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The Validation of a Structured Situational Interview for Registered and Licensed Practical Nurses

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THE VALIDATION OF A STRUCTURED SITUATIONAL INTERVIEW FOR
REGISTERED AND LICENSED PRACTICAL NURSES

A Thesis
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts, Industrial/Organizational Psychology

By
Nicholas L. Simmons
May 2010

THE VALIDATION OF A STRUCTURED SITUATIONAL INTERVIEW FOR
REGISTERED AND LICENSED PRACTICAL NURSES

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The profession of nursing is experiencing a shortage of qualified nursing professionals. Hospitals understaffed with nurses are likely to experience several negative consequences including low quality care, which places the health and safety of patients at risk. In order to ensure an effective selection process for hospital nurses, a structured situational interview, developed using a content validation approach, was validated using a criterion-related approach.

Interviews that have a high degree of structure consistently demonstrate higher predictive validities with job performance than do interviews with less structure. The structured situational interview in this study had a high degree of structure and was developed after a job analysis was completed. Interviewee responses were evaluated using a behavioral summation scale.

The results of the current study confirmed the hypothesis that there would be a positive relationship between nursing student interview scores and Grade Point Average, thus indicating that the structured interview should be useful in the selection of professionals in the field of nursing. However, the observed validity coefficient ($r = .29$) was lower than expected based on a review of previous research on the criterion-related validity of structured situational interviews. It is recommended that future research with this instrument use a larger sample of nurse incumbents as participants and nurse

managers as interviewers. Additional interview items, developed following a content validity approach, would likely increase the reliability and the validity of the interview.

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Nursing is largely a knowledge based field (Ballard, 2003). Accordingly, nurses need to incorporate knowledge of nursing science, biomedical, physical, emotional, behavioral, social science, ethics, and philosophy to be successful in the profession. Ballard stated that nurses need to have the capacity for critical thinking and to maintain leadership qualities. Critical thinking is requisite for successful job performance in the dynamic work environment nurses encounter on a daily basis. Further, registered nurses are typically responsible for the oversight of unlicensed colleagues, which requires leadership to be successful.

The field of nursing is currently understaffed. The nursing staff of a hospital is an important influence on patient health and safety (Stanton, 2004). For example, nurses providing low quality care have been linked to adverse health occurrences such as higher frequencies of urinary tract infections, pneumonia, shock, longer hospital stays, and 30-day mortality. Furthermore, patients likely receive lower quality care as a result of understaffed nursing positions in hospitals. It has been demonstrated that hospitals with an adequate nursing staff experience dramatically fewer adverse events (Stanton).

Even though hospitals' nursing departments are currently understaffed and face the associated adverse patient health consequences (Stanton, 2004), hospitals are currently facing another obstacle, that is, the average age of nurses is getting older. The older demographic is likely a result of the aging baby-boomer era coupled with a decreasing number of young adults being trained to enter the work force as nurses (Drury, Francis, & Chapman, 2009). This dynamic further explains why hospitals are experiencing negative consequences that likely result from understaffed nursing positions. Moreover, nurses regularly report that they experience heavy workloads,

minimal mentoring, low degrees of supervision, and minimal professional opportunities (Drury et al.). The health care field is desperate to find mature nurses who are capable and motivated to replace the aging workforce. Motivated young adults demonstrate lower levels of attrition, less sick time, and above average academic performance (Drury et al.). These positive dispositions characteristic of motivated young adults would likely generalize to young adults entering a professional nursing setting. Furthermore, in the health care industry, a shortage of nursing professionals is a widespread occurrence. This trend is occurring globally, directly affecting the quality of care that patients receive around the world (Drury et al.).

Given the specialized knowledge required to perform successfully in the profession of nursing, it is critical to select appropriate, qualified personnel to work in this field. There is currently a global crisis in the nursing field. That is, hospitals and other sectors of health care are experiencing a shortage of qualified nurses. The field of nursing is largely understaffed. The problem of understaffed nursing positions is exacerbated by the previous generation of nurses retiring at higher rates than younger nurses are entering the field. This is problematic for a number of reasons, but is especially so for individuals who need nursing care. Therefore, it is critical that empirically based measures are developed to accurately predict successful nursing performance.

The current study will evaluate the criterion-related validity of a structured interview developed to screen nursing applicants at a hospital in Kentucky during the summer of 2009. To evaluate the effectiveness of the instrument, a criterion-related validity study was conducted to determine the predictive validity of the structured

interview. Rather than using nursing position candidates or current employees, nursing students were used as participants in the study. These students were all in their last year of academic study. The criterion measures were grades in an applied practicum course and grade point average in nursing courses. The literature on structured interviews will be reviewed next, followed by unstructured interviews, types of items used in structured interviews, job analysis, training interviewers, transparency in structured interviews, and impression management. Finally, the hypotheses for the current study will be given.

Structured Interviews

Interviews are one of the most widely used methods for assessing candidates in an employment setting (Campion, Campion, & Palmer, 1997; Huffcutt & Arthur, 1994; Macan, 2009; Pulakos & Schmitt, 1995; Van Iddekinge, McFarland, & Raymark, 2007). The only other method that may be more commonly used in an employment setting is the application blank. There are several qualities that distinguish a structured interview from its counterpart, the unstructured interview. Essentially, every narrative review that has been conducted to compare the structured and unstructured interview has reached the same conclusion, that is, structured interviews are more useful for predicting job performance (e.g., Arvey & Campion, 1982). In addition, meta-analytic reviews focusing on validity have unanimously supported the dominant features of structured interviews when compared to unstructured interviews (Campion et al.). Structured interviews have demonstrated criterion-related validity coefficients comparable to those for cognitive ability test (Huffcutt & Arthur). Furthermore, structured interviews introduce less bias and discrimination than cognitive ability tests (Guion, 1988). These findings typically occur only after statistical artifacts have been accounted for (i.e., sampling error, lack of

reliability in both the predictor and criterion, and range restriction). Thus, it is in an organization's best interest to use structured interviews rather than unstructured interviews when making hiring decisions because of the psychometric properties inherent in structured interviews.

Definitions of structure have varied greatly throughout the literature. However, researchers frequently cite Huffcutt and Arthur's (1994) definition. Huffcutt and Arthur defined structure as "the reduction in procedural variability across applicants, which can translate into the degree of discretion that an interviewer is allowed in conducting the interview" (p. 186). While the current review uses the term structure, other reviews have substituted many other terms to describe the same interview. For example, other terms that have been used interchangeably with structure throughout the literature include standardization, guided, systematic, and patterned (Campion et al., 1997). At one time, there was a tendency for researchers and practitioners to view interview structure as a dichotomous construct; that is, the interview either was or was not structured. However, the construct of structure is more complex than this dichotomy implies (Huffcutt & Arthur). The complexity occurs because structure is best conceptualized as a continuous and multidimensional construct. Huffcutt and Arthur argued that, at an operational level, there are two dimensions of structure that relate to the degree of discretion permitted when conducting an interview. These two dimensions are interview questions and response scoring. In Campion et al.'s review of the literature they determined there are 15 components that constitute structure. These components were divided into two categories: components that influence the content of the interview and components that influence the evaluation process. Furthermore, there are many components that account

for each of these two dimensions (i.e., interview items and evaluation or response scoring).

The dimension of structure called question standardization can be conceptualized by four progressively higher levels of structure (Huffcutt & Arthur, 1994). Level 1 is characterized as an absence of formal constraints, a typical unstructured interview. Practitioners using this level of structure are free to ask applicants whatever questions they deem necessary. Level 2 utilizes limited constraints. Thus, a standardization of topic areas to be discussed is present, but the interviewer is free to create questions within the specified topic areas. Level 3 is denoted by pre-determined identification of interview items. However, candidates still are not asked the exact same questions because interviewers are permitted to choose among alternative questions. Level 4, the highest level of structure, uses complete structure. That is, all applicants are asked identical questions in the same sequence and deviation or follow-up questions are not permitted.

The same process also can be used to assess structure for the evaluation of responses. Response scoring has only three levels of structure as compared to four levels of questioning. Level 1 of the evaluation process is characterized by forming a single, overall evaluation made at the conclusion of the interview (Huffcutt & Arthur, 1994). Level 2 consists of making evaluations based on pre-determined criteria. Typically, Level 2 structure for the evaluation of responses involves the computation of dimension scores. The highest level of structure, Level 3, is characterized by the evaluation of responses to each interview item using a pre-established scoring or rating system.

Huffcutt and Arthur (1994) used a systematic process for combining the levels of structure for both dimensions to identify an overall level of structure. Structure 1 was

defined as Level 1 questioning with Level 1 scoring. Thus, there are no formal constraints for questions asked and a universal score is determined for applicants at the conclusion of the interview. The conceptualization of Structure 2 is less straightforward. For an interview to be classified as a Structure 2 interview, the levels of both dimensions (i.e., content of the interview and evaluation of responses) sum to either three or four. For example, Level 2 item standardization and Level 1 response scoring would be classified as Structure 2. Similarly, Level 2 item standardization and Level 2 response scoring would also be classified as Structure 2. Overall structure at Level 3 is indicative of a high level of structure, but still involves variability in the interview process. To be classified as a Structure 3 interview, the sum of both dimensions must equal 5 or 6. Structure 4, the highest level of structure, occurs when each applicant is asked identical questions without probing and scores are evaluated using benchmark answers.

Huffcutt and Arthur's (1994) investigation of structure used a meta-analytic approach to evaluate the predictive qualities of the four structure classification schemes. Huffcutt and Arthur concluded that the more structured the interview, the better its predictive characteristics. However, this increase in incremental validity stops with Structure 3; that is, Structure 3 demonstrated a criterion-related validity coefficient of .56 while Structure 4 demonstrated a validity coefficient of .57. Lower levels of structure demonstrated lower levels of predictive validity. Structure 1 had a validity coefficient of .37 while Structure 2 demonstrated a validity coefficient of .20. These results suggest a ceiling effect. That is, the more structure an interview has the better it will be at predicting performance; however, incremental validity is not demonstrated by Structure 4 over Structure 3. The reported validity coefficients were found for entry-level positions.

Thus, one must use caution when attempting to generalize these results to more advanced positions.

Campion et al. (1997) discussed 15 components of structure that encompass both dimensions of structured interviews, the content of the interview, and the evaluation of responses. Seven components were identified for the content of the interview. These components are job analysis, same questions, limit prompting, better questions, longer interview, control ancillary information, and no questions from candidates. Eight components were identified for the evaluation of responses. These components are rate each answer or use multiple scales, anchored rating scales, detailed notes, multiple interviewers, same interviewers, no discussion between interviews, training, and statistical prediction. The 15 components involved for both dimensions of structure further demonstrate the complexity of the construct. As seen in Appendix A, each identified component has unique impacts on the reliability, validity, and user reactions. Appendix A summarizes the valence (i.e., negative or positive) of the effect each interview component has on reliability (i.e., test-retest, interrater, candidate consistency, interviewer-candidate interaction, internal consistency, and interrater agreement), validity (i.e., job-relatedness, reduced deficiency, and reduced contamination), and user reactions (i.e., reduced equal employment opportunity, candidate reactions, and interviewer reactions). Delineating each of these effects is beyond the scope of this review. Interested readers are referred to Campion et al.

In sum, structured interviews are complex and multidimensional. Higher levels of interview structure are associated with higher predictive validity. In order to attain the high validity coefficients associated with structured interviews, practitioners are required to commit a large amount of time to develop the instrument. As a result, organizations may prefer to develop interviews that use fewer constraints, such as the unstructured interview.

Unstructured Interview

Now that it is clear what constitutes a structured interview, it is important to understand what constitutes an unstructured interview. This distinction is particularly important because, despite the psychometric superiority of the structured interview, organizations prefer unstructured interviews (Chen, Tsai, & Hu, 2008; Le, Oh, Shaffer, & Schmitt, 2007). This preference may occur because of negative attitudes toward structured interviews, interviewer uncertainty regarding the proper delivery of structured interviews, and a lost sense of control. Further exacerbating this problem is that unstructured interviews typically are not validated. Thus, unstructured interviews typically are poor predictors of job performance.

Another factor that may influence the prevalent use of unstructured interviews is a need for power. Interviewers who have the freedom to ask any question they desire in any order, experience a powerful situation. Thus, interviewers who have a high need for power will likely reject the introduction of a structured interview because of the restrictions imposed on the interviewer in the process (Chen et al., 2008). However, the idea that need for power can serve as a deterrent to the use of structured interviews was not supported when empirically tested (Chen et al.). However, the participants in this

study were from Taiwanese cultures. This finding may suggest that there may be differences between cultures, need for power, and preferences to use unstructured interviews. Interviewers from individualistic cultures may demonstrate a preference for unstructured interviews because of a need for power. Thus, the hypothesis that individuals with a high need for power prefer unstructured interviews should not be dismissed; it should be examined in future studies.

Another characteristic likely influencing perceptions towards structured interviews is interviewer's cognitive style (Chen et al., 2008). Interviewers who maintain an intuitive style likely prefer unstructured interviews because the interviewer is free to guide the discussion into areas that he/she deems appropriate. Another explanation that may help explain the prevalence of unstructured interviews may be the large workload typically experienced by individuals who work in human resource fields (Klehe, 2004). Human resource personnel likely do not read academic journals (Rynes, Brown, & Colbert, 2002). Furthermore, they may not be able to understand the statistical evidence and theoretical viewpoints if they did read the journals (Le et al., 2007). Furthermore, structured interviews take a great deal of time to develop effectively (Macan, 2009). Thus, without adequate time and resources, it is easier for practitioners to design unstructured interviews. Lievens and De Paepe (2004) found support for two additional reasons explaining the preference for unstructured interviews. Structured interviews regulate the delivery of the evaluation process, but practitioners want discretion in the interview process. Unstructured interviews allow this discretion. It also was demonstrated that individuals believed that they lose valuable informal contact with applicants during structured interviews.

Unstructured interviews may be conceptualized easily by referring to Huffcutt and Arthur's (1994) structure scheme. Structure 1 was characterized by the absence of structure and without constraints for questioning or evaluation. Therefore, practitioners utilizing unstructured interviews are free to guide and direct interview questions in any direction they desire. These interviews may or may not be job relevant; interviewees are likely asked different questions; and the content of the interview is not derived from a job analysis. Evaluating a candidate using an unstructured approach typically involves making a single overall evaluation at the end of the interview. Interviewers may take notes during the interview process, but it is not required. It can be assumed that interviewers using this format do not take notes because it would detract from the interpersonal aspect of the interview that the interviewer desires. For example, it may make applicants nervous to see an interviewer writing notes, which negates eye contact during the process. The practice of not taking notes occurs even though there is evidence supporting that note taking during the evaluation process increases the objectivity of the evaluation process (Campion et al., 1997). Note taking positively effects reliability and may increase predictive validity, as well. Thus, many organizations prefer unstructured interviews despite the accumulation of evidence to support the positive psychometric qualities inherent in structured interviews (Campion et al.; Huffcutt & Arthur; McDaniel, Whetzel, Schmidt, & Maurer, 1994; Pulakos & Schmitt, 1995). Organizations continue to use such approaches that are not validated.

While it is recognized that structured interviews demonstrate higher validity coefficients than unstructured interviews (Huffcutt & Arthur, 1994; Campion et al., 1997), there have been few studies that have attempted to explain this difference.

Schmidt and Zimmerman (2004) suggested that structured interviews are more valid than unstructured interviews because of a difference in valid construct measurement (i.e., accurately measuring job relevant dimensions). This occurs because with structured interviews a thorough job analysis identifies the necessary job dimensions to measure in the interview. Unstructured interviews are less reliable. The difference in validity between the two types of interviews may be explained by the difference in reliability. Longer interviews are more reliable than shorter interviews. Thus, using multiple unstructured interviews utilizing more items than a single unstructured interview may be as reliable as a single structured interview. This increase in reliability for the unstructured interviews would be advantageous because organizations tend to prefer unstructured interviews (Chen et al., 2008; Le et al., 2007). If the difference in reliability is accounted for between both interview formats, it may enable unstructured interviews to maintain the same predictive qualities as structured interviews by increasing the validity coefficient (Schmidt & Zimmerman).

Schmidt and Zimmerman (2004) tested the hypothesis that the predictive correlation between both interview formats is actually the same. Several data sets were examined from previous studies. They found some evidence to support this notion. That is, both interview formats demonstrated the same predictive validity when reliability differences were accounted for. Yet, the evidence was mixed at best. There also was a wealth of evidence that failed to support the hypothesis. Schmidt and Zimmerman concluded that their hypothesis should not be dismissed and argued for further research. Given the wealth of evidence in support of structured interviews (e.g., Huffcutt & Arthur, 1994; Campion et al., 1997), practitioners should not consider unstructured interviews to

be as effective as structured interviews for predicting job performance. There is little evidence that supports the predictive validity of unstructured interviews and unstructured interviews have many qualities that limit psychometric properties. The differences in reliability between the two types of interviews exist because of a lack of item standardization and a subjective evaluation method. These characteristics in the unstructured interview contribute to instruments that are deficient and contaminated (Campion et al., 1997). For these reasons reliability and validity should be greater for structured interviews. Therefore, comparing the validity of a structured interview after correcting for unreliability in an unstructured interview is inappropriate. Regardless, of the number of unstructured interview items used, errant hiring decisions are likely to occur. In order to avoid inaccurate hiring decisions, organizations should use structured interviews rather than unstructured interviews to make selection decisions. Several methods are available to develop structured interview items.

Types of Questions used in Pre-Employment Interviews

A variety of question types are available to organizations when designing structured interviews. Pulakos and Schmitt (1995) indicated that attempts to structure an interview and ask job-relevant questions typically focus on two types of interview questions, experience-based interviews and situational interviews. Experience-based interviews are commonly referred to as a behavioral description index (BDI). BDI questions are past oriented and they ask interviewees to identify experiences from past jobs or life situations and relate these experiences to relevant aspects of the job. In particular, interviewees need to demonstrate relevant knowledge, skills, and abilities needed to perform the targeted job (Pulakos & Schmitt). This style of interview question

is founded on a common axiom, that is, the best predictor of future behavior is past behavior. There is at least one limitation to the BDI format. An applicant new to the workforce may possess a desirable skill set, but be unable to demonstrate these skills because questions are directed at past behaviors. Without relevant experiences, the interviewee may score low on the interview even though he/she would perform well on the job. Thus, BDI questions may be best suited for higher level positions which presume prior experience.

In contrast to experience-based (i.e., BDI) questions focusing on past behavior, situational questions focus on future behavior (Latham, Saari, Pursell, & Campion, 1980, as cited in Pulakos & Schmitt, 1995). Situational questions are derived from goal setting theory (Campion et al., 1997). Situational items present interviewees with hypothetical, yet realistic situations that would likely occur on the job. Applicants are then asked how they would respond to the particular situation. Situational interviews typically include a high amount of structure in terms of the other components of the interview (i.e., the 15 components identified above). Situational items are advantageous because all interviewees respond to the same hypothetical situations (Pulakos & Schmitt, 1995). By asking applicants the same items, the structure of the interview is further increased (Campion et al., 1997). In a situational interview, structure is enhanced by giving all applicants the same situation as compared to experience-based questions where the applicant determines the situational response. When experience-based questions are used, each applicant answers items reflecting upon different, personal life experiences. Thus, experience-based questions introduce less structure into the evaluation process. However, this discrepancy can be alleviated through the development of a pre-determined

evaluation format; that is, an evaluation format that standardizes ratings administered to interviewees through personal experience benchmarks.

Although situational and experience-based questions are the most commonly used methods in pre-employment interviews (Pulakos & Schmitt, 1995), two other types of questions are used by organizations, background items and job knowledge items. Background questions are fairly structured (Campion et al., 1997). These questions ask applicants to demonstrate their work experience, education, and other qualifications (Lopez, 1966, as cited in Campion et al., 1997). However, this information can be gathered through common human resource practices such as application blanks and background checks. Therefore, it would seem more appropriate to focus interviews on job relevant behaviors, especially when considering the benefits to validity when doing so (Campion et al.). Job related interview questions result in higher validity coefficients than other types of items. Finally, another relatively structured type of interview question is job knowledge questions. Job knowledge items are typically mixed in with other types of interview questions (Campion et al.).

Researchers have addressed what type of interview question is most beneficial (i.e., maintains the highest predictive validity). High quality question types (i.e., experience-based and situational questions) may increase interview reliability (Campion, Campion, & Palmer, 1988). Further, high quality questions likely enhance validity because of high levels of job-relatedness and reduced contamination (i.e., a reduction in measuring constructs that are not critical for successful performance on the job) that occur with low quality questions (i.e., unstructured interview questions). Evidence from empirical studies is mixed at best when comparing experience-based questions to

situational questions. McDaniel et al. (1994) found an average validity coefficient of .50 for situational interview questions after correcting for unreliability in the criterion and range restriction. Other research has directly compared the validity of both styles of questions. While both item types were found to be valid predictors, experience-based questions demonstrated a higher validity coefficient (Campion, Campion, & Hudson, 1994, as cited in Pulakos & Schmitt, 1995). Latham and Saari (1984) compared both types of interview questions and found that only situational questions were valid. Thus, there have been numerous studies that have demonstrated conflicting evidence. Therefore, all that can be concluded currently is that if interviews are developed appropriately, both formats will likely be valid. At this point, it is impossible to conclusively demonstrate which format is more effective for selecting employees. However, situational questions maintain higher elements of structure, so hypothetically this question type may have better predictive capability. Yet, it is equally possible that even though experience based questions are less structured, the format may predict equally well as a result of the ceiling effect (Huffcutt & Arthur, 1994). That is, there is a minimal difference in predictive validity between Level 4 structure and Level 3 structure. Therefore, structured interviews that are slightly less structured than Structure 4 interviews predict job success at an equivalent rate. In order to create experience-based items or situational items, a job analysis needs to be conducted.

Job Analysis

One of the primary determinants for creating a valid structured interview is a job analysis (Arvey & Campion, 1982; Chen et al., 2008; Schmidt & Zimmerman, 2004). One goal of the job analysis when developing a structured interview is to identify

dimensions of the job that are required for effective performance. Although a variety of job analysis techniques are available when designing a structured interview, critical incidents is the most commonly used method (Campion et al., 1997). When conducting a job analysis using critical incident methodology, an analyst meets with subject matter experts to obtain information for job-related items. Critical incidents target information that demonstrates particularly effective or ineffective behavior based on the consequence of that behavior. The outcome was of the behavior either extremely beneficial to the organization (i.e., if the behavior was effective) or detrimental to the organization (i.e., if the behavior was ineffective). Critical incidents can also identify information targeting average job performance behaviors. Thus, a wide range of job performance can be identified using a critical incident job analysis. This range of behavior can be helpful for creating a structured evaluation technique such as a behavior summation scale. Critical incidents also are used to create the items in the structured interview. Insight into both dimensions of structure has been gained as a result of the critical incident job analysis (i.e., standardization of items and standardization of evaluation). Typically, critical incidents are grouped into dimensions of performance and the level of performance reflected is evaluated. Task analysis is another method of job analysis used to create structured interview items. Regardless of the type of job analysis utilized, a job analysis is a necessary first step to develop a structured interview that will predict performance and be legally defensible (Campion et al., 1988). Interviews developed without a job analysis typically are considered to be unstructured (Campion et al., 1988). Furthermore, using a job analysis is expected to influence all three types of validity identified by Campion et al., 1988 which were job-relatedness, reduced deficiency, and reduced

contamination. Therefore, by using a job analysis, items in the interview have a greater probability of being job-related, measuring dimensions of performance critical to the job without measuring other dimensions (i.e., absence of contamination), and not measuring irrelevant performance domains (i.e., deficiency). Job analysis is a necessary step for developing a structured interview; however, practitioners using the instrument need to properly administer the interview. To avoid improper interview administration, interviewers should be trained.

Interviewer Training

Chapman and Zweig (2005) hypothesized that formally training interviewers would increase the use of structure in the interview process. This hypothesis was supported indicating that trained interviewers are more likely to select more effective employees. Interestingly, untrained personnel were confident in their ability to predict performance through the use of unstructured interviews. Unfortunately, the prediction of job performance using an unstructured interview was not nearly as easy as it seemed. To exacerbate the problem, Chapman and Zweig found in two samples of data which included 812 applicants spanning 1500 organizations, that only 34% of one sample of interviewers and 28% of the other sample reported ever receiving interviewer training. Generalizing this finding suggests that the majority of interview decisions are made by individuals who never receive interview training. This is discouraging because interviewer training is likely the most universal method to improve the interview process (Dipboye, 1992, as cited in Campion, 1997). Yet, a majority of interviewers never learn the principles of structure or how to employ these mechanisms in an interview. Chapman and Zweig found that formally trained interviewers were more likely to incorporate

components of structure into the evaluation process, further supporting the idea that all interviewers should be trained on structure. This training is critical even with a structured interview as untrained interviewers are unlikely to use the selection instrument appropriately. This lack of interviewer training will likely limit the psychometric properties of any well-developed structured interview.

The interviewer training content usually includes a discussion of the interview itself (Pulakos & Schmitt, 1995). Training may also incorporate how to write interview questions and take notes during the interview process (Campion et al., 1997) or how to use items already written. Dimensions relevant to successful performance are also typically included in training sessions (Campion et al.). Another common topic is how to rate individual items (Pulakos & Schmitt, 1995). Rater error and frame of reference information may also be included in these training sessions (Campion et al.). Utilizing job analyses and training interviewers do not constitute an exhaustive list of antecedents to structure; however, these processes greatly enhance the likelihood for structure to occur. It is important to increase the probable and appropriate use of structured interviews because of the predictive validity associated with these instruments. While there is a formidable body of evidence that has the demonstrated criterion-related validity of structured interviews (Campion et al.), the construct validity of structured interviews is not well documented.

A Paradox for Structured Interviews

The underlying reasons that structured interviews predict job performance are largely unknown (Van Iddekinge, Raymark, Eidson, & Attenweiler, 2004). Structured interviews typically involve a job analysis (Campion et al., 1997). The job analysis

information is used to determine dimensions that are necessary to perform a given job. If an interview is capable of measuring dimensions that are necessary for effective performance, a logical rationale for the prediction of job performance has been achieved. Unfortunately, instruments designed to assess dimensions of job performance may not measure the targeted constructs (Van Iddekinge et al.). Researchers have explored this possibility. Conway and Peneno (1999) examined the construct validity of structured interviews using both experience-based and situational interviews. An interview was developed that utilized data gained through a critical incident analysis. The interview was composed of eight dimensions. Five of the dimensions were measured using both experience-based and situational items. The interview composition allowed the construct validity of the five dimensions to be measured. The monotrait, heteromethod mean validity coefficient was .50 (i.e., the mean convergent validity coefficient of experience-based items and situational items used to measure the same dimension), while the heterotrait, heteromethod mean validity coefficient was .48 (i.e., the mean discriminate validity coefficient of experience-based items and situational items used to measure different dimensions). Therefore, items designed to measure different dimensions were correlated nearly as high as were items designed to measure the same dimension. These findings certainly do not suggest construct validity of the structured interview.

Assessment centers typically display this same paradox. In this situation, exercise factors converge rather than dimensions (Guion, 1988). However, assessment centers measure different dimensions using different exercises (Van Iddekinge et al., 2004). Structured interviews evaluate dimensions using the same exercise (i.e., all items are answered orally). Therefore, this paradox should not be as exaggerated for structured

interviews. Van Iddekinge et al. noted that many structured interviews evaluate dimensions using only one or two questions per dimension. Structured interviews using few items to evaluate each dimension likely result in unreliable measurement at the dimensions level (however, overall interview score may be highly reliable) and may explain why dimensions typically do not converge. As a result, construct validity may be more demonstrable if a greater number of items were used to evaluate each dimension. To test this hypothesis, Van Iddekinge et al. used a multitrait-multi method research design to assess construct validity for an interview designed to select customer service managers. Unfortunately, the divergent validities in this study were higher than the convergent validities for the dimensions being evaluated.

Thus, evidence suggests that structured interviews may not measure the targeted dimensions identified during a job analysis. However, structured interviews demonstrate high levels of criterion-related validity (Huffcutt & Arthur, 1994; Campion et al., 1997); that is, individuals who perform effectively during a structured interview perform effectively on the job. Thus, as long as the predictions made are accurate, the absence of construct validity is seemingly irrelevant. However, improving the construct validity of a structured interview may also improve the criterion-related validity. Further research should explore this paradox and determine if predictive validity can be further enhanced. Another method that may interact with predictive validity is revealing to job candidates the dimensions used to evaluate interview performance.

Transparency vs. Non-Transparency

Structured interviews can be rigorous for applicants because they combine both social and cognitive processes (Campion et al., 1997). That is, interviewees must engage

in conversation (i.e., social process) while interpreting the information desired by the interviewer (i.e., cognitive process). Giving applicants insight into the evaluation process may improve performance and give more accurate insight into the skill set an applicant offers. Transparent structured interviews represent an effort to reduce the complex tasks that are associated with structured interviews. A transparent structured interview reveals to applicants the dimensions used in the evaluation process (Klehe, Konig, Richter, Kleinmann, & Melchers, 2008). Making the evaluation criteria known may enable applicants to better demonstrate their job relevant knowledge, skills, and abilities. Transparent dimensions also will likely reduce random error (i.e., by not making applicants guess at what dimension a particular item represents) and allow for perceived fairness. Transparency may also increase criterion-related validity by reducing erroneous responses. Further, by making the dimensions known to applicants, the construct validity paradox may not be as exaggerated. Klehe et al. tested these postulations over two experiments. As suspected, interview scores improved when dimensions were transparent. Further, transparent dimensions did improve the construct validity of the structured interview. However, in the second sample of participants, criterion-related validity was assessed. Unfortunately, while mean interview scores were significantly higher for the transparent condition, criterion-related validity was not improved. Thus, while transparent dimensions aid applicants through the interview process, they do not increase predictive validity. These results are rational. Making dimensions known to interviewees should improve their scores. However, in an actual job setting, employees have to work independently. Supervisors may be willing to help employees for a period of time, yet if work cannot be completed independently after a transitional period, an

employee will likely be terminated. Further, transparency may lead to impression management (discussed below). Impression management can be both positive and negative. But, when interviewees intentionally change their behavior simply to manage impressions, it is likely to have a negative effect on predictive validity.

Non-transparent interviews are the opposite of transparent interviews. That is, interviews utilizing non-transparent dimensions do not make the dimensions assessed in the interview known to the interviewee. Without this explicit information, candidates must identify the evaluative criteria (Konig, Melchers, Kleinmann, Richter, & Klehe, 2007). The ability to identify criteria moderates individuals' performance in the structured interview, and the ability to identify job related information will likely help a candidate perform on the job. Therefore, the ability to identify criteria may be viewed as a construct that generalizes across situations (Konig et al.). Konig et al. also proposed that the ability to identify criteria may help solve the construct validity paradox. A sample of 95 prospective university graduates, were invited to participate in an interview training session. Konig et al. found intriguing results. That is, the results demonstrated that the ability to identify criteria generalizes across situations. Thus, individuals who exhibit this ability during an interview process will likely perform better on the job. Evidence for this idea was demonstrated through significant criterion-related validity coefficients. The answer to the question of whether to make dimensions known or unknown to the interviewee seems relatively straight forward. That is, transparent interviews do not improve the prediction of job performance and may encourage interviewees to use impression management, while non-transparent dimensions predict job performance because interviewees must have the ability to identify criteria.

Therefore, the prediction of job performance is just as likely to occur using non-transparent interviews and have fewer negative consequences (e.g., a form of impression management that reduces the predictive validity of the interview) than transparent interviews.

Impression Management, Faking, and Coaching

Impression management is an individual's attempt to consciously or unconsciously control the way in which he/she is perceived in social situations (Van Iddekinge et al., 2007). This construct certainly plays a role in interview settings through a variety of mechanisms. Some forms of impression management are verbal statements, nonverbal behaviors, and altering appearance. Verbal exchanges likely influence the outcome of an interview more than nonverbal behaviors or modifications to appearance. There are two types of verbal impression management, assertive and defensive behaviors. Assertive behaviors are typically used for self-promotion. When an individual uses this type of impression management, he/she tries to demonstrate their relevant skills, knowledge, and abilities for a particular job. Ingratiation, another assertive type of impression management, involves interviewee's efforts to make an interviewer feel good about him/herself in an attempt to influence the outcome of the interview. Individuals' who use defensive behaviors attempt to deflect or repair their image (Schlenker, 1980, as cited in Van Iddekinge et al., 2007). Personality or trait theory may determine a person's tendency towards a style of impression management. According to trait theory, a trait will present itself in behavior if the situation is relevant to the trait. The strength of the situation moderates an individual's traits and the use of impression management (Van Iddekinge et al.). Impression management is most likely to be used in weak situations

(i.e., a situation where behavioral expectations are ambiguous). Experience-based questions are more likely than situational question to encourage self promoting behavior because individuals answer questions in relation to their past experiences. Individuals may try to exaggerate their experiences in an effort to seem more qualified for a given position. Understanding these concepts of impression management is critical because impression management may dictate the outcome of an interview.

The use of impression management can introduce error and decrease the predictive validity of a structured interview (Levashina & Campion, 2006). However, the occurrence of impression management does not always impose negative consequences on the selection process. For example, an individual utilizing self presentation in a truthful manner would not be negative. Rather, the individual is attempting to demonstrate his/her knowledge, skill, and ability that are relevant for the position. Conversely, impression management that is untruthful can damage the predictive validity of the selection procedure (Levashina & Campion). Untruthfulness in an interview situation can be described as faking. Faking is defined as the intentional falsification of responses in an effort to portray a positive impression. Levashina and Campion stated that faking is a function of the willingness to fake, the capacity to fake, and the opportunity to fake. It was hypothesized that these three functions must be simultaneously present for faking to occur. If this hypothesis is accurate, the only function that can be controlled in an interview setting is the opportunity to fake. That is, by introducing structure to an interview, the flow of communication is controlled. For example, interview items are pre-determined and the interviewer is not permitted to deviate from these questions. Further, prompting and follow-up questions are either eliminated or controlled in highly

structured interviews (Huffcutt & Arthur, 1994), which should decrease a candidate's opportunity to fake. The use of non-transparent dimensions should also reduce faking (Levashina & Campion). This may occur because candidates are not made aware of the dimensions used to evaluate responses. Transparent dimensions may promote untruthful behavior in an effort to secure a position. Finally, longer interviews reduce the likelihood of faking in a selection context.

Various types of impression management can be taught to interviewees through coaching. Coaching job candidates prior to the interview process can influence an applicant's perception of fairness and reduce potential liability by increasing the applicant's perception of procedural justice (Maurer, Solamon, & Lippstreu, 2008). If psychometric properties are not decreased, coaching should be utilized. Yet, how does coaching affect the psychometric properties of a structured interview? Generally, there are two types of coaching. The first type is referred to as peripheral coaching. Peripheral coaching focuses on non-verbal behaviors and typically teaches individuals how to dress, smile, and make eye contact (Maurer et al.). This coaching strategy may improve scores allocated during an interview, but also introduces error into the evaluation process because of impressions that are not job relevant. Another type of coaching is teaching applicants to enhance focus and convey job-relevant information. This method of coaching may reduce irrelevant sources of variance (Maurer et al.).

Maurer et al. (2008) tested the effects of coaching on structured interviews. The study used police and fire department personnel who were candidates for promotion. An optional coaching session was offered to those interested; that is, participants were not randomly placed into groups (i.e., coached or not coached). Rather, participants

volunteered for coaching and those that did not volunteer for coaching served as a control. The coaching used was designed to enhance focus and conveyance of job relevant information. Specifically, participants received information about dimensions used to assess interview performance for an unrelated job (as it would have been unfair for these individuals to have such insight for the actual job). These participants also received coaching regarding the scoring, rating, and evaluation process. Coaching participants demonstrated significant effects. Participants who received coaching performed significantly better than non-coached candidates, and the reliability of ratings administered to these individuals was significantly higher. Maurer et al. concluded that proper methodological coaching likely increases predictive validity. Yet, peripheral coaching may hurt predictive validity by introducing irrelevant sources of variance (error) that are not job specific (note: this assumption was left untested).

The Maurer et al. (2008) study suggests that organizations should consider coaching job candidates prior to evaluating them in a structured interview. However, in the Maurer et al. study higher predictive validity may have resulted because of candidate motivation; that is, candidates who were motivated to attend the coaching session likewise may have been more motivated on the job, thereby performing at a higher rate. This confound would inflate the predictive validity in the study. However, if candidates had been randomly assigned to groups (i.e., coached or none coached) the effect on predictive validity would be more conclusive. Further research should examine the effects of coaching on predictive validity. Practitioners and organizations alike should be cautious of the generalization that coaching job candidates will increase the predictive validity of the selection process. Although it is possible to coach job candidates through

the selection process, the coaching process is discontinued after selection. Thus, job candidates will not be guided through their job functions. As a result, coaching may not improve predictive validity. Coaching may inflate mean scores during the interview process; this does not necessarily mean that these individuals will in fact perform to a higher level on the job. To an extent, coaching is similar to organizations' use of transparent dimensions. That is, transparent dimensions increase interview score, but do not necessarily increase predictive validity.

Summary of the Literature Review

Interview structure is a continuous, multidimensional construct (Huffcutt & Arthur, 1994). Completely unstructured interviews anchor one end of this continuum while highly structured interviews anchor the other end. Structured interviews have good psychometric properties enabling high predictive validity. Yet, despite the high predictive validity of structured interviews, organizations prefer to use unstructured interviews (Chen et al., 2008; Le et al., 2007).

Two item types commonly used in structured interviews are experience-based items and situational items (Pulakos & Schmitt, 1995). Both are effective predictors of job performance; research has not indicated conclusive evidence demonstrating superiority in predictive validity for either item type. A job analysis is needed to develop both experience-based items and situational items. Likewise, a job analysis is required as the foundation for a valid structured interview (Chen et al., 2008; Schmidt & Zimmerman, 2004; Arvey & Campion, 1982).

Several factors other than interview structure can impact the reliability and validity of the interview. Training interviewers increases the use of structure in the

interview process (Chapman & Zweig, 2005). While structured interviews demonstrate high predictive validity (e.g., Campion et al., 1997; Huffcutt & Arthur, 1994; McDaniel et al., 1994), the construct validity of structured interviews is not well documented. Transparent interviews reveal to applicants the dimensions used in the evaluative process (Klehe et al., 2008), but do not improve the predictive validity of the structured interview. Non-transparent interviews force applicants to identify the evaluative criteria in the interview (Konig et al., 2007), an ability that generalizes to job performance. Thus, structured interviews should utilize non-transparent dimensions. Impression management can have both positive and negative effects on the predictive validity of structured interviews (Levashina & Campion, 2006). Coaching can be used to promote the use of impression management; that is, coaching can increase predictive validity (e.g., teaching a job candidate to more accurately portray job relevant information) or decrease predictive validity by introducing error into the evaluation process (e.g., teaching a job candidate to smile at the interviewer). The current study will evaluate the predictive validity of a situational structured interview developed to evaluate candidates for nursing positions. The interview will be non-transparent and the interviewers will be trained. Candidates will not be coached.

Current Study

A structured interview was developed to select registered and licensed practical nurses. The first step in the development process was a job analysis. A job analysis is a necessary first step for developing a valid selection instrument (Chen et al., 2008; Schmidt & Zimmerman, 2004). The job analysis identified both critical incidents and task statements. The job analysis identified five dimensions that were requisite for successful

nursing performance: interpersonal dynamics; critical thinking; professionalism, integrity, and work ethic; work independently; and leadership. Each of these dimensions was represented in the structured interview. The dimension definitions for each of the respective dimensions can be seen in Appendix B. Thus, the developed structured interview was consistent with Ballard's (2003) acknowledgment of leadership as being an essential function in the profession of nursing. Each of these five dimensions was evaluated using multiple items (i.e., the interview contains four items per dimension).

The items used in the structured interview were situational. These items present to applicants hypothetical, yet realistic situations that were likely to occur during the job of nursing. To ensure items represented the five targeted dimensions, a retranslation was performed. Job experts assigned each item to the dimension that was best represented by that item. Items with a demonstrable level of agreement between job experts were selected for use in the final instrument.

Huffcutt and Arthur (1994) stated that item standardization is one of two dimensions of structure. The instrument evaluated in the current study is classified as the highest level of structure for this dimension (i.e., Level 4). That is, all items were asked to each applicant and follow-up questions were restricted, although asking a job candidate to clarify his/her response was permitted. Huffcutt and Arthur considered follow-up questions to be prompting or the freedom to direct the flow of the applicant response. Prompting was not permitted when using this structured interview. Rather, an interviewer could simply seek clarification to the interviewee's response.

The second dimension of structure was standardizing the evaluation of applicant's responses (Huffcutt & Arthur, 1994; Campion et al., 1997). With the current instrument,

candidate responses were evaluated for every item. Evaluations were made using a behavior summation scale (BSS). Thus, interviewers have a standard by which to evaluate and rate applicant responses. The responses found in the BSS were examples of responses that candidates may offer. The reliability of the interview ratings may have increased because the interviewer compared offered responses to the rating scale. This method of response rating was representative of Huffcutt and Arthur's Level 3 dimension for evaluating responses. The BSS identified five levels of performance represented on a five-point scale. The scale anchors were 1 = failure, 2 = below standards, 3 = meet standards, 4 = exceeds standards, and 5 = excellent behavior. Each exemplar in the behavior summation scale was calibrated by job experts; that is, subject matter experts rated the level of performance indicated by each exemplar. The criteria for retaining an exemplar was a standard deviation equal to or below 1.0. Means and standard deviations were computed for each exemplar. Exemplars were placed on the rating scale to reflect the level of performance indicated by the mean rating.

Both dimensions of structure used in this instrument represent the highest level of structure described by Huffcutt and Arthur (1994). Thus, the overall structure found in the instrument should be classified as Structure 4. However, because interviewers in the current study were permitted to seek clarification to applicant responses, some might classify the interview as Structure 3. Never the less, both Structure 3 and Structure 4 predicted performance at an equivalent rate in the Huffcutt and Arthur study.

The following hypothesis was tested.

Hypothesis 1: Associate degree seeking nursing students' scores on the structured interview will be positively correlated with academic performance (as reflected by grade point average).

Method

Participants

In the current study, nursing students were used rather than nursing applicants or current nursing employees. The 43 participants in this study were nursing students from an accredited Associate Degree Nursing program. All participants were enrolled in a mid-sized university in the south central region of the United States. Four participants in this study were male and 39 participants were female. No other demographic information was collected from participants.

Interviewers

The structured interview was administered to participants by industrial/organizational psychology graduate students. Each interviewer was trained prior to conducting interviews. The training consisted of dimension training, rater training, and frame of reference training. A mock interview using pre-determined responses was used as a practice mechanism to acclimate each interviewer to the structured interview. Interviewers also were trained in the proper method for providing feedback to participants regarding structured interview performance. Each interviewer was trained on how to take detailed notes during the administration of the structured interview.

Instrument

The instrument used to evaluate nursing students was a structured situational interview. The structured interview consisted of 20 items measuring five dimensions (i.e., interpersonal dynamics; critical thinking; professionalism, integrity, and work ethic; works independently; and leadership). Each dimension contained four interview items.

Interviewee responses were evaluated using a BSS, which identified five levels of performance on a five-point scale. The scale anchors were 1 = failure, 2 = below standards, 3 = meet standards, 4 = exceeds standards, and 5 = excellent behavior. Levels of performance in the BSS were illustrated with behavioral exemplars providing interviewers with a standard for evaluating student responses. The situational structured interview may be seen in Appendix C.

Criterion Measure

The criterion measure used for participants was grade point average. The originally proposed criterion of overall grade point average (GPA) was determined to be contaminated because many participants had earned credits in academic programs other than the Associate Degree Nursing program (ADN) that were included in an overall GPA. As a result, the GPA for the most recent 50-55 credit hours was used as the criterion measure. If a student had earned more than 67 hours (i.e., the number of hours required to earn the ADN degree), then the GPA was calculated for the most recent 50-55 credit hours. This range of credit hours was chosen because participants varied in their progress in the ADN program (i.e., some students were in their third semester of the ADN program, while other students were in their fourth semester of the program). The refinement to the criterion was designed to reflect more accurately GPA based on credits earned in the ADN program.

Procedure

Participants were required to participate in this study for course credit. Students who did not want to participate were offered an alternative assignment.

Participants were notified by email stating the time and date of their structured interview. The structured interviews were held at a desk in a psychology office. The office was designed to provide a professional interview setting. Thus, the room maintained a quiet and distraction free environment. Each structured interview was conducted using one interviewer. Upon arrival, each participant was given background information, informed of the purpose of the study, and given an informed consent form. Interview items were asked to each participant in the same order. Items were grouped by dimension. The order in which the items were asked to participants was interpersonal dynamic items; critical thinking items; professionalism, integrity, and work ethic items; works independently items; and leadership items. Deviation from this order was not permitted. Additionally, follow-up questions by the interviewer were not permitted. However, if a response was not understood, clarification was sought by the interviewer. Responses to each item were noted in the allotted space on the interview form by the interviewer. Notes included an appropriate amount of detail to justify the assigned rating for each item. Upon conclusion of the interview, each participant was given feedback regarding his/her performance.

Results

The data were examined to determine if the sample included any outliers. Standardized residuals were computed. Participants who had a standardized residual greater than 2 or less than -2 were excluded from the analysis. There were a total of 43 participants in the study. The data from one participant met the criteria for outliers and were discarded from the final data set; thus, the data from 42 participants were included in the analyses.

Internal consistency reliability was determined for each interview dimension. Even though the interview was intended to be multidimensional, an overall alpha coefficient was calculated for the structured interview as well. The reliability analysis indicated an alpha of .596, .358, .165, .523, and .539, respectively, for the dimensions of interpersonal dynamics; critical thinking; professionalism, integrity, and work ethic; works independently, and leadership. The coefficient alpha for the total interview was $\alpha = .792$.

Scores on the structured interview items were formed into a composite rating by summing the ratings for each item. Hypothesis 1 stated that nursing student's scores on the structured interview would be positively associated with academic performance. This hypothesis was tested by correlating the composite structured interview score for ADN students with academic performance (i.e., grade point average), which resulted in a significant positive correlation ($r = .29, p = .032$) supporting Hypothesis 1. When the outlier was included in the analysis, a non significant correlation was found between scores on the structured interview and academic performance ($r = .22, p = .077$). Thus, the outlier had a disproportionate detrimental effect on the coefficient.

Discussion

Hypothesis 1 was supported by a significant correlation between structured interview scores and ADN student GPA. The findings of this study support the criterion-related validity of the structured interview. That is, individuals who score higher on the structured interview will likely perform at a higher level on the job than will individuals who score lower on the structured interview.

The results of this study were expected based on the review of the literature and professionally accepted norms in the field of industrial-organizational psychology. For example, Huffcutt and Arthur's (1994) meta-analysis indicated that highly structured interviews demonstrate strong predictive validity (i.e., $r = .57$). McDaniel et al. (1994) found an average criterion-related validity coefficient of .50 for situational interviews. Latham and Saari (1984) compared experience-based interviews to situational interviews and found support for the predictive validity of situational interviews.

Several researchers have indicated that a primary determinant in the development of a valid interview is the completion of a job analysis (Arvey & Campion, 1982; Chen et al., 2008; Schmidt & Zimmerman, 2004). Furthermore, work oriented job analyses take precedence over worker oriented job analyses when developing structured interviews. Of the various ways to complete work oriented job analyses, critical incident analyses are the most common type when creating structured interviews (Campion et al., 1997). Furthermore, Chapman and Zweig (2005) found evidence that formally trained interviewers were significantly more likely to incorporate structure into the interview process. The inclusion of structure into the interview process will likely enhance the accuracy of ratings, thereby increasing the predictive validity of the structured interview.

Common components of interviewer training include the content of the interview (Pulakos & Schmitt, 1995), the evaluation of applicants' responses to interview items, rater error and frame of reference training (Campion et al., 1997), and dimension training.

The structured situational interview evaluated in this study was developed after a job analysis was completed. The job analysis consisted of both a critical incident analysis and a task analysis. The developed structured interview consisted of situational items. Furthermore, the method used to develop and evaluate the situational interview was representative of Huffcutt and Arthur's (1994) highest level of structure (i.e., Structure 4). Structure 4 interviews were found to have the highest predictive validity (Huffcutt & Arthur). That is, each candidate was asked identical items in the same order and evaluated using a BSS. Furthermore, each interviewer used in the study was trained. The interviewers received dimension training, training pertaining to the content of the interview itself, training on the evaluation of participants' responses, rater error training, and frame of reference training. Given that a thorough job analysis was conducted, that the structured situational interview consisted of a high level of structure, and that each interviewer was appropriately trained, the magnitude of the criterion-related validity coefficient found in this study ($r = .29$) was relatively low. However, there are several limitations to this study that may have limited the observed predictive validity coefficient.

Limitations

One of the major limitations of the current study was the sample size. At one time in the field of industrial-organizational psychology it was commonly thought that sample sizes between 30 and 50 were sufficient to conduct criterion-related validity studies

(Sackett & Wade, 1983). However, Sackett and Wade illustrated that much larger sample sizes are required to have adequate power (i.e., the probability of detecting a significant validity coefficient if the predictor is truly valid) for these types of analyses. Even though the analysis in the current study resulted in a significant validity coefficient, it is possible that the true validity of the structured situational interview exceeds .29. For example, considering the method used to develop the predictor and to execute this study, a criterion-related validity coefficient of .50 would have been a reasonable expectation. For example, using Huffcutt and Arthur's (1994) classification scheme, the examined structured situational interview should be considered Structure 4 (i.e., the highest level of structure). Interviews that are developed and executed with this amount of structure have been found to have validity coefficients greater than .50. Therefore, if the sample size had been significantly larger (e.g., $n = 150$), it is likely that the observed validity coefficient in this study would have been greater. That is, if the population correlation truly is greater than .29, a larger sample would have resulted in an increase in the observed predictive validity coefficient. The increase in the observed validity coefficient would be more representative of the population correlation when corrected for lack of perfect reliability and range restriction. The increased sample size also would have reduced the size of the confidence interval around the observed coefficient.

Guion (1988) stated that criterion-related validity studies that use a concurrent design will be negatively impacted by motivational issues. That is, interviewees in concurrent designs are already incumbents as opposed to applicants. In an interview setting, applicants are much more likely to prepare for the interview and ultimately put forth a great deal of effort to perform well in the interview. This occurs because

applicants are interested in obtaining the position for which they have applied. Conversely, interviewing current job incumbents does not elicit this level of motivation because the desired position has already been obtained. Even though the current study used nursing students rather than applicants or incumbents, the study constitutes a concurrent design. Therefore, motivation may have been a factor in this study. As a result, the evaluation of interviewee's responses to interview items may not be representative of the interviewee's true scores. A predictive design would have corrected this issue and may have increased the observed criterion-related validity coefficient. Although there were issues related to the interviewees, interviewers also likely experienced similar difficulties.

The interviewers used in this study were industrial-organizational psychology graduate students. Similar to the motivation issues that affected interviewees, motivation likely influenced interviewers as well. That is, the graduate students used in the study did not receive any incentive to accurately rate interviewee's responses or to even participate in the study. As a result, it is possible that the interviewers did not perform at the same level of proficiency that may have occurred if an incentive was offered.

Motivation was not the only factor that may have influenced interviewers. The training that was used to prepare the interviewers was relatively short (i.e., one hour). As a result of the time limitation, the interviewers may not have fully understood the dimensions underlying the structured situational interview or the BSS. Furthermore, the frame of reference training that was used only covered one item from each dimension. Therefore, the interviewers may not have fully understood the BSS or the content evaluated by the items in the interview.

The ratings made by the interviewers in this study may have been less accurate than if ratings had been made by nursing managers. As the interviewers were psychology graduate students, it is unlikely that any of these individuals had knowledge specific to the profession of nursing. This may have affected their interpretation of the BSS and ultimately resulted in rater errors. For example, if an interviewee's response was not specific to an exemplar found on the BSS, the interviewer may have resorted to making errors of central tendency. If this occurred, the accuracy of interviewee evaluations would have been less than if the interviewers had adequate knowledge regarding the profession of nursing.

Another factor that may have restricted the observed validity of the structured situational interview was the BSS itself. The structured situational interview was originally developed using a content validity approach. A portion of the development approach utilized retranslation and the calibration of responses. During retranslation, each SME was asked to assign each item to the dimension that was best represented by the item. The dimensions were determined a-priori based on information obtained during the job analysis. Specific items were retained if the SMEs indicated a clear majority agreement regarding the dimension represented by the item. After a sufficient number of items were retained, responses to these items were calibrated.

During the calibration phase of the study, subject matter experts were asked to rate the level of performance represented by responses to each item. Ratings for each response ranged from 1 = failure, 2 = below standards, 3 = meet standards, 4 = exceed standards, and 5 = excellent behavior. Standard deviations and means were computed and served as the basis for retaining responses for each interview item. This process resulted

in a disproportionate number of responses for varying levels of performance. For example, interpersonal dynamics item number 4 does not have any exemplars that represent failure or excellent performance. Furthermore, there are three exemplars that represent below standards, six exemplars that represent meet standards, and only one exemplar that represent exceed standards. Therefore, the rater does not have a frame of reference for either the low or high end of the scale. As a result, raters are likely to fall victim to central tendency, limiting the variance of ratings on the item, and inhibiting the predictive validity of the instrument. The proportion of BSS exemplars was not evenly distributed across the range of performance for any item in the interview. Most frequently the meets standard level of performance was highly represented while the failure and excellent behavior levels of performance were underrepresented.

Another factor that may have limited the observed predictive validity was the realism of exemplars found in the BSS. The majority of ratings across 42 participants ranged between 2.5 and 4.5. That is, out of all interviewees, only one individual received a rating of 1 (i.e., failure) and zero individuals received a rating of 5 (i.e., excellent behavior). As a result, the variance of ratings was restricted. This may have occurred because the exemplars that represented these levels of performance were either overly idealistic, so poor that a candidate would never consider offering such a response, or non-existent. Furthermore, the restricted range of interviewee ratings influenced the range of ratings for the total interview. That is, 50% of interviewees received total interview scores between 62.5 and 67.0 ($n = 21$). As a result of these findings, the observed criterion-related validity coefficient was likely lower than it would have been if the distribution of scores was evenly distributed. While the content of the BSS may have

limited the observed predictive validity, the criterion utilized also may have contributed to the lower than expected predictive validity.

Guion (1988) noted that a criterion problem impacts the majority of all validity studies. That is, researchers never obtain a precise measure of job performance. In the current study, GPA was used as a proxy for a performance measure. Typical criterion measures, performance appraisal ratings, contain error and preclude a perfect measure of job performance. The proxy variable used in this study likely exacerbated the problem. The criterion variable used in this study was contaminated by a variety of factors. For example, GPA calculations included course work outside of student's major area of study. Therefore, performance in academic areas outside of nursing was included in the criterion measure. The structured situational interview was intended to measure nursing performance, not other areas of knowledge. Thus, the inclusion of grades not relevant to the profession of nursing likely contaminated the measure and added irrelevant variance to the analysis. As a result, the dependent variable was negatively affected in two ways. First, proxy variables never provide as representative of a measure as direct measures of the target variable. Second, the proxy variable itself was contaminated. Thus, considering these factors, it is likely that the true predictive validity of the structured interview is higher than the observed predictive validity found in this study.

Another limitation found in this study was the internal consistency reliability of the dimensions in the structured situational interview. As noted above, a reliability analysis indicated an alpha of .596, .358, .165, .523, and .539, respectively, for the dimensions of interpersonal dynamics; critical thinking; professionalism, integrity, and work ethic; works independently, and leadership. However, an overall test of internal

consistency indicated an alpha of .792. That is, the items across all of the dimensions are significantly correlated with one another, with the exception of items in the dimension of professionalism, integrity, and work ethic. Professionalism, integrity, and work ethic did not significantly correlate with any of the other four dimensions.

After item total correlations were examined, a criterion of an increase in alpha of .05 was used to explore whether or not to retain items. This analysis indicated that all four items from the dimensions of interpersonal dynamics, works independently, and leadership should be retained. However, removing critical thinking item number 2 would increase the internal consistency of the dimension from .358 to .492. Additionally, in the dimension professionalism, integrity, and work ethic, item number 3 did not contribute any variance to the dimension. Removing item number 1 and item number 3 increased the alpha of the dimension from .165 to .309. These items limited the reliability and predictive validity of the total structured situational interview. Interestingly, removing these items from the analysis did not significantly increase the predictive validity of the interview.

Another limitation to the study is associated with the dimensions of the interview. The dimensions that were used to develop the interview are relatively detailed and extensive. The dimensions were consolidated from a previously used dimension structure. As a result, the dimensions represent multiple constructs. For example, the dimension professionalism, integrity, and work ethic represents three different constructs. This limitation becomes more apparent when considering the number of items used to evaluate each dimension. That is, each dimension is evaluated using only four items. Thus, there are four items used to evaluate three constructs, which resulted in a limited internal

consistency of the dimension ($r = .165$). While the dimension of professionalism, integrity, and work ethic provides an extreme illustration of this problem, each of the other four dimensions suffered from the same problem.

Directions for Future Studies

Additional studies should be conducted to evaluate the psychometric properties of the current structured situational interview. These studies should utilize a predictive design rather than a concurrent design to alleviate the motivational issues that occurred in the current study. Furthermore, studies should be conducted in an organizational setting and use job applicants rather than nursing students. This type of study would also allow actual performance measures to be used as the criterion variable. Performance appraisal ratings would not provide a perfect measure of job performance, but would correct many of the contamination issues that were included in the GPA criterion measure used in the current study.

Interviewers in future studies should be individuals who are trained registered nurses as opposed to psychology graduate students. Interviewers with appropriate backgrounds will likely include nursing managers in hospitals or other nursing staff members who are sufficiently trained to administer and score the interview. This change would ensure that the interviewers had a comprehensive understanding of the profession and the ability to interpret the exemplars in the BSS. Interviewers with nursing backgrounds would likely make fewer rating errors and, as a result, provide more accurate evaluations of applicant responses.

In addition to studies that address the issues mentioned above, future studies should correct for deficiencies in the structured situational interview and the BSS. It is

well known by professionals in the field of industrial-organizational psychology that longer interviews are more reliable than shorter interviews (e.g., Schmidt & Zimmerman, 2004). Therefore, additional items should be developed for the structured situational interview to make the interview approximately twice as long. First, experimental items should be developed, with the help of subject matter experts, which are designed to evaluate each of the five dimensions. Second, the newly developed items should survive a retranslation phase which would ensure that the developed items are representative of the targeted dimension. Third, after a sufficient number of items have met the criteria for retranslation, exemplars for responses to the items should be developed. Fourth, the exemplars should be realistic and include examples across the entire range of performance. Fifth, these exemplars should be calibrated and, if the exemplars are not evenly distributed across levels of performance, additional exemplars should be developed and calibrated. Sixth, items that did not contribute to the reliability or variance of the interview should be removed. Finally, in addition to the development of new items and exemplars for those items, additional exemplars should be generated for the original 17 items. These steps will help ensure that the structured situational interview will exhibit better psychometric properties.

Implications

Given that the nursing staff of any hospital has critical implications for the health of patients (Stanton, 2004), hospitals should use empirically developed behavioral assessments to evaluate the qualifications of nurse applicants. The problem of hiring qualified nurses is exacerbated by the fact that hospitals are currently largely understaffed

on a global level. This is occurring because of the aging workforce in the profession coupled with fewer young professionals entering the field.

One way that hospitals can ensure they are selecting the most qualified applicants is to use a structured situational interview developed by a professional who has the technical skills needed to perform a job analysis, develop items and responses with the cooperation of subject matter experts, perform retranslation and calibration, and conduct validity studies. Unfortunately, the majority of organizations prefer to use unstructured interviews despite the psychometric superiority of structured interviews (Chen et al., 2008; Le, et al., 2007). If these trends continue in hospitals, the health and safety of patients will continue to be at risk.

Conclusion

The results of this study indicated a significant association between structured situational interview scores and GPA. This finding occurred despite many limitations to the study. These limitations include, but are not limited to, motivation issues, criterion contamination, low levels of internal consistency, a small sample size, and evaluation issues. These limitations should be addressed in future research to obtain a better estimate of the psychometric properties of the instrument. Specifically, future studies should use a predictive design and applicants should be evaluated by trained nursing staff personnel. The current instrument should be revised to include a more evenly distributed range of exemplars on the BSS. In addition, items that did not add variance to the evaluation process or that did not contribute to the internal consistency of their respective dimensions should be removed from the instrument. The current instrument should be expanded by completing the necessary steps to develop additional items and exemplars.

Finally, hospitals can greatly benefit through the use of structured interviews to select qualified nurses.

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Appendix A

15 components of interview structure and their affect on reliability, validity, and user reactions

		Effects of Interview Structure on Reliability, Validity, and User Reactions											
		Reliability						Validity			User reactions		
		Test-retest	Inter-rater	Candid. Consist.	Inter-cand. Interaction	Internal consist	Interrater agreement	Job-relatedness	Reduced deficiency	Reduced contam.	Reduced EEO bias	Candidate reactions	Interviewer reactions
Content	Job Analysis							+	+	+	+	+	+
	Samw questions	+	+	+	+				+	+	+		
	Limit prompting	+	+	+	+				-	+	+	-	-
	Better questions			+		+		+		+	+		+
	Longer interview	+				+			+			-	-
	Control ancillary information	+							-	+	+	-	-
	No questions from candidate	+	+	+	+				-	+		-	-
Evaluation	Rate each answer or use multiple scales	+	+			+			+	+			
	Anchored rating scales	+	+				+	+	+	+	+		+
	Detailed notes	+	+				+	+	+	+	+		-
	Multiple interviewers	+	+		+	+	+		+	+	+	-	
	Same interviewer(s)	+			+					+	-		
	No discussion between interviews	+	-				-			+	+		-
	Training	+	+	+	+	-	+	+	+	+	+	+	+
	Statistical prediction	+	+			+			+	+	+		
Note: "+" means positive effect and "-" means negative effect													
Campion et al. (1997)													

Appendix B

Dimension Definitions

Interpersonal Dynamics

The ability to effectively communicate with all employees in the hospital including nursing team members, physicians, clerical workers, and any other associates of OMHS. Includes treating patients with dignity and respect, including sharing name and credentials with patient and family in a collaborative effort to provide care; the ability to achieve a high level of rapport, enabling effective communication between the nurse and patient; the ability to teach patients and their families how to effectively facilitate self care; the ability to recognize when other team members are in need of assistance and a willingness to assist; and being conscientious with respect to the needs of patients and other employees who are collaboratively working to treat patients. In addition to helping other team members, interpersonal dynamics includes seeking assistance when needed to improve unit functioning.

Critical Thinking

The ability to derive effective solutions for complex situations; the ability to resolve conflicts between co-workers, patients, and other OMHS staff members. Includes the ability to prioritize patient needs while ensuring the most critical situations are treated first, while still providing the care required for all patients, and the ability to acclimate to change which enables easy transitions in dynamic environments. Critical Thinking includes problem solving skills, conflict management skills, and adaptability.

Professionalism, Integrity, and Work Ethic

A strong appreciation for appropriate behavior and integrity in the work place; valuing honesty and truthfulness. Includes following hospital protocol for all situations and never acting in a negligent manner; keeping patients' medical needs, records, status, medications, and any other form of documentation completely confidential and sharing it only with appropriate individuals. Understands rules and guidelines that are enforced to allow for successful practice and abides by these regulations. Maintains and expands personal expertise in the job field of specialty. Holds him/herself accountable for mistakes, enabling him/her to learn and grow as a nurse, engages in appropriate use of electronics (e.g., no personal cell phone use, video texting, etc. while administering care); uses professional language and dress to instill confidence; and treats patient and hospital property with respect. Also includes performing multiple tasks simultaneously, while keeping the needs of the patient foremost.

Works Independently

The ability to complete work independently without oversight by the supervisor. Includes proactively seeking solutions to difficult situations, and taking the initiative to complete tasks that are not formally required by the position. Also includes recognizing that when unfamiliar situations arise, the individual should not hesitate to seek assistance to enable the individual to sufficiently complete tasks; seeks out training for equipment and procedures when needed, which allows for a higher level of proficiency and enables a safer practice.

Leadership

The ability to mentor, influence, guide, and direct colleagues. Includes recognizing when other members of the work unit need guidance and effectively and appropriately providing advice or direction; analyzing the functioning of the work unit and identifying methods by which effectiveness can be increased; and providing support to enable higher levels of performance by colleagues.

Appendix C

Structured Situational Interview

Interpersonal Dynamics: You are the nurse of a patient who has recently been diagnosed with a serious illness. How would you handle this situation when communicating with the patient and his or her family members?

Any response indicating a lack of empathy towards the patient and his/her family	I would do the best I can in this situation	I would try to maintain a professional demeanor in this difficult time	I would try to clarify the patient and families' understanding of the current situation if there was any confusion	I would spend an extra amount of time with the patient and his/her family during this difficult time
I would ignore the situation	I would tell the patient/family that the physician will discuss the patient's medical status with them	I would notify my supervisor of the current situation	I would clarify any misunderstandings for the patient/family	
	I would assure the patient that everything will be okay	I would be realistic with the patient/family	I would offer any additional resources available to the patient/family	
	I would try and lighten the mood for the patient/family by being humorous and etc.		I would teach and educate the family/patient about the illness	
			I would discuss any options that may be available with the patient/family	
			I would be conscientious of the situation and realize that the patient may be feeling a large amount of anxiety because of the recent diagnosis	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Interpersonal Dynamics: You have been caring for a patient for several days. The patient is now healthy enough to be discharged. However, the patient will need to use a catheter once arriving at home. What would you do in this situation?

<p>Any response indicating that the candidate will assume the patient will be able to use the catheter on his/her own after returning home</p> <p>I would have a nursing assistant teach the patient how to use the catheter</p> <p>I would give the patient the proper catheter and discharge him/her</p>		<p>I would inform the patient how to use the catheter and give him/her accompanying educational material</p> <p>I would show the patient how to use the catheter</p> <p>I would give the patient informational pamphlets/resources to the patient</p>	<p>I would determine who will be at home with the patient that may be able to provide assistance using the catheter</p> <p>I would teach any family members that are present how to use the catheter so that they can help the patient</p> <p>I would ensure that the patient maintains a thorough understanding of everything I told him/her and of the educational resources</p> <p>I would give the patient a catheter and rehearse the procedure with him/her until they were comfortable using the device independently</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Interpersonal Dynamics: What would you do if you were the primary nurse for a patient and you observe the individual and his or her family arguing about the proper course of treatment?

<p>I would ignore the situation because it involves family dynamics and is none of my business</p> <p>I would side with the party who is clearly right</p> <p>I would call security</p> <p>I would side with one of the parties</p> <p>I would tell those involved what I would do if I was in the situation</p>	<p>I would report the argument to my supervisor</p> <p>I would ask those involved to not argue</p>	<p>I would make sure that I was professional when interacting with those involved</p> <p>I would contact the physician and have him/her talk with the family and the patient</p> <p>I would talk to the patient privately so that I can determine what he/she really desires</p>	<p>I would communicate with those involved to determine the nature of the argument and strive to resolve the conflict</p> <p>I would identify and clear up any misunderstandings that may have caused the problem</p> <p>I would strive to reach a state of clarity between the patient and family so that they can reach an agreement</p> <p>Offer the patient and the family educational resources which may help alleviate the confrontation</p>	<p>I would seek any needed additional information to clarify the confrontation allowing for an appropriate resolution</p>
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Interpersonal Dynamics: The hospital uses a procedure called intentional rounding. This procedure entails checking patients in their rooms once an hour using keywords and key tasks. This is useful for decreasing the use of fall lights, decreasing the occurrence of falls, improving clinical outcomes, and generally improving patients' conditions. When you are performing intentional rounding how would you interact with the patient and his or her family?

	<p>I would not talk too much to the patient because I would not want to bother him/her while in the room</p> <p>I would try to be as quiet as possible</p> <p>I would work as quickly as possible so I can keep up with all of my patients</p>	<p>I would introduce myself to the patient and his or her family</p> <p>I would act in accordance to hospital policy while performing intentional rounding</p> <p>I would be professional in front of the patient and family members</p> <p>I would ask the patient if there was anything else that he/she needed before leaving the room</p> <p>I would put my name on the board located in the patient's room</p> <p>I would inform the patient when I would be back to help keep them comfortable</p>	I would sit at eye-level when interacting with the patient	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Critical Thinking: What would you do if you were the nurse in charge of three patients who are simultaneously experiencing medical difficulties; one patient is experiencing an airway problem, another is vomiting, and the third is in severe chest pain?

<p>I would treat the vomiting patient</p> <p>Any response indicating that the candidate is poor at multi-tasking</p>	<p>I would concentrate on one or two of the patients depending on how comfortable I was in the situation</p> <p>If possible I would ask a family member to assist the vomiting patient until the other patients were stable</p> <p>I would do my best to handle the situation</p> <p>I would treat the patient experiencing severe pain before the other two patients</p>	<p>I would ask a peer or a nursing assistant to treat the vomiting patient</p> <p>I would transfer a patient to a staff member to ensure that all patients receive the necessary care</p> <p>I would verify background information after the situation was resolved to try and determine why each occurrence took place</p> <p>I would do everything possible to ensure each patient receives the care that he or she needs</p> <p>I would make sure that all three patients receive the necessary care, but in the desired order</p>	<p>I would ask for help realizing that I can't do three things at once</p> <p>I would follow up with each of the patients after the situation was over</p> <p>A response that indicates the candidate is aware of the desired order to treat each of the patients</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Critical Thinking: You have a patient who is displaying a rapidly deteriorating status. As the primary nurse of the patient, you are the first to observe the adverse events. What steps would you take in this situation to ensure the well being and safety of the patient?

<p>I would notify the family prior to doing anything else</p> <p>Any response indicating that the candidate would ignore the situation</p> <p>Any response indicating a delayed response</p> <p>I would panic if a situation like this occurred</p> <p>I would ensure that everyone is aware that I was not responsible for the occurrence</p>		<p>I would check the patient's vital signs</p> <p>I would take the appropriate action to reverse the patient's deteriorating status</p> <p>I would do everything possible to discontinue the patient's status from worsening</p> <p>I would contact the family after the patient has become stable or the appropriate personnel has been notified</p> <p>I would do whatever needed to be done to resolve the situation</p> <p>I would investigate reasons that explain why the patient's health declined so rapidly</p> <p>I would have someone contact the family immediately while I was working with the patient</p> <p>I would seek a second opinion regarding the patient's status</p>	<p>I would call or page the medical response team</p> <p>I would contact the patient's physician immediately</p> <p>I would inform charge nurse/supervisor so that my peers can care for my other patients</p> <p>I would contact the physician and communicate with him/her using a SBAR format</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Critical Thinking: What would you do if, as a nurse at the hospital, you observed two of your peer nurses engaging in a conflict which was disrupting their performance and was heard by nearby patients?

<p>I would walk away from the situation because it is not any of my business</p> <p>I would side with the nurse which was clearly right</p> <p>I would get mad at their obvious lack of respect in the workplace</p>	<p>I would call security</p>	<p>I would advise the two nurses who are arguing to quit</p> <p>I would be professional when addressing the issue</p> <p>I would try and separate those involved until they have calmed down</p> <p>I would explain the importance of professionalism in the work place to the nurses involved in the argument</p> <p>I would report the occurrence to my supervisor</p>	<p>I would attempt to clear up any misunderstandings that may have caused the disruption</p> <p>I would apologize to any patient's that may have heard the conversation</p>	
<p>1 Failure</p>	<p>2 Below Standards</p>	<p>3 Meets Standards</p>	<p>4 Exceeds Standards</p>	<p>5 Excellent Behavior</p>

Critical Thinking: You are the nurse of a patient who is expressing negative emotions about having to be hospitalized. The patient decides that he/she will just leave the hospital even though both you and the physician have informed the patient that this is not advisable. What steps would you take to resolve the situation?

I would use a form of restraint to inhibit the patient's ability to leave I would use a sedation medication to inhibit the patient's ability to leave I would ignore the patient and continue to treat him/her	I cannot force the patient to stay so I would let them leave I would inform the patient that he/she cannot leave	I would inform my supervisor/charge nurse of the situation I would get the patient's attending physician I would be professional at all times when handling the situation I would give the patient the AMA form and ask him/her to sign it I would try and remain calm during the situation and do the best that I could I would explain the hospital's policy for the situation I would work to resolve any problems that I could I would look up any family members contact information on admission forms	If family accompanied the patient I would try and use them as a tool to calm the patient down I would thoroughly explain the risks/benefits of leaving the hospital I would listen to the patient and try to determine what the underlying issue is (i.e., maybe it is something that I can help with) I would try to build a rapport with the patient so he/she would trust and listen to me	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Professionalism, Integrity, and Work Ethic: Suppose that you are the primary nurse for a patient who was currently prescribed numerous medications (i.e., 10 prescriptions). What would you do if you confused the medications and gave an extra pill to the patient?

<p>I would ignore the occurrence if the pill was not dangerous (e.g., stool softener)</p> <p>A response indicating that the candidate thinks that these sort of things happen frequently and it is not that big of a mistake</p> <p>My response would depend upon how busy I was at the time</p> <p>The candidate says something similar to these mistakes happen easily and frequently</p>	<p>My response would depend upon the type of medication(s) that was wrongly administered</p>	<p>I would contact the patient's primary physician</p> <p>I would report the occurrence to my supervisor/charge nurse</p> <p>I would recognize that the situation was a mistake and take steps to resolve the issue</p> <p>I would report the occurrence to the appropriate personnel</p>	<p>I would inform the patient of the mishap</p> <p>I would hold myself accountable for the occurrence at all costs</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Professionalism, Integrity, and Work Ethic: You are the primary nurse for a patient who was recently discharged. Upon patient discharge, the individual filed a complaint against you. How would you handle this situation?

<p>I would become mad or offended especially if I know I did not do anything wrong</p> <p>I would disregard the complaint because I know I did not do anything wrong</p> <p>I would assume that complaints from patients are not uncommon and continue on with my day</p>	<p>The candidate offers a response indicating that the best I can do is care for each of my patients to the best of my ability</p>	<p>I would discuss the complaint with my supervisor</p> <p>I would seek advice from my colleagues regarding the complaint</p>	<p>I would use the complaint as an opportunity for a learning experience</p> <p>I would strive to ensure that future complaints do not occur from patients</p> <p>I would use the complaint to improve myself</p> <p>I would try to understand the patient's perspective in an effort to prevent future occurrences</p> <p>I would investigate the nature of the complaint so I can be sure it will not happen again</p> <p>I would change the behavior that caused the complaint so it will not happen again</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Professionalism, Integrity, and Work Ethic: You are the nurse of a patient who does not want his or her medical information to be shared with family members. What would you do if the patient's family members were demanding information regarding the individual's condition?

<p>I would tell the family enough information to appease them</p> <p>Since they are family members I will tell them the information they desire</p> <p>The candidate indicates that they would make a justification for telling the family member the desired information</p> <p>I wouldn't want to upset the family so I would release whatever information they wanted in private</p>	<p>I would assure the family that the patient will be get better</p> <p>I would ask the family to discuss to speak with the patient's physician about his/her medical status</p>	<p>I would not tell the family because this is the patient's right</p> <p>I would notify my supervisor/charge nurse and discuss the situation with him/her</p> <p>I would be professional when handling the situation</p> <p>I would make sure that I addressed the family politely</p> <p>Inform the family that they will have to obtain this information from the patient</p> <p>Inform the family that it is the patient's legal right to keep this information confidential</p> <p>determine whether any of the family members are legal guardians of the patient (i.e., release of information is only acceptable if the patient cannot function independently)</p>	<p>The candidate offers a response recognizing that it is the patient's right to keep this information private</p>	
<p>1</p> <p>Failure</p>	<p>2</p> <p>Below Standards</p>	<p>3</p> <p>Meets Standards</p>	<p>4</p> <p>Exceeds Standards</p>	<p>5</p> <p>Excellent Behavior</p>

Professionalism, Integrity, and Work Ethic: As the medical field consistently experiences changes due to research, what steps do you take to ensure that you are up-to-date with your knowledge?

<p>Nursing school has prepared me for this position and allowed me to maintain an appropriate level of knowledge</p> <p>I do not think that these types of activities are very important</p> <p>I just got done with school and have not had time to concern myself with these issues</p>	<p>I utilize the floor as a learning experience and this allows me to keep current</p> <p>I occasionally look back over my notes from college which allows me to remember aspects of the field</p> <p>I would like or have worked in a variety of nursing units which allows me to keep my knowledge up-to-date</p>	<p>I subscribe to medical journals</p> <p>I keep up-to-date through the completion of continuing education courses</p> <p>Any statement recognizing the importance of keeping current in the nursing field</p> <p>I attend nursing conferences</p>	<p>I have obtained additional certifications (i.e., in the candidates field of expertise) or I am currently working on obtaining additional certifications</p> <p>Candidate plans to pursue a degree higher than what they currently maintain (i.e., higher education)</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Works Independently: You are the primary nurse for a patient with a condition with which you are not very familiar. The patient needs care (e.g., chest tube, embolism, etc.,). What would you do in this situation to ensure that the patient receives the best care possible?

<p>I would not do anything because I do not know how to care for the patient</p> <p>I would wait for the nurse on the next shift to arrive and let him/her handle the situation</p> <p>I would inform the patient's physician that I am not able to care for the patient because of my lack of knowledge regarding the condition</p>	<p>I would attend to the patient and care for the condition to the best of my abilities</p> <p>I would find someone else with more expertise to care for the patient</p> <p>I would ask my supervisor to change patient assignments so I could have a patient in which I was more familiar</p> <p>I would have a peer nurse solely care for the patient because the patient would receive better care if I was unaware of the condition</p>	<p>I would look up information regarding the procedure in the policies and procedures guide</p> <p>I would use educational resources to learn about the condition</p> <p>I would inform my supervisor/charge nurse about the situation</p> <p>I would find another nurse to perform the procedure so I could observe him/her do it properly</p> <p>I would assess the patient and evaluate their condition to determine if further care was necessary</p> <p>I would assess the patient's comfort level and determine if there is anything else I could do for him/her</p>	<p>I would contact another unit which may be more familiar with the procedure to learn information about it</p> <p>I would locate an expert nurse and have him/her supervise me while I cared for the patient</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Works Independently: The hospital uses a policy for patients who are at risk for falling. The policy states that these patients are to be checked every 30 minutes. What would you do if you are the primary nurse for a patient who was labeled as a high risk fall patient, but you do not have enough time to check every 30 minutes because of demands from your other patients?

<p>I would sedate the patient so he/she are less likely to fall while I'm away</p> <p>Due to the time restraints I would continue to check the patient during my normal rounding schedule</p>	<p>I would inform the family of the policy and use them as a resource to keep an eye on the patient</p> <p>I would do the best I could to round the patient every 30 minutes</p> <p>I would round the patient every 30 minutes even if I had to provide spend less time with the other patients I am caring for</p>	<p>I would notify my supervisor of the situation and let him/her decide the appropriate course of action</p> <p>I would do my best to round the patient every 30 minutes</p> <p>I would try and move the patient into an area where more staff members could help keep an eye on him/her</p> <p>I would ask a peer nurse if he/she is available to assist me</p> <p>Every time I get ready to leave the patient's room I will ask him/her if there is anything that is needed to help prevent the need to get out of bed</p>	<p>I would partner with a colleague or nursing assistant to ensure that one of us was in the patient's room every 30 minutes</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Works Independently: It is the high winter census months when acuity is at its highest. You are caring for five patients today instead of four. You discharge three of your patients by noon and are paged that a new admission will be coming within the hour from surgery. You have administered your medications, rounded your patients, and completed all assessments. What would you do next?

I would use the opportunity to converse with friends/family	I would ask my supervisor if I can go home because of the slow period and it would save the hospital money	<p>I would perform rounds on my remaining patients so I would be free when the new patient arrives</p> <p>I would check patient's charts for orders</p> <p>I would clean up the work unit during my free time</p> <p>I would catch up on charting</p> <p>I would prepare any medical devices/instruments that may be needed when the patient arrives</p> <p>I would ask my supervisor what I can do to help the unit during this slow time</p> <p>I would work with the nursing assistants during this slow time and help them with anything that may be needed</p>	I would offer assistance to my peer nurses since I was currently only caring for two patients	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Works Independently: The hospital uses a procedure called intentional rounding. This procedure entails checking patients in their rooms once an hour. This is useful for decreasing the occurrence of falls, improving clinical outcomes, and generally improving patient's conditions. What would you do if you were performing intentional rounding and noticed that one of your patient's bed is saturated?

<p>I would wait until the next time I round the patient to resolve the situation because I do want to deviate from the already established rounding schedule</p> <p>I would disregard the situation because these things happen frequently</p> <p>I would make the patient feel guilty so that he/she would not do it again</p> <p>Any response indicating the candidate would be angry if such a situation occurred</p>	<p>I would evaluate the situation</p> <p>I would ask a nursing assistant or another staff member to change the bed sheets</p> <p>If I were too busy at the time I would put something dry under the patient until I get an opportunity to change the sheets</p> <p>I would notify my supervisor regarding the situation</p>	<p>I would reassure the patient that it is okay</p> <p>I would attempt to make the patient feel comfortable</p> <p>I would ask the patient if he/she was okay and if there is anything else that is needed</p> <p>If applicable I would ask the patient's family if he/she has recently displayed a change in status</p> <p>I would be polite when interacting with the patient</p> <p>I would be professional when resolving the situation</p>		
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Leadership: You are aware that an unlicensed staff member is not proficient at performing a certain procedure. Yet, your unit is busy and the type of task is within the individual's scope of practice. Meanwhile the procedure needs to be performed. How would you handle the situation?

A response indicating that the candidate will become upset because the person should be competent enough to perform the procedure	If the task was easy I would offer advice and instruct the unlicensed staff member to perform the procedure	I would evaluate my expertise in regards to the procedure. If I feel I'm an expert I would provide direct oversight while the procedure is performed	If I was not competent at performing the procedure I would locate another colleague who could teach both of us	
	I would tell the individual to rehearse the procedure on his/her own	I would look up resources and go over the information with the unlicensed staff member	I would perform the procedure myself and allow the unlicensed staff member to observe me	
	I would tell the unlicensed staff member to not perform the procedure because he/she does not know how to	I would supervise the procedure while it is being performed		
	I would inform my supervisor/charge nurse of the current situation	I would be professional when interacting with the individual		
	I would find a different unlicensed staff member who was more familiar with the procedure and have him/her perform it	I would rehearse the procedure with the unlicensed staff member if he/she were unfamiliar the procedure		
	I would tell the unlicensed staff member to delay performing the procedure until I had more time to assist him/her	I would direct the unlicensed staff member to resources that can explain the necessary steps to perform the procedure		
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Leadership: After you have made an assessment of an individual patient, you have asked an unlicensed staff member to perform an enema. How will you ensure that the unlicensed staff member does an appropriate job?

<p>I would assume the unlicensed worker would ask me if he/she didn't know how to perform an enema or had any other questions</p> <p>Any response indicating that the candidate would not verify the knowledge level of unlicensed worker</p> <p>I would write the assignment on the unlicensed staff member's papers and let them attend to the patient</p>	<p>I would evaluate the patient's status prior to letting the unlicensed individual perform the enema. If the patient is stable I will allow the unlicensed staff member to conduct the procedure</p> <p>I will give the unlicensed staff member the assignment and tell him/her to ask if any questions arise</p> <p>I would inform the unlicensed worker that if he/she has any questions to ask a peer who has performed an enema before</p> <p>I would direct the unlicensed worker to the appropriate resources (i.e., policy and procedures) prior to performing the enema</p> <p>I would perform the procedure myself</p>	<p>Prior to the unlicensed staff member conducting the procedure I would practice with him or her</p> <p>I would quiz the unlicensed staff member prior to allowing him/her perform the enema to ensure that the individual's knowledge level is adequate</p> <p>I would check in with the patient after the procedure has been performed to make sure that everything is okay</p>		
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Leadership: As a RN or LPN at the hospital it is likely that you will be in charge of supervising an unlicensed staff member. With this in mind, you as the primary nurse will be responsible to complete a care plan for each of your patients. How will you distribute responsibilities to unlicensed staff members to ensure that the care of each patient is met?

<p>I would assume that the individual is familiar with the distributed assignments. The unlicensed staff member can come get me if he/she needs to</p> <p>It is not my job to babysit unlicensed staff members</p> <p>Any response indicating that the candidate feels as though unlicensed staff members are below him/her. Thus, the candidate would be reluctant to work or collaborate with unlicensed staff members</p>	<p>I would have the individual(s) complete basic tasks such as baths, turning, and rotating</p> <p>I would assign the unlicensed staff member patients that needed easy procedures (e.g., glucose checks) and maintained low risk care needs</p> <p>I would delegate appropriate tasks to these individuals, but the candidate does not indicate that he/she will follow up with unlicensed staff members</p> <p>I would assume that the unlicensed staff member can function independently</p>	<p>I would expect that the tasks I distribute to the unlicensed workers are performed</p> <p>I would analyze which patients require extensive care and distribute responsibilities from there</p> <p>I would follow up with the unlicensed staff members and the patients to make sure that everything is functioning smoothly</p> <p>I would delegate tasks and responsibilities that maintained low levels of risk and that the individual was comfortable performing</p>	<p>I would ensure that the unlicensed staff members are comfortable with the tasks assigned and I would supervise their work providing any advice or support as needed</p> <p>I would assign responsibilities and tasks that coincide with his/her strengths, while helping develop their weaknesses</p>	
1 Failure	2 Below Standards	3 Meets Standards	4 Exceeds Standards	5 Excellent Behavior

Leadership: There is a daily meeting discussing the reports of each patient on the floor. The meeting is important so each nurse can plan and effectively implement an appropriate course of action for the assigned patients. You have noticed that the unlicensed staff member you are supervising for the day is not paying attention in the meeting. What would you do?

<p>I would assume that the unlicensed staff member will learn the information covered in the meeting on their own</p> <p>I would get upset with the individual</p>	<p>I would review the information covered during the meeting at a later time with the unlicensed staff member</p> <p>Any response indicating the candidate understands that the unlicensed staff member will not know everything covered in the meeting and follow up with him/her later</p> <p>I would inform my supervisor of the occurrence</p>	<p>I would hold the unlicensed staff member accountable for his/her responsibilities and expect the individual to have appropriate priorities</p> <p>I would attempt to determine and address any distractions allowing the individual to focus more easily</p> <p>I would explain the importance of the meetings to the unlicensed staff member and express that it is necessary to help facilitate effective patient care</p> <p>I would check the unlicensed staff members sheet to make sure that they are aware of their upcoming responsibilities</p>		
<p>1 Failure</p>	<p>2 Below Standards</p>	<p>3 Meets Standards</p>	<p>4 Exceeds Standards</p>	<p>5 Excellent Behavior</p>

Appendix D
WKU HSRB Approval Form



A LEADING AMERICAN UNIVERSITY WITH INTERNATIONAL REACH
HUMAN SUBJECTS REVIEW BOARD

In future correspondence, please refer to HS10-084, October 26, 2009

Nick Simmons
c/o Dr. Shoenfelt
Leadership Studies
WKU

Nick Simmons:

Your research project, *The Validation of a Structured Situational Interview for Registered and Licensed Practical Nurses*, was reviewed by the HSRB and it has been determined that risks to subjects are: (1) minimized and reasonable; and that (2) research procedures are consistent with a sound research design and do not expose the subjects to unnecessary risk. Reviewers determined that: (1) benefits to subjects are considered along with the importance of the topic and that outcomes are reasonable; (2) selection of subjects is equitable; and (3) the purposes of the research and the research setting is amenable to subjects' welfare and producing desired outcomes; that indications of coercion or prejudice are absent, and that participation is clearly voluntary.

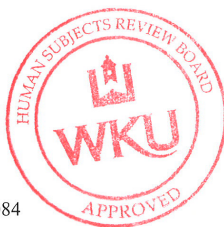
1. In addition, the IRB found that you need to orient participants as follows: (1) signed informed consent is required; (2) Provision is made for collecting, using and storing data in a manner that protects the safety and privacy of the subjects and the confidentiality of the data. (3) Appropriate safeguards are included to protect the rights and welfare of the subjects.

This project is therefore approved at the Expedited Review Level until October 26, 2010.

2. Please note that the institution is not responsible for any actions regarding this protocol before approval. If you expand the project at a later date to use other instruments please re-apply. Copies of your request for human subjects review, your application, and this approval, are maintained in the Office of Sponsored Programs at the above address. Please report any changes to this approved protocol to this office. A Continuing Review protocol will be sent to you in the future to determine the status of the project. Also, please use the stamped approval forms to assure participants of compliance with The Office of Human Research Protections regulations.

Sincerely,

Paul J. Mooney, M.S.T.M.
Compliance Coordinator
Office of Sponsored Programs
Western Kentucky University



cc: HS file number Simmons HS10-084

HSRB APPLICATION # 10-084

APPROVED 10/26/09 to 10/26/10

EXEMPT EXPEDITED FULL BOARD

DATE APPROVED 10/26/09

The Spirit Makes the Master

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