proper nutritional and health needs. Branded and doctored calves. Farmed land to produce feed for animals. Irrigated and put up hay for feed. Located and gathered cattle off large acreages. Helped market and negotiate price for pending cattle sales. Produce annual quarter horse sale, ride and show over 100 horses per year. Designed and build facilities to hold large auction. Advertised horse sale in print as well as on the internet. Talked to public to help them in the buying process of horses.

EDUCATION:

University of Wyoming, Industrial Education Bachelors of Science, 1992
Chadron State College 1988-1989

Wind River High School, Graduation Date: 1988

SPECIALIZED TRAINING:

Property Management and Contracts Course at Texas School of Real Estate.
Home Inspection courses from the Professional Career Development Institute
(est. graduation May 2007)
Licensed General Contractor in City of Junction, KS (#013380)
Graduate of 2006 Crossroads of Leadership
Courses in "Green building" 2006 HAC Conference
2007 Kansas Renewable energy conference
2006-Present Board Member of the National Self-Help Housing Steering Committee

LICENSES/CERTIFICATES:

Class C Drivers Licence

AWARDS:

Recipient of the 2006 Mark of Excellence Award of the City of Junction City
Selected for the 2006 Crossroads of Leadership Training

REFERENCES: Available upon request

Appendix L - Biographical Information Blanks for John T. Smith

John T. Smith

Biographical information blanks

1. What social clubs are you members of or have been in the past?
None
2. When you were a student during your teens, you preferred homework assignment that were:
 - a. Detailed and explicit as to what was expected
 - b. Fairly specific but with a fair amount of leeway in following procedural instructions**
 - c. Quite general and open-ended, allowing you to follow the instructions according to your own understanding
3. When working on a project which part do you like best
 - a. Planning it**
 - b. Carrying out the specified tasks
 - c. Working out unexpected problems
 - d. Showing the finished product
4. In your leisure time, you prefer to be involved with:
 - a. Reading
 - b. Social activities
 - c. Making things in your own workroom**
 - d. Sports
 - e. None of the above
5. Others look to me to answer difficult questions and solve problems that they do not understand?
 - a. Never
 - b. Sometimes
 - c. Often**
 - d. Always
6. Describe experiences you have speaking in front of others. Did you feel comfortable?

My public speaking experience is mostly limited to work related issues. At first I was extremely nervous, but as my knowledge of the subject matter to which I was speaking about increased I experienced less anxiety and became a better speaker.
7. Do you prefer reading?
 - a. Information almost only about my business**
 - b. Materials based on a variety of areas

8. Describe activities in the past that you have done with new employees at your business that you were not asked to do.

I had all my employees take a personality test to help better understand how they processed information. I also tried to spend some one on one time to share experiences outside the office to create a level of comfort for both of us.

9. Do you attend religious services often?

Yes, all of the time.

10. Do you find yourself staying late after work, even though, nobody is around to notice? Explain briefly.

No, I don't believe in taking time from myself and my family working late. I feel that if an employee works hard and efficiently during business hours that they should be able to complete their work load.

Appendix M - Participants Overall Rating Form

What is the last four digits of your social security number? _____

For (1-5) please respond by circling the number that corresponds to your understanding of the particular concept

	very weak understanding <i>1</i>	weak understanding <i>2</i>	average understanding <i>3</i>	good understanding <i>4</i>	very good understand <i>5</i>
1.	How well do you feel you understand the concept of conscientiousness?				
2.	How well do you feel you understand the concept of extraversion?				
3.	How well do you feel you understand the concept of agreeableness?				
4.	How well do you feel you understand the concept of cognitive ability?				
5.	How well do you understand the concept of organizational citizenship behaviors?				
6.	not helpful at all <i>1</i>	not very helpful <i>2</i>	neutral <i>3</i>	helpful <i>4</i>	very helpful <i>5</i>
7.	not enjoyable at all <i>1</i>	<i>2</i>	neutral <i>3</i>	<i>4</i>	very enjoyable <i>5</i>
8.	not helpful at all <i>1</i>	not very helpful <i>2</i>	neutral <i>3</i>	helpful <i>4</i>	very helpful <i>5</i>
9.	Do you feel you created an image in your head for what high or low would be for each concept? (please circle one)				
		Yes	No	Maybe	
10.	When evaluating the candidates did you match new information about the candidates to your existing image in your head for what high or low meant for each concept.				
		Yes	No	Maybe	

Appendix N - Big Five Inventory

The Big Five Inventory (BFI)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Disagree strongly 1	Disagree a little 2	Neither agree nor disagree 3	Agree a little 4	Agree strongly 5
---------------------------	---------------------------	------------------------------------	------------------------	------------------------

I see Myself as Someone Who...

- | | |
|---|--|
| <p>___ 1. Is talkative</p> <p>___ 2. Tends to find fault with others</p> <p>___ 3. Does a thorough job</p> <p>___ 4. Is depressed, blue</p> <p>___ 5. Is original, comes up with new ideas</p> <p>___ 6. Is reserved</p> <p>___ 7. Is helpful and unselfish with others</p> <p>___ 8. Can be somewhat careless</p> <p>___ 9. Is relaxed, handles stress well</p> <p>___ 10. Is curious about many different things</p> <p>___ 11. Is full of energy</p> <p>___ 12. Starts quarrels with others</p> <p>___ 13. Is a reliable worker</p> <p>___ 14. Can be tense</p> <p>___ 15. Is ingenious, a deep thinker</p> <p>___ 16. Generates a lot of enthusiasm</p> <p>___ 17. Has a forgiving nature</p> <p>___ 18. Tends to be disorganized</p> <p>___ 19. Worries a lot</p> <p>___ 20. Has an active imagination</p> <p>___ 21. Tends to be quiet</p> <p>___ 22. Is generally trusting</p> | <p>___ 23. Tends to be lazy</p> <p>___ 24. Is emotionally stable, not easily upset</p> <p>___ 25. Is inventive</p> <p>___ 26. Has an assertive personality</p> <p>___ 27. Can be cold and aloof</p> <p>___ 28. Perseveres until the task is finished</p> <p>___ 29. Can be moody</p> <p>___ 30. Values artistic, aesthetic experiences</p> <p>___ 31. Is sometimes shy, inhibited</p> <p>___ 32. Is considerate and kind to almost everyone</p> <p>___ 33. Does things efficiently</p> <p>___ 34. Remains calm in tense situations</p> <p>___ 35. Prefers work that is routine</p> <p>___ 36. Is outgoing, sociable</p> <p>___ 37. Is sometimes rude to others</p> <p>___ 38. Makes plans and follows through with them</p> <p>___ 39. Gets nervous easily</p> <p>___ 40. Likes to reflect, play with ideas</p> <p>___ 41. Has few artistic interests</p> <p>___ 42. Likes to cooperate with others</p> <p>___ 43. Is easily distracted</p> <p>___ 44. Is sophisticated in art, music, or literature</p> |
|---|--|

Please check: Did you write a number in front of each statement?

Appendix O - The Big Five Inventory Scoring Guide

BFI scale scoring ("R" denotes reverse-scored items):

Extraversion: 1, 6R, 11, 16, 21R, 26, 31R, 36

Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42

Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R

Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39

Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

Appendix P - Organizational Citizenship Behavior Measure

OCB Measure

Please score on the enclosed excel sheet to the degree the item describes you and behavior you are likely to exhibit in your workplace.

Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

1. Defend the organization when other employees criticize it.
2. Encourage friends and family to patronize this organization.
3. Emphasize to people outside the organization the positive aspects of working for the organization.
4. Defend the organization when outsiders criticize it.
5. Show pride when representing the organization to the public.
6. Never publicly complains about changes in the organization.
7. For issues that may have serious consequences, I express opinions honestly even when others may disagree.
8. Often motivate others to express their ideas and opinions.
9. Encourage others to try new and more effective ways of doing their job.
10. Encourage hesitant or quiet workers to voice their opinions when they otherwise might not speak-up
11. Frequently communicates to co-workers suggestions on how the work unit can improve.
12. Rarely returns late from breaks or meals.
13. Perform your duties with unusually few errors.
14. Perform your duties with extra special care.
15. Always finish your work on time.
16. Always willing to listen to co-workers problems and worries.
17. Always goes out of the way to make newer employees feel welcome in the work group.
18. Show genuine concern and courtesy toward co-workers, even under the most trying business or personal concerns.