The Scored Plant Tour:
Improve Performance and Lower Turnover

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ABSTRACT

Many job applicants, especially those applying for factory level jobs, take a tour of the facility. I characterize this commonly used recruiting device as an opportunity to gain useful selection information on the applicants. This paper reports content and criterion-related validity of a Scored Plant Tour used in a Southeastern manufacturing facility. The content validity part of the study shows how the Subject Matter Experts produced tasks and competencies for the job and linked them. The competencies measured by assessors on the tour were: safety awareness, interest in plant processes, comfort in a factory environment, and listening and understanding. After the content validity study was complete, scores on the plant tour were correlated with supervisors' ratings after one year on the job. The plant tour scale correlated significantly with four different supervisor's ratings. Suggestions for different ways to adapt the tour to other types of organizations are discussed.

Subject Area: Human Resource Management and Organizational Behavior
Article Type: Peer-Reviewed Journal Article.

INTRODUCTION

Knowledge is the only factor of production not subject to diminishing returns (Hirji, 2001). Most organizations have valuable data available that they overlook. Many have begun efforts to discover and use these data in what has become known as data mining. Scoring the plant tour is, in a very real sense, recovering data that many organizations are already generating. The Scored Plant Tour allows the organization to predict future employee behavior with data that are currently available but not gathered. This article suggests: 1. How the Scored Plant Tour fits in with past selection research; 2. How the Scored Plant Tour can be scored easily and accurately; 3. How raters and tour guides should be trained; 4. That research in this manufacturing company indicates that the plant tour is predictive of relevant work behaviors; 5. That the Scored Plant Tour is relatively uncorrelated with interview and manufacturing simulation scores; 6. That the Scored Plant Tour adds unique variance to the prediction of employee success on the job; and 7. That the scored plant tour allows organizations to assess motivational variables that may not be measurable by other means.

The Realistic Job Preview (RJP)

Since at least the 1950's, researchers have found that job applicants often hold unrealistic expectations about the organization they are about to enter. Weitz and Nuckols (1955) studied insurance sales representatives, and they found that misrepresentations of a job by the hiring manager during the interview were more likely to lead to turnover. Interviewers typically made the job seem more attractive than it really was. Then, in a later study, Weitz (1956) suggested that giving a more realistic description of the job to an applicant would result in lower turnover. He showed that he was able to reduce turnover by giving a realistic preview booklet to recruits. Weitz recognized that a valid objection to the realistic job preview is that it may discourage

some recruits and make it difficult to fill vacant positions. However, his analysis indicated that this did not happen with his insurance sales representatives. Not only did the realistic preview reduce turnover, but it did not appear to affect the applicant pool adversely.

Wanous (1973) showed that viewing videos containing either realistic information or more traditional recruitment information had no effect on whether candidates accepted the job, but did have an effect on job survival. The realistic information group had lower turnover than the traditional recruitment group. Steers and Porter (1975) reviewed turnover and absenteeism studies which dealt with the mechanisms of how realistic recruitment might reduce turnover. They held that if a job candidate's expectations were met, this had a direct effect on job satisfaction. They also reasoned that job satisfaction has historically been found to be negatively related to turnover, thus they theorized that unmet expectations lead to job dissatisfaction which leads to turnover.

More recent research has focused on how to improve the classical Realistic Job Preview. Work by Buckley, Fedor, Veres, Wiese, and Carraher (1998) focused on the expectancy lowering procedure (ELP). This approach to realistic expectations is more general than the usual RJP. It was designed to remedy a problem with the RJP: it is very situation specific. On the other hand, the content of the ELP is very general and not designed for a specific job or organization. Since it is more general as opposed to situation specific, it does not have the same developmental costs that typically are part of RJP's.

RJP's have been shown to reduce turnover in registered nurses by creating more realistic expectations. Crow, Hartman, & McLendon (2009) asserted that there is a disconnect between what nurses expect and what they actually encounter when they begin their careers. They reported the results of a survey of a nursing faculty and suggested that such a need exists. Implications for the initial entry into nursing education, continuing education, and retention of nurses are considered in their discussion. Horn, Griffeth, Palich, & Bracker (1998) explored theoretical reasons for why RJPs deter turnover. They designed an RJP booklet about the nurse's role. This booklet was given to 82 newly hired nurses during orientation. A control group was created by giving a traditional recruitment brochure to 76 other nurses. The RJP lowered voluntary quits: 8.5% of nurses with the RJP quit versus 17.8% of nurses that got the traditional recruitment brochure. The authors interpreted their results to mean that met expectations have both a direct influence on turnover and indirect effects through other mediators (e.g., organizational concern and coping) on turnover precursors – namely, job satisfaction and organizational commitment.

Realistic expectations of the job also help to produce better "fit." At a psychological level, realistic expectations are the substance of the psychological contract and such contracts have the power to create an employee's future. RJPs introduce candidates to the work environment. Those candidates who accept a job from that organization have experienced the work environment. By first building and then clarifying candidate expectations of the work environment, more realistic psychological contracts help build organizational commitment (Klein, Wesson, Hollenbeck, & Alge, 1999).

Generally, the true RJP involves presenting both favorable and unfavorable job-related information to job candidates (Olian & Rynes, 1991). In a meta-analysis of RJPs, Phillips (1998) observes that, in general, RJPs were related to higher performance and lower attrition from the recruitment process, initial expectations, voluntary turnover, and overall turnover. The RJP typically allows candidates to select themselves out based on more complete information about the job. It is not usual for RJPs to measure candidate attributes during the process.

The plant tour has been part of some RJPs. But in that use, candidates were not rated for their reaction to the experience. Exposing applicants to the manufacturing, nursing home, or hospital environment allows them to see and experience the heat, cold, dust, odors, noise, danger, and mind-numbing repetition that exists in the work environment. Some candidates may decide during or after their plant tour that work in that environment is not for them. On the other hand, their reactions to the working conditions may be predictive of their subsequent performance in that environment if they do accept a job offer. The Scored Plant Tour is an extension of the idea of the Realistic Job Preview. By giving the applicant a realistic idea of what to expect in the job, researchers found that they could lower turnover. The plant tour is in many ways a realistic preview, perhaps not of the job itself, but it is a preview of the work environment. The principle difference between it and the RJP is that the Scored Plant Tour gives data to both the applicant AND the organization about whether this applicant is a good 'fit' or not.

Plant or facility tours typically consist of a tour leader and one or more job candidates who follow the tour leader around the plant, listening more or less attentively to the explanation of what the candidates are seeing. This is useful as an introduction to the work going on in the facility and does give the employee something of a realistic job preview. During the tour some applicants may give away their distaste for facility conditions: heat, noise, various odors, chemicals, crowds, isolation, stress, etc. Some applicants will be perfectly at home in the environment, having worked in such a place for some years. Still other prospective employees may show fascination for the machinery in the plant or the processes they are shown. The Scored Plant Tour is based on the proposition that certain applicant competencies related to the environment can be reliably assessed by trained raters. A second, and related proposition for the Scored Plant Tour, is that all selection is based on samples of behavior. The tour involves behavior that otherwise might not be included in the sample. The Scored Plant Tour is different from the Realistic Job Preview in that the Scored Plant Tour is a selection measure: Both the candidate and the organization are acquiring information about the other party in order to make an informed choice. Even though it is a reasonable assumption that candidates know they are being observed throughout their time in the prospective organization, it is important to inform all applicants that when they come to plant for an interview that their behavior in all situations is part of what is being assessed.

The Structured Interview

All previous reviews of the literature have supported the notion that structured interviews are much more reliable and valid than unstructured interviews (Arvey & J. Campion, 1982; Harris, 1989; Mayfield, 1964; Schmitt, 1976; Ulrich & Trumbo, 1965; Wagner, 1949; Wright, 1969). A significant amount of research has established that structured interviews result in lower group differences than unstructured interviews. They are, however, time-consuming and expensive to produce and administer. Usually, the questions from a structured interview must come from a formal job analysis. In addition, it is usually necessary to calibrate answers to the questions. Like the structured interview, the Scored Plant Tour is based on job analysis. While the structured interview gives assessors the opportunity to examine a sample of the candidate's verbal behavior (and nonverbal as well, of course), the Scored Plant Tour provides an opportunity to assess the candidate's reaction to the work situation. An examination of the protocol used in the Scored Plant Tour (Figure 1) reveals that most of the verbal behavior recorded is centered on what questions the candidates ask. Many of the items concerned demonstrated behavioral concern for safety.

The Scored Plant Tour limits the interaction between the assessors and the candidates. Assessors rate each candidate in each situation using standard scales. Multiple assessors assess the same candidate are used whenever possible. The same assessors are used for all candidates. The assessors are given extensive training in making behavioral observations, and the selection process follows statistical rather than clinical decision-making. Given the behavioral focus of the Scored Plant Tour, it appears that it is an ideal companion to the structured interview in that the Scored Plant Tour assesses candidate competencies that the structured interview cannot easily get at. In this study a structured interview, as well as a manufacturing simulation, were part of the selection process, and the results of the interview and the manufacturing simulation are included later in this paper to demonstrate the incremental predictive power that is added by the Scored Plant Tour.

Content Validity of Assessed Competencies

The 1978 Uniform Guidelines on Employee Selection state that "to demonstrate the content validity of a selection procedure, a user should show that the behaviors demonstrated in the selection procedure are a representative of sample of the behavior(s) of the job in question or that the selection process procedure provides a representative sample of the work product or the job" (Sec. 14C(4)). The evidence for content validity does not lie in correlational evidence, but rather content validity is concerned with the congruence or overlap in Knowledge, Skills, and Abilities (hereafter KSAs) between the critical job components and test components. The final outcome of the job analysis done for this purpose needs to be a set of specific KSAs and a set of specific task groups or tasks to which the KSAs are linked (Goldstein & Zedeck, 1996).

The job analysis necessary for establishing a foundation for content validity is very thorough and detailed (Goldstein, Zedeck & Schneider, 1993). After consulting subject matter experts (SMEs) such as supervisors, trainers, engineers, and incumbents, a set of tasks which are representative of the tasks usually involved in the job is arrived at. Then using the same SMEs, the competencies necessary for the job are enumerated. Each competency must then be tied to one or more of the tasks arrived at earlier. Many of the competencies thus derived will not be assessable by means of the plant tour. For instance, competencies like following written directions, mechanical comprehension, remembering information and so forth could best be assessed by means of a written test.

However, the Scored Plant Tour might be a way to assess such competencies as: interest in mechanical things, interest in the production process, interest in various kinds of jobs, desire to work in a factory environment, listening and understanding, and concern for safety. By asking strategic questions, the tour guide can help assessors who come along with the tour to gauge how much of the information of the tour a candidate has absorbed. It is important that whatever competencies are assessed on the tour be tied by SMEs to the tasks of the job.

Figure 1 shows a scoring form for a Scored Plant Tour. The figure does illustrate the kinds of things that *could* be assessed on the plant tour. It is generally better to have tours with several candidates at the same time rather than one candidate alone. Such a situation allows the assessors to see how the candidate reacts to others, and it makes the assessors less obtrusive since the tour obviously involves a number of people unknown to the candidate.

Figure 1. Plant Tour Scoring Form

Applicant: _____
Assessor: _____
Date: _____

During the plant tour, observe this applicant carefully and indicate whether or not you observed each of the following 20 behaviors.

SAFETY

Yes	No	
□	□	Wore safety glasses throughout the tour.
□	□	Wore ear plugs in all appropriate plant locations.
□	□	Stayed with the tour (i.e., didn't stray or lag behind).
□	□	Asked questions that showed a concern for safety.
□	□	Appeared to be conscious of tow motors as they passed by in the aisles
□	□	Protected hands by keeping them by side or in pocket to protect them (as opposed to touched and examined things with his/her hands)
□	□	Walked only in designated areas (i.e., stayed within the yellow lines).

INTEREST IN PLANT PROCESSES

Yes	No	
□	□	Asked questions of tour guide that indicated keen interest.
□	□	Refrained from making negative comments about the plant.
□	□	Facial expression and/or body language conveyed disinterest.
□	□	Always stayed in the back throughout the tour.
□	□	Made a concerted effort to hear the tour leader despite plant noise and earplugs

LISTENING AND UNDERSTANDING

Yes	No	
□	□	Listened attentively to the tour leader.
□	□	Paid attention when other tour members asked questions.
□	□	Answered tour leader's questions correctly.

COMFORTABLE IN A FACTORY ENVIRONMENT

Yes	No	
□	□	Appeared to be comfortable wearing earplugs and safety glasses.
□	□	Appeared to be comfortable in the noisier environments.
□	□	Was comfortable climbing ladders and walking on catwalks.
□	□	Appeared to be comfortable in confined spaces.
□	□	Appeared to be comfortable in the dusty parts of the plant (e.g., doesn't complain or sneeze excessively).

Score: ____ yeses out of 20

It is generally easier if candidates wear brightly colored vests during the tour. The vest marks the candidate as an outsider for plant employees. Moreover, it makes scoring easier for the assessors. The assessor knows that s/he is charged with watching the blue and green candidates and can concentrate on them. This is substantially simpler than trying to track candidates by name.

As one can readily see from Figure 2, it is relatively easy to relate situations encountered in the factory on the tour to tasks encountered in the job. The figure shows tasks from the job analysis lined up with their corresponding competencies. For instance, most factories emphasize safety as one of the most important things an employee has to learn. There are some employees who are oblivious to safety rules and others who seem to have them "built in." The plant tour can at least give some clues as to whether this applicant is likely to be motivated to obey the safety rules.

Figure 2. Content Validity of Plant Tour Competencies

COMPETENCY	REPRESENTATIVE TOUR BEHAVIORS	REPRESENTATIVE TASKS FROM JOB ANALYSIS
Safety Awareness	Walks only in designated areas. Appears to be conscious of fork trucks as they pass by. Uses earplugs when told to.	Observes safety rules. Determines if work area is safe. Wears hearing protection in areas where it's required.
Works well in a Factory Environment	Appears to be comfortable in dusty areas. Appears to be able to tolerate strong plant odors well.	Carries dirty vats away from production area with pull cart. Performs cleaning duties vacuuming up dust and debris.
Listens & Understands	Pays attention when other tour members ask questions or make statements. Listens attentively to the tour leader.	Receives and understands directions from supervisor. Remembers and applies vital information taught in training.
Interest in Plant Processes	Questions show interest and understanding of manufacturing. Did not make negative comments about the plant.	Understands the mechanical aspects of plant processes.

There are also some ways to examine manual dexterity. In small tour groups, the tour leader can request that the applicants adjust a set screw in a difficult place to get a screwdriver. S/he can also ask applicants to pick up and carry items that are commonly carried by factory personnel to get some idea of the applicant's ability to do that. While the plant tour cannot be a true job simulation, it can give some preliminary ideas as to how well the person works with his/her hands.

The Scored Plant Tour is also an excellent way to see how an applicant reacts to the work environment. Many jobs take place in facilities that are noisy, dusty, smelly, dirty, or hazardous. Thus, it is entirely appropriate for the Scored Plant Tour to take the applicant through these

areas and gauge his/her reaction to them. Someone who is instantly repulsed by the smell, the noise, or the dust is likely to have problems with these conditions when s/he encounters them in the work environment after being hired. So this is a unique opportunity to see if a candidate is motivated to work in the environment or motivated to avoid it as much as possible.

Last, it is possible to gauge how well the applicant listens and understands. Oftentimes supervisors only give verbal directions, and where that is true, it is important that the employee understand and comply with such directions. One way to get an idea of how the applicant processes information is to monitor his/her listening abilities on the tour by watching whether the person pays attention or not and whether the candidates follow the directions of the tour guide as s/he takes the candidates around the plant.

By using a content validity approach, it is possible that most plant tours could be converted into Scored Plant Tours where the organization could get a real world assessment of the applicant's competencies for and reactions to the workplace. Enumerating the tasks involved in the job will usually reveal several competencies that might be assessed as part of a Scored Plant Tour. The four found in Figure 2 are those I was able to get from one manufacturing plant. Other competencies that might be found in the job analysis and be assessed on a Scored Plant Tour are: mechanical understanding, analyzing problems, visual accuracy, quality checking, depth perception, electrical understanding, ability to use common hand tools, physical abilities, ability to stand and walk for extended periods, fear of heights, and sense of smell. There are doubtless other important competencies that could be assessed as well.

Training Necessary to Implement a Scored Plant Tour

Training Assessors

In order to make the Scored Plant Tour as reliable as possible it is necessary to train assessors (raters). Training should include such things as focusing on behavior, watching more than one candidate, and avoiding rating errors. Following Pulakos (1984) rater accuracy training was employed to train the observers. First, the observers were told that behavior on the Scored Plant Tour is multidimensional. It was explained to them that they needed to pay close attention to candidate behavior in terms of the dimensions on their score sheet. Next, the observers were then given the four rating scales shown in Figure 1. The trainer then read through the definition of each scale on the sheet. The individual items in the scales were designed to be based on assessor seeing a specific target behavior on the part of the candidate. They were shown a video of candidates walking through a plant tour, and the trainer explained the need for assessors to position themselves carefully so that they could see the target behaviors. Last, following the material on the video, the trainer lead a discussion with the assessors as to what behaviors might lead to rating confusion. They reached agreement amongst themselves on how they would rate each of the ambiguous behaviors they discussed.

Interviews with each of the assessors after the first run-throughs of the Scored Plant Tour indicated that they had anticipated most of the ambiguous behaviors well. When observers were asked to rate the same candidates during tours where there was not a full complement of candidates, inter-rater reliabilities were consistently above 0.80 for all four scales. Differences typically centered around "I didn't see that." That is, one observer was distracted and missed a certain behavior that another saw.

One of the difficulties with the questions in Figure 1 is that they involve behaviors we may not observe. No observable behavior should equal a "no". That is, if the candidate didn't ask

questions of the tour leader, then s/he gets a "no." However, it is very important in their training that raters are taught to look for the behaviors at certain points in the tour.

There are some situations (e.g. walking on the catwalk or climbing the ladder) that can only be seen at one point on the tour. There may be others such as avoiding forklifts, passing carts, or staying in the yellow lines that could potentially occur in many places on the tour, but usually only happen one or two places where there is congestion or where it's difficult to stay within the yellow lines.

Each candidate received one score for the plant tour: a count of the number of yesses that assessors had checked off. As noted above, when it was possible to have two raters rate the same candidate(s), the raters discussed their differences until they reached consensus on the proper number of yesses. In only one of the 34 candidates in this study were there more than two disparities in the ratings.

Training Tour Leaders
It is important to train tour leaders to conduct the tour. A training video showing the candidates on the tour is a handy training tool. I have generally found that a tour leader plus two trained assessors makes for the best behavioral observations. However, it is most important that the tour leader position the group so that the assessors can see the behaviors they are trying to assess. This is where the video comes in handy. The trainer can point out how the tour leader can move the group so that assessors have the best visual vantage points to assess the behaviors they are looking for. It is necessary for the tour leader to rehearse the information and the stations of the plant tour several times before actually giving it to live candidates. It is often helpful for experienced tour leaders to bring new leaders along with them on one or two tours until the "newbies" get the feel of the tour.

It is also generally necessary to train several tour leaders. Depending on the size of the facility that the tour entails, a tour leader may do a considerable amount of walking on hard floors. If there are a number of tours that need to be done within any given week, tour leaders may need the opportunity to have a day off after several tours the previous day.

Criterion-related Validity
After the content validity study was completed, some 34 candidates succeeded in passing all the hurdles of the test. That is, they were able to pass Basic Skills Testing and then the Structured Interview, the Manufacturing Simulation, and the Scored Plant Tour. These last three were actually scored as a composite so that candidates who scored poorly on one of the three assessments could make up for it by doing well on the other two. After more than one year on the job, the supervisors rated the performance of each of the new employees. All 34 of the employees who were put on the job from the first iteration of the selection process were still with the company at the end of the first year. However, since the sample was attenuated by all the employees who were not able to pass the other three selection measures, one would expect severe attenuation of the correlations. While the attenuation most certainly occurred, it is remarkable that the selection measures all showed at least some small degree of correlation with the eleven different criteria of performance.

Table 1 shows the means and standard deviations of the plant tour and three other selection measures that were being applied at the same time. While only 34 candidates were placed on the job after the first iteration of selection, 25 more candidates were placed on the job during

that first year. Criterion data were only available on the first 34, but in order to increase sample size in the estimates of means and standard deviations, the second 25 are included in Table 1.

Variable	Mean	Standard Deviation	Manufacturing Simulation	Structured Interview
Manufacturing Simulation	43.15	7.12		
Structured Interview	51.37	5.19	-.145	
Scored Plant Tour	52.64	4.22	-.121	.210

Table 1. Descriptive Statistics of Selection Measures (N = 59)

What is most notable about these data is that although the manufacturing simulation, the structured interview, and the Scored Plant Tour were each based on 60 possible points, the manufacturing simulation is more than a full standard deviation below the other two measures in its mean. I also calculated the correlations among these three measures. None is significant at the .05 level. While this might seem surprising, the three measures were designed to tap different areas of competency thus they should be relatively uncorrelated.   The largest correlation was .21 between the Structured Interview and the Scored Plant Tour.

Performance Appraisal Dimension	Mean	Standard Deviation
Listening and Understanding	4.20	0.64
Mechanical Comprehension	4.19	0.66
Dependability	4.12	0.91
Concentration at Work	4.17	0.75
Pride in Work	4.36	0.66
Works Needing Little Supervision	4.22	0.79
Uses Time Wisely	4.15	0.58
Safety Awareness	4.34	0.51
Team Player	4.19	0.80
Troubleshooter	3.85	0.83
Manual Dexterity	4.39	0.53

Table 2. Descriptive Statistics for Performance Appraisal Dimensions (N=34)

Table 2 shows the means and standard deviations of the eleven scales used to rate the employees. Each employee was rated by two supervisors. The eleven scales used had behavioral anchors that had previously been produced as part of the content validity study. The scales were all five point scales. Average inter-rater reliability of the scales was .78. However,

the scales had a pronounced leniency bias and the means ranged only from 3.85 to 4.39. Moreover, the standard deviations for these scales were all less than 1.0. Since these employees were the first to enter the plant through the new selection process, it is likely that they were, as a group, thought to be considerably superior to other employees in the plant. Additionally, it is likely that the effective selection of the three selection measures restricted the range. Last, the leniency of the ratings may be due to a contrast effect with other present employees.

Performance Appraisal Dimension	Plant Tour	Structured Interview	Manufacturing Simulation
Listens and understands	.316*	-.066	.251*
Mechanical Ability	.240	.337**	-.050
Dependability	.394**	-.036	-.134
Concentration on work	.338**	.066	.042
Pride in your work	.052	.106	.075
Using Time Wisely	.086	-.113	.260*
Works effectively without supervision	-.059	.025	.129
Is a team player	.012	.171	.237*
Effective at troubleshooting	-.040	.074	.030
Observes safety rules	.333**	.121	-.051
Has good manual dexterity	.018	.009	.015

** p < .05, *   p < .10

Table 3. Correlations of Selection Measures with Performance Appraisal Measures (N = 34)

Table 3 shows that, of the eleven dimensions rated, four were significant at the 5% level. The dimensions that were significantly correlated with the scores from the plant tour were: listens and understands, dependability, concentration on work, and observes safety rules. It would be unreasonable to expect that the plant tour would correlate significantly with mechanical ability, pride in work, using time wisely, working effectively without supervision, being a team player, being an effective troubleshooter, or having good manual dexterity. These criteria were included to assess the effectiveness of the other assessment measures. What is notable is that the structured interview correlated only with mechanical ability. This is probably due to the background questions that were part of that interview. It was expected that the structured interview would predict team player behavior. Although the correlation for that is positive, it is still well short of the 10% level of significance. The manufacturing simulation is correlated with listening and understanding, using time wisely, and being a team player. This simulation is timed and done with groups of six job candidates who have to work closely together to complete the simulation. Therefore, it is easy to see why it should be related to these three criteria. It seems likely that attenuation due to selection effects has prevented these correlations from being higher.

The Scored Plant Tour does predict criterion measures for things that are part of its content. For instance, "listens and understands" is the focus of the Plant Tour scale "interest in plant processes" as well as "listening and understanding." Therefore it is to be expected that the tour

score would correlate with the "listens and understands" criterion measure. I also expected that the plant tour scale would correlate with "observes safety rules" since seven of the 20 items in the plant tour scale are concerned with adherence to safety rules. Moreover, one of the items of the "comfortable in a factory environment" measure of the plant tour scale also included candidate's comfort wearing earplugs and safety glasses.

The Scored Plant Tour was not correlated with all eleven of the criterion measures, but it was not designed to do so. However, a very important aspect of the Tour was its ability to add incremental validity to the selection measures. Correlation among the three selection measures shows that the three are not correlated with each other at the .05 level. In part, this is explainable first because they were each designed to measure different competencies, and second because the measures do not share method variance – they use very different methods of assessment. The manufacturing simulation and the Scored Plant Tour share the fact that they are scores compiled by assessors, but they differ in that one is assessment in a contrived group situation and the other is assessment of individuals walking around the plant. While candidates were told at the beginning of their time in the organization that they would be observed throughout the day, behavior on the plant tour made it seem as if they forgot this once they began the tour.

Though candidates are wearing earplugs and safety glasses, they are required to pay careful visual and auditory attention to the things being explained and demonstrated on the tour as well as machinery operating around them. Their ability to concentrate in such an environment should be somewhat predictive of the ability to concentrate on their own work in the same environment.

Table 3 shows that not all important dimensions of employee performance can be predicted using the Scored Plant Tour, but at least four important dimensions can be. Given that these employees were selected with the Plant Tour Score as part of the selection decision, there was some restriction of range in Plant Tour Scores. The lowest score was 48 out of a possible 60 for the candidates who were chosen for the job whereas among all candidates the lowest score was 40. This restriction of range usually means that correlations are smaller than they would otherwise be.

CONCLUSION

This study explains the method by which a Scored Plant or Facility Tour can be produced. The Scored Plant Tour is a logical extension of the research done on Realistic Job Previews, and there is considerable evidence that RJPs decrease turnover. This study shows how a content valid tour may be constructed and demonstrates that such a measure may also demonstrate criterion related validity as well. For this particular manufacturing plant, the Scored Plant Tour was significantly correlated with ratings of employee performance.

This study shows that a content valid Scored Plant Tour is relatively easy to construct. While some training is necessary in order to insure that assessors produce reliable ratings, the training is not long or particularly expensive. Moreover, one training session usually suffices to provide assessors for a period of several years.

The scores on the Plant Tour were not significantly correlated with the other two measures used in this part of the selection process. Since the Plant Tour scores were significantly related to the supervisor's ratings but were not correlated with each other, it seems reasonable to say that the

Plant Tour contributed unique variance to the prediction of employee success. The Plant Tour gets at candidate reaction to the environment in which the job will be performed. If candidates find the environment or the safety procedures aversive, it is unlikely that they will be successful on the job. The other measures could not get at these predictors of success with the same power that the Plant Tour did.

The results indicate that candidate impressions on a Scored Plant Tour are related to some aspects of employee performance. For those organizations that offer prospective employees the opportunity to look over the facilities, this approach to assessing the fitness of candidates for the job allows the organization to gain valuable information from a source they are now neglecting.

REFERENCES

Buckley, M., Fedor, D., Veres, J., Wiese, D., and Carraher, S. (1998). Investigating newcomer expectations and job-related outcomes. *Journal of Applied Psychology*, 83(3), 452-461.

Crow, S., Hartman, S. & McLendon, C. (2009). The realistic job preview as a partial remedy for nursing attrition and shortages: The role of nursing schools. *The Journal of Continuing Education in Nursing*, 40(7), 317-323.

Equal Employment Opportunity Commission. (1978).

Goldstein, I. & Zedeck, S. (1996). Content Validation *In:* Fair employment strategies in human resource management. Barrett, Richard S. (Ed.); Westport, CT, US: Quorum Books/Greenwood Publishing Group, 1996. pp. 27-37.

Goldstein, Zedeck & Schneider, (1993). An exploration of the job analysis-content validity process. In Schmitt, N. and Borman, W. *Frontiers of industrial and organizational psychology*. Jossey-Bass: New York.

Hirji, K. (2001). Exploring Data Mining. *Communications of the ACM*, 44(7), 87-93.

Hom, P., Griffeth, R., Palich, L., & Bracker, J. (1998). An exploratory investigation into theoretical mechanisms underlying realistic job previews, *Personnel Psychology*, 51(2), 421-451.

Klein, H., Wesson, M., Hollenbeck, J.& Alge, B. (1999). Goal commitment and the goal-setting process: Conceptual clarification and empirical synthesis. *Journal of Applied Psychology*, 84(6), 885-896.

Olian, J. & Rynes, S. (1991). Making Total Quality Work: Aligning Organizational Processes, Performance Measures, and Stakeholders. *Human resource Management* . 30(3), 303.

Phillips, J. (1998). Effects of realistic job previews on multiple organizational outcomes: a meta-analysis. *Academy of Management Journal*, 41(6), 673-690.

Pulakos, E. (1984). A comparison of rater training programs: Error Training and Accuracy Training*. Journal of Applied Psychology*, 69(4), 581-588.

Steers, R. and Porter, L. (1975). Motivation and work behavior. New York: McGraw-Hill.

Wanous, J. (1973). Effects of realistic job preview on job acceptance, job attitudes, and job survival. *Journal of Applied Psychology*, 58(3), 327-332.

Weitz, J. & Nuckols, R. (1955). Job satisfaction and job survival. *Journal of Applied Psychology*, 39(4), 294-300.

Weitz, J. (1956). Job expectancy and survival. *Journal of Applied Psychology*, 40(4), 245-247.