

Quarterly Topic: Job Analysis

President's Message Job Analysis Tips



Cassi Fields
 Fields Consulting Group

I am pleased that we devote one issue of the Quarterly Newsletter each year to job analysis. It is like going back to our professional roots, and a job analysis is the root of any employee selection system.

During my career, I have conducted literally hundreds of job analysis to develop and validate employment tests. The job analysis approach I employ is the traditional task and Knowledge-Skills-Abilities-Other Characteristics (KSAOs) analysis using interviews, job observations, focus groups and surveys. Based on my experiences applying this approach, I wanted to share with you some basic job analysis tips that I have found useful for making a more reliable, valid, and legally defensible test.

Tasks

The first question a job analyst should ask himself/herself is "What level of task detail do I need to create and defend my selection procedure?" Based upon my observations,

very few analysts begin with this question even though it is critical. Do you want 30 tasks, 100 tasks or 300 tasks? Each produces a vastly different result.

For instance, in the 30-task scenario, the tasks are likely to be so broad that it would be easy to link any selection procedure to the tasks but it would be difficult to defend since the link is neither direct nor specific. In the other extreme, 300 or more tasks are likely to be so detailed that the job analysis data may only be accurate for months (rather than years) since any small change in the job would immediately require modifying the task statements. In task analyses that are this detailed, task statements often cover every procedure performed and exactly how each one is performed. If, for example, the target job requires word processing, task statements in a 300-task list would often indicate the specific word processing software used. Therefore, if the word processing software changed from Corel Word Perfect to Microsoft Word, a job analysis update would be required.

A highly detailed job analysis is often useful for training purposes. A task analysis consisting of 80-100 tasks is the level of specificity that I find works for content validation. This level of detail generally covers all of the important requirements of a job, and it is specific enough to clearly link the test content to it.

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Upcoming PTC/MW Luncheons and Workshops

December Luncheon:

PTC/MW Business Meeting & Presidential Address

Cassi Fields, Ph.D.
 PTC/MW President and
 Fields Consulting Group

Wed., Dec. 12, 2007

January Luncheon:

James Sharf, Ph.D.
 Sharf & Associates

Wed., Jan. 9, 2008

February Luncheon:

Wed., Feb. 13, 2008

March Workshop:

Wed., Mar. 12, 2008

April Luncheon:

Wed., Apr. 9, 2008

May Luncheon:

Wed., May 14, 2008

June Workshop:

Wed., Jun. 11, 2008

July Luncheon:

Wed., Jul. 9, 2008

August Luncheon:

Wed., Aug. 13, 2008

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December Luncheon

PTC/MW Business Meeting & Presidential Address

Cassi Fields, Ph.D.
PTC/MW President
Fields Consulting Group

Wednesday, December 12, 2007

11:30 a.m. – 1:30 p.m.

Pier 7 Restaurant, 650 Water Street, SW, Washington, DC

\$20 for members, \$30 non-members

Luncheon Registration Information

Sign up via our website, www.ptcmw.org. **The deadline for Luncheon reservations is 2:00 p.m., Monday, December 10.** Cancel by 2:00 p.m. Monday to avoid having to pay for the Luncheon.

If you do not have Internet access, you may contact PTC/MW Treasurer **Brian Katz**, Tel: (703) 812-3043; E-mail: Brian.Katz@PDRI.com. Please include the following information in your message: name, membership status, menu selection, e-mail address,

and telephone number.

Pier 7 Restaurant is located approximately one block south of the intersection of Maine Avenue and 7th Street SW. Free parking up to 3 hours.

Menu: Medallions of New York Sirloin; Breast of Chicken Tarragon; Chef Salad; Broiled Filet of Sole and Scallops; Seafood Newburg with Rice; Vegetable Plate; or Fruit Plate.

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LEGAL WATCH

Now for the OFCCP's Perspective on Employment Testing

Eric M. Dunleavy
DCI Consulting Group

In the last PTC/MW Quarterly, this column summarized key points from an Equal Employment Opportunity Commission (EEOC) meeting about employment testing. Recall that the EEOC primarily enforces Title VII of the Civil Rights Act of 1964, and also enforces the Americans with Disabilities Act (ADA) and the Age Discrimination in Employment Act (ADEA). Perhaps the most important 'take home' message from that column was that employment testing is certainly on the EEOC's radar as part of its mission to eliminate systemic discrimination at work. Since that meeting, the Office of Federal Contracts Compliance Programs (OFCCP), which primarily enforces Executive Order (EO) 11246 and also enforces the Rehabilitation Act of 1973, has also 'unofficially' weighed in on how employment testing fits into their current enforcement strategy.

Recall that, under EO 11246, federal contractors are required to take affirmative action to ensure that members of protected classes (primarily women and minorities) are recruited, hired, and treated equally during employment. In this context, being treated equally may include decisions related to 'employment, upgrading, demotion, transfer, recruitment, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.' The OFCCP can audit any organization that is a federal contractor to ensure that affirmative action plans are succeeding.

An OFCCP audit investigation usually assesses recruitment success via workforce and labor pool statistics, as well as more direct analyses of hiring, promotion, termination, and compensation. In these cases, employment tests may come under scrutiny if adverse impact exists and that test can be identified as part of the hiring process and a potential cause of the impact.¹ Depending on the employment decision in question, the OFCCP can investigate disparate treatment against a class (i.e., pattern and practice) as well as adverse impact associated with a selection procedure. Note, that employment testing can be implicated under both theories of discrimination.

¹ Any measure used to make an employment decision can be considered an 'employment test.'

Recent OFCCP Interest in Testing

According to OFCCP officials, there were over 100 employment test investigations in 2006, resulting in over \$4 million in settlement not including litigation. Unofficially, it appears that the OFCCP has targeted at least as many tests in 2007; at the recent Industry Liaison Group (ILG) meeting over the summer, one OFCCP regional director estimated that around 25 testing cases were being investigated in their region of the country alone.² Although the OFCCP has not held any public meetings or published new guidelines³ about employment testing, the agency has informally provided federal contractors with some guidance via a number of recent professional presentations. For example, at the ILG conference, a number of presentations focused on employment testing, including one by high-level OFCCP officials with expertise in testing. The session was targeted toward federal contractor employees who are responsible for developing, monitoring, and evaluating employment testing systems.

The OFCCP Stance on Evaluating a Test

When evaluating a test, the OFCCP enforces the *Uniform Guidelines on Selection Procedures* (UGESP) as law. This is an interesting difference from the EEOC, which does not enforce the UGESP as law, although the EEOC certainly appears to use the UGESP much more frequently in litigation than other professional and technical guidelines like the AERA/APA/NCME's *Standards for Educational and Psychological Testing* and SIOP's *Principles for the Validation and Use of Personnel Selection Procedures* (Jeanneret, 2005). Since the UGESP are the OFCCP's criterion, testing only becomes an issue in the presence of adverse impact.⁴ In other words, the OFCCP will not target a test for review if there is no adverse impact associated with any stage of a selection process, including the overall bottom line. If adverse impact exists at either a particular step in the hiring process or overall, then the OFCCP will collect validity evidence associated with that stage. This evidence is then sent to the OFCCP headquarters in

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² There are 6 geographical regions of OFCCP jurisdiction.

³ Recall that the OFCCP is an arm of the U.S. Department of Labor (DOL), which is a co-author of the *Uniform Guidelines on Employee Selection Procedures* (UGESP). Few expect to see any new DOL testing guidelines unless the UGESP are eventually revised.

⁴ Interestingly, the OFCCP generally does not use the 4/5ths rule to detect adverse impact. Of course, this rule was codified in the UGESP. Instead, the OFCCP takes a statistical significance approach and defines adverse impact as any disparity equal to or greater than 2 standard deviations (which is an alpha level of just under .05).

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Washington D.C., where OFCCP testing experts evaluate the validity evidence according to the UGESP.

One issue that OFCCP officials are quick to point out is that the test user, and not the test vendor, will be held liable under EO 11246. In other words, federal contractors should carefully consider the validity of a test before purchasing one, particularly 'off the shelf' from a third party vendor. If the vendor cannot provide some form of test validity and reliability information, or document which jobs the test has been validated on, potential test users should walk away.

Once a testing case gets to Washington, D.C., the fate of the investigation falls upon whether OFCCP experts decide that the validity requirements of the UGESP are met. According to the UGESP, content, criterion-related, construct, and transported criterion-related strategies are acceptable validation strategies. Although additional test validation strategies have emerged since the publication of the UGESP (in 1978), it is unclear if these strategies are similarly acceptable. Section 5A of the UGESP states that 'New strategies for showing the validity of selection procedures will be evaluated as they become accepted by the psychological profession.' However, with no update to the UGESP, it is difficult to judge whether this evaluation has occurred.

During their recent conference presentation, OFCCP officials described evaluating a test using characteristics and processes that I/O psychologists are all familiar with. If adverse impact exists and the validity evidence is not compelling, then the OFCCP considers the test to be discriminatory and submits a notice of violation to the contractor. When making this evaluation, OFCCP considers the:

- ✓ test development process;
- ✓ technical summary of the validation strategy and results (including correlation coefficients for criterion and construct validation evidence and the link between test content and job requirements for content validation evidence);
- ✓ job analysis information (required for all content and construct validity studies, but not necessarily for all criterion-related validity studies);
- ✓ standard setting procedure;
- ✓ test reliability; and
- ✓ consideration of less adverse alternatives.

Conclusion

Clearly, employment testing is on radar of the OFCCP as part of its mission to eliminate systemic discrimination at work. In general, the OFCCP and the EEOC appear to have similar perspectives on employment test discrimination enforcement. The two primary statutes these agencies enforce, Title VII and EO 11246, are parallel in the sense that the same classes are protected and the same general employment practices are covered. Both agencies view any measure used to make an employment decision as a 'test' that may or may not be discriminatory. Both agencies usually conduct adverse impact analyses at each step of a hiring process, although the agencies may differ in the methods used to detect adverse impact – the OFCCP appears to use statistical significance tests to identify adverse impact, while the EEOC uses practical significance estimates like the 4/5ths rule and/or statistical significance tests. Both agencies rely on established guidelines to determine whether validity evidence is adequate – the OFCCP enforces the UGESP as law, whereas the EEOC references the UGESP, in addition to other professional standards.

Taken together, the last two Legal Watch columns suggest that employment testing is certainly of substantial interest to the enforcement community, particularly given recent initiatives to stop systemic discrimination at work. After all, a class of people who take a discriminatory test would certainly fall under the umbrella of systemic discrimination. In this enforcement environment, organizations (federal contractors or not) should have a clear understanding of what employment tests are being used, what validation evidence exists for each, and whether these tests produce adverse impact. Interestingly, we have not seen an employment testing case under Title VII/EO 11246 make it to the Supreme Court in a long time, particularly using an adverse impact theory of discrimination. It will be interesting to see if these recent enforcement initiatives against systemic discrimination produce such cases in the high court over the next few years.

References

Jeanneret, P. R. (2005). Professional and technical authorities and guidelines. In F. J. Landy (Ed.), *Employment discrimination litigation: Behavioral, quantitative, and legal perspectives* (pp. 47-100). San Francisco, CA: Jossey-Bass Publishing.

Collecting Job Analysis Data: Purpose Matters

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A recent search in PsycINFO on “job” or “work analysis” indicates an increase over the past decade in research on the topic (Hysong, Best, Moore, and Cronshaw, unpublished manuscript). During this time, an important and recurring topic of discussion and debate has centered on the accuracy and validity of job analysis data, and the relative emphasis to be placed on each. As with performance ratings, estimating the accuracy of job analysis data has proven challenging for multiple reasons. For one, jobs and work settings are arguably too fluid and dynamic to be described by a single, “true score” (Carson & Stewart, 1996). Furthermore, as Sanchez and Levine (2000) remind us, employees’ descriptions of their jobs are, to some degree, social constructions (i.e., reflections of the opinions and frames of reference of the job incumbents). Consequently, Morgeson and Campion (2000) have advocated a departure from focusing on the accuracy of job analysis data in favor of concentrating on the validity of inferences derived from these data. Although accuracy (reliability) is a necessary but not sufficient condition for validity, the authors’ recommendation to “shift from an exclusive focus on the accuracy of job analysis data to a consideration of the validity of job analysis inferences” is well taken (Morgeson & Campion, 2000; pp. 822-823). In sum, when conducting a job analysis, the purpose (i.e., consequential validity) matters and carries equal, if not potentially greater, implications for evaluating and making appropriate use of job analysis data than the data’s accuracy.

What follows is a description of an applied research project illustrating the point that purpose matters when deciding on the approach and method of collecting job analysis data. This project used Functional Job Analysis (FJA) to systematically examine the work of primary care employees in the Veterans Health Administration (VHA). The principal objective of this project was to develop a database of task statements that comprehensively describe primary care work in the VHA. This database was intended to provide an evidence base that could guide the re-engineering of primary care jobs in VHA clinics. From the perspective of Morgeson and Campion’s (2000) thesis on inference-based models, this project is most relevant to the first inference in that it focuses on the extent to which a database of task statements adequately characterizes primary care work.

Method

Task data was collected using a modified FJA procedure on six jobs: (a) Physician; (b) Advanced Practitioner; (c) Registered Nurse; (d) Licensed Vocational Nurse; (e) Health Technician; and (f) Clerk. In brief, the modified FJA procedure consisted of the following three steps: (a) separately generating a set of task statements for each job; (b) integrating the different sets of task statements into a single, master list; and (c) collecting task ratings from job incumbents across the six jobs on the same master list of tasks.

A preliminary set of task statements was generated in focus groups conducted separately for each of the aforementioned six jobs. The resulting task statements were then edited by certified job analysts to ensure linguistic fidelity (following FJA protocol) and subsequently reviewed by the same Subject Matter Experts (SMEs) who participated in the focus groups. In addition to ensuring the task statements were accurate reflections of their work, the SMEs were asked to confirm that the list of tasks captured at least 85% of the job they perform. Throughout the entire task generation process, particular care was taken to ensure the accuracy of task statements (as judged by SME evaluation) and comprehensiveness of the list of tasks (as rated by SMEs). Inferences of accuracy, comprehensiveness, and usability are deemed important in the collection of FJA data (Cronshaw, Best, Zugec, Warner, Hysong, & Pugh, 2007).

Next, job analysts combined the six sets of task statements into a single database. Task statements featuring similar activities, behaviors and outputs and that were rated similarly along the FJA dimensions were identified as possible duplicates. After consulting with SMEs, task statements judged to be duplicates were not included in the database, resulting in a final set of 243 unique task statements of primary care work. This overall set of task statements was compiled into a machine-readable inventory for distribution to primary care personnel in select VHA sites. For each task statement, respondents were asked to indicate: (a) whether or not s/he performed the task in question (task endorsement); (b) how frequently s/he performed the task per week (frequency); and (c) how many minutes it took him/her to complete one instance of the task (duration).

Findings

The primary finding of relevance to this article is the number of tasks generated during the focus groups versus the number endorsed on the task inventory.

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Although all of the tasks for a given job title generated during the focus group were endorsed by incumbents on the task inventory, many more tasks were endorsed using the task inventory than generated in the focus groups. On average, incumbents in any given job title endorsed 2.44 times as many tasks ($M = 112.16$, $SD = 53.30$) as were generated in the focus groups ($M = 47.16$, $SD = 5.03$, $t(5) = 2.85$, $p < .05$). For example, Physician SMEs generated 40 – 50 task statements in the FJA focus groups, whereas the Physician incumbents endorsed 141 task statements on the task inventory. In sum, the two methods of collecting task information rendered very different results.

There are several possible explanations for this finding. Using the social-cognitive biases framework proposed by Morgeson and Campion (1997), this discrepancy could be interpreted as inaccuracies due to information processing limitations involving recall (focus groups) and recognition (task inventories) biases. Alternatively, it may be that the generation of task statements during focus groups is constrained by SMEs' conception of their job description. Instructions guiding focus group participants to tell the facilitator what s/he "gets paid to do" may create a frame of reference confined to the "core" aspects of the job in question. Incumbents responding to a task inventory, on the other hand, may recognize additional tasks s/he does, indeed, perform, but that are peripheral to the core tasks of their job.

A follow-up pilot to this study examined that possibility by asking Physician SMEs to read the list of 141 task statements endorsed by Physician incumbents and rate each statement as "core", a task considered central to the job of physician, or "peripheral", a task that may be performed by the incumbent, but not integral to the position itself. Results indicated that whether a task statement was rated as "core" or "peripheral" was correlated with whether it was generated in focus groups or endorsed on the task inventory ($r = .39$, $p < .001$). Although this suggests that most endorsed tasks tend to be peripheral and most generated tasks tend to be core tasks, caution is admonished in interpretations since this evidence is correlational.

From an accuracy perspective, the key question is "which method of data collection rendered the more accurate information?" From our perspective, the answer is, "it depends on the purpose for which the data were collected." Stated somewhat differently, the task statements were developed with great care for their accuracy and comprehensiveness. The unknown dimension is their usability.

As part of the main objective of the study, we were also interested in the extent to which we could use the database of task statements to re-engineer primary care work. Toward that end, we examined the extent to which task performance overlapped among the various job titles. The rationale for this analysis was that identifying tasks endorsed by incumbents from multiple job titles provides prima facie evidence of who can perform each task. That is, overlap in task performance among multiple job titles signals opportunities for re-engineering the work (i.e., re-assigning task responsibility to equally qualified members of the care team to optimize quality, efficiency, cost, etc.). In this particular application, the use of task statements generated in focus groups would have excluded a substantial number of "peripheral" tasks also eligible for re-assignment. Thus, the use of data collected from the task inventory better served the purpose of identifying opportunities for re-assignment.

Conclusion

Attention to the outcome is a hallmark of organizational science. There are multiple approaches and methods for conducting a job analysis. All other factors being equal, the ultimate purpose for which the job analysis is being conducted should drive or influence the approach and method by which the data are collected.

References

- Carson, K. P., & Stewart, G. L. (1996). Job analysis and the sociotechnical approach to quality: A critical examination. *Journal of Quality Management*, 1, 49-65.
- Cronshaw, S. F., Best, R. G., Zugec, L., Warner, M. A., Hysong, S. J., & Pugh, J. A. (2007). A five-component validation model for functional job analysis as used in job redesign. *Ergometrika*, 4, 12-31.
- Hysong, S. J., Best, R. G., Moore, F. I., & Cronshaw, S. F. (unpublished manuscript). *All task statements are not created equal: Social and cognitive biases in alternative task-oriented work analysis methods*.
- Morgeson, F. P., & Campion, M. A. (2000). Accuracy in job analysis: Toward an inference-based model. *Journal of Organizational Behavior*, 21, 819-827.
- Morgeson F. P., & Campion, M. A. (1997). Social and cognitive sources of potential inaccuracy in job analysis. *Journal of Applied Psychology*, 82, 627-655.
- Sanchez J. I. & Levine, E. L. (2000). Accuracy of consequential validity: Which is the better standard for job analysis data? *Journal of Organizational Behavior*, 21, 809-818.

Job-Analytic Reasons for the Limited Validity of Personality Tests: A Hollywood Story

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Personality testing has a lot in common with veteran Hollywood actors who, after enjoying a great deal of success early in their careers, are forgotten or fall in disgrace only to be rediscovered and brought back to stardom later on. Fortune seemingly smiled on personality testing in the early 1990's, when a few seminal meta-analyses catapulted it back to fame (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). Since then interest in personality testing has boomed, resulting in what some would characterize as a "personality bubble" in recent years. Unlike Hollywood, where remakes of old-time movies typically fail to achieve the same level of success than the original (e.g., see "King Kong"), personality testing broke all ticket sales records in the 90's.

However, the renewed interest in personality testing has been based on average validity coefficients similar in magnitude to those that had led Guion and Gottier (1965) to confess that they could not advocate personality testing "with a clear conscience" more than four decades ago. Has the morality of the newer generations of I/O psychologists finally been corrupted by the alleged lack of values in Hollywood, thereby making them more prone to staining their conscience than their predecessors? I like to believe that our "collective conscience" has not become lax over time and, therefore, that the new interest in personality testing is fueled by scientific analysis of the available evidence. What factors then have made our field more optimistic about personality testing in recent years in spite of its seemingly small validity coefficients? The answer, once again, resembles a Hollywood story.

Personality Testing: An Extreme Makeover

Just like veteran Hollywood actors who subject themselves to an "extreme makeover" hoping to be cast in younger roles, personality testing in the 90's enjoyed the equivalent of "surgical enhancement" in the form of statistical corrections. Yes, correcting for sampling error is akin to Botox for validity coefficients, which see an immediate effect on their looks. In those cases where aging has caused permanent damage and Botox is just not enough, applying a correction for attenuation provides dramatic results overnight by removing the fat (i.e., error) while increasing the muscle (i.e., systematic variance). In still more severe cases whose age one would not dare to discuss in the open, correcting for restrictions of range is like liposuction for validity

coefficients. The very last improvement to this delicate surgical procedure – correcting for restrictions of range in the criterion – has already provided miraculous results notwithstanding those who accuse this procedure of being risky and highly invasive.

Together, these surgical enhancements allow what would otherwise seem like small validity coefficients to walk up and down Ocean Drive provoking the envy of even the top South Beach models. There are infomercials providing dramatic testimonials of the effects of surgical enhancement on validity coefficients, like that from a former mentor and colleague of mine who claims to have increased the multiple correlation between performance and a concoction of personality and cognitive ability tests (strengthened with collagen and glucosamine) to a miraculous 1.13!

A physical transformation, weight loss and all, is seldom enough to reopen the doors of Hollywood. A good Hollywood agent typically recommends an image consultation, including wardrobe, hairstyle, and cosmetic dentistry. In this respect, the Big Five designer clothes increased the sex appeal of personality testing several-fold, as evidenced by the following. First, conscientiousness emerged as a possible twin brother of cognitive ability, with its undisputed talent to be cast in any role, be it hero or villain (i.e., predict job performance across all jobs). Second, differences in the validity coefficients associated with the Big Five personality traits across various occupations fed the hope of those of us who have longed for situational specificity in testing. Indeed, the world around us would make much more sense if openness to experience were a consistently good predictor of performance in, say, the occupation of gadget inventor, whereas emotional stability worked well to predict the performance of, say, a marriage counselor.

In sum, just like an old actor who went through an "extreme makeover," the surgically enhanced validity coefficients associated with personality tests, sporting their best Big Five attire, often found a leading role in journal articles and book chapters alike. However, in our field, as in Hollywood, fame is ephemeral. Personality is no different from dot-coms or real estate, and every bubble sooner or later must burst.

Troubles in Paradise

A recent compilation of past journal editors' opinions (Morgeson, Campion, Dipboye, Hollenbeck, Murphy, & Schmitt, 2007) suggests that many of us still evoke Guion and Gottier's struggles of conscience when the topic of personality testing is brought up. The main source of these inner conflicts is that despite all the surgical enhancements and designer clothes, the validity coefficients associated with personality tests are still small. That is, in close-ups and when the camera is fixed

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on them, the audience can still see the wrinkles in personality testing, no matter how much make-up is applied. Is personality testing about to fall out of grace once again? I believe I have a new remedy that may prevent it. Now that personality testing has finally got its body in prime shape, it is time to turn to a spiritual transformation. Indeed, no acting career is complete without some soul-searching, which is typically preceded by a DUI, one or more nights in jail, and an expensive addiction treatment program.

Of all the I/O tools, job analysis seems the least capable of inducing anybody's spiritual transformation. And yet despite being uncool and tedious, job analysis may hold the secret to personality testing's eternal youth. To explain my point, I am afraid I have to leave momentarily the Hollywood hills...

Saving Personality Testing by Reinventing Job Analysis: The Need for a Paradigm Shift

Traditional job analysis has been permeated by behavioral assumptions such as the fact that job behaviors can be defined and studied separately from the incumbents who hold the job. However, the assumption that the best description of the job is a strictly behavioral and objective one is in itself questionable. Contrary to the traditional notion of Subject Matter Experts (SMEs) as "objective" informants of the job, I argue that incumbents are best conceived as socio-cognitive reporters of the meaning, consequences, and behavioral tendencies that their job experience triggers on them (Mischel, 1976). That is, one should not forget that the same environmental pressures may be interpreted quite differently by incumbents, whose reactions are necessarily tainted by their past experiences and dispositional tendencies. Murray (1938) noted that the same environment provokes different interpretations, which in turn invoke different behavioral themes or patterns.

Similarly, there is often more than one successful approach to the job. For example, whereas dealing with an irate customer may invoke a response of passive submission (i.e., agreeableness) in some job incumbents, a different interpretation of the situation may elicit an innovative solution that renders the source of the customer's frustration irrelevant (e.g., openness to experience). Thus, it is not the job that calls for either agreeableness or openness to experience, but the job incumbent's interpretation of the job that does so.

The paradigm that currently dominates evaluations of job analysis data is at odds with my argument. That is, most job analysis research endorses the view that SMEs are subject to many cognitive biases that interfere with their ability to provide an "accurate" description of the job. The

problem with this view is that we often forget that jobs or job titles are semantic abstractions, and that incumbents often (always?) choose to enact their job responsibilities according to their own interpretation of the job environment (Sanchez & Levine, 2000).

Because jobs are conceived as a separate reality from the incumbents who perform them in traditional job analysis, it is not surprising that standard job analysis practice advocates enlisting as many external observers of the "job reality" as possible, so that the biases and idiosyncratic misperceptions that each observer brings to the plate can be cleaned up through a process of triangular observation of the same "object" from multiple vantage points. In contrast to this dominant paradigm, I advocate the use of multiple sources of information not because I believe that the "truthful" depiction of the job will emerge from comparing and contrasting descriptions provided by various sources, but because a comparison across sources may best reveal the subjective interpretations of how people experience the job. This experience, and not the objective job reality, is the one factor underlying the behavioral patterns that we have grown accustomed to calling personality traits (e.g., conscientiousness, agreeableness).

Some may say that my points are not new, because interactional psychology recognized the importance of trait by situation interaction long ago. This is true. However, although we have finally agreed on a classification of traits along the Big Five, we have not made comparable progress in regards to our study of situations. I would blame this failure on "physical sciences envy," which has propelled us to conceive situations as objective realities that can be measured in isolation. We in psychology should not be concerned with just the "objective" features of situations, but with precisely their subjective features as well. In other words, behavior and cognition interact in multiple ways, and "situation X" does not necessarily invoke conscientious behavior, but the behavior that best fits with the actor's interpretation of the situation.

A counterargument to this position is that, in employee selection, one is interested in those individuals who interpret a specific situation a certain way (e.g., as calling for conscientious behavior, because conscientious behavior is most likely to lead to good performance). However, this presumption misses the opportunity to learn about perhaps less common but potentially more effective ways to perform the job by relying on, for instance, openness to experience. If we agree that jobs can be enacted in multiple ways, and that each one of these approaches may rely primarily on a different personality trait, traditional validity studies

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are unlikely to shed light on the importance of any one trait. The reason being that the same job may be performed equally well by incumbents who interpret the job situation differently (e.g., employees who interpret the job situation to call for primarily conscientious behavior and by those whose interpretation calls for primarily creative behavior as in openness to experience). In the absence of a consistent pattern of covariation between a given trait and performance across employees, the validity coefficient of any personality trait would be attenuated. Concluding from these data that none of the traits is important for performance would be misleading, and a better conclusion would be that not all incumbents rely on the same behavioral pattern to enact the job with success.

I understand that this line of reasoning is likely to make many in our field quite uncomfortable. After all, a strict interpretation of my argument implies that the notion of “job-relatedness,” at least in the personality arena, is in itself questionable. That is, traits such as conscientiousness or openness to experience are “job-related” only in the mind of those incumbents who interpret the job environment in ways that elicit behaviors characteristic of such patterns. But there is no need to worry. All of the Big Five are always job-related, because they represent basic, adaptive human behavior to the environment. In other words, all of our daily routines require a minimum of conscientiousness (e.g., stopping at the red light), agreeableness (e.g., “yes, dear, I’ll take the kids to the doctor”), emotional stability (e.g., dealing with annoying telemarketers), extraversion (e.g., greeting coworkers in the hallway), and openness to experience (e.g., eating “tofu” may be good for you after all).

Taking Situations Seriously: What the Future Could Hold

So, what specific changes in job analysis methodology am I proposing? In essence, I am suggesting that job analysis needs to become more concerned with describing the incumbent’s “experience” of the job, and less concerned with describing the so-called “reality” of the job. It is not too late to realize that, when incumbents are describing their job, they are actually describing themselves in disguise. For instance, ratings of task criticality or “consequences of error” are not objective task characteristics, but judgments of an adaptive organism (i.e., the incumbent) regarding what would happen to him or her if s/he performed the task incorrectly. Similarly, job incumbents’ estimations of Big Five requirements reflect their own, idiosyncratic interpretation of the behavioral patterns that the job environment elicits from them. Many otherwise traditional job analysis practices, such as imposing a standardized task inventory across all incumbents, should be revised.

Instead, we should listen to incumbents more carefully, and let each one of them develop his/her own task inventory, which should tell us a lot more about their own conception of the behavioral patterns associated with their interpretation of the job.

In sum, instead of seeking “consensus” in job analysis as our ultimate goal, we should value disagreement among incumbents of the same job title. Analyzing within-job title differences can reveal meaningful differences in incumbent “theories” of how the job should be approached. These theories can in turn provide helpful insights regarding selection or training programs (Sanchez, Prager, Wilson, & Viswesvaran, 1998).

Some may say that raising questions about the validity of traditional job analysis is a futile academic exercise. Let me prove the opposite by sharing three examples from job analysis projects in which I was fortunate to serve as a consultant or as an expert panelist that illustrate these points and their practical implications. The first involved the job of air traffic controller. Aviation control technology has drastically changed the job of air traffic controller in the last two decades. During this time, the job went from usage of rudimentary radar equipment and simple visual inspection of the airfield to a “dark room” where traffic controllers operate in a highly computerized environment. Many air traffic controllers were having trouble adapting to the new environment because their “folk theory” of what an air traffic controller should be did not fit with their new work setting. Another aviation example is the job of aviation safety inspector, which the U.S. Senate recently directed the National Academy of Sciences to examine. It turns out that many inspectors endorse an old-fashion “mechanic” approach to doing their job. Conversely, the FAA would prefer them to function more like a quality or risk manager, which seems more in line with today’s overwhelming air traffic flow. A final example is that of Non-Commissioned Officers (NCOs), who early on had trouble adapting to the high-tech battlefield that the U.S. Army envisioned. In brief, the way NCOs conceived of how a soldier should do his/her job was at odds with the model of a new, high-tech soldier in the works.

In all three examples, had these organizations discarded the dissenters’ view of the job as “inaccurate,” and accepted instead the “consensus” view of the job endorsed by a majority of the job incumbents, they would have perpetuated an obsolete approach to these jobs that did not take full advantage of the new technology available.

Back in Hollywood, it occurred to me that some of the I/O movie studios that populate the Washington DC metroplex might have a good script (i.e., a job analysis

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PERSONALITY TESTING, FROM PAGE 9-----

project or dataset) to which they would like to apply these ideas. Hollywood has unfortunately typecast Spanish-speaking actors in roles of drug dealers and womanizers and, as a result, I am always on the lookout for a serious script that will let me showcase my acting talent. Thus, if you run into a good job-analysis script, please email my agent at sanchezj@fiu.edu.

References

- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1-26.
- Guion, R. M., & Gottier, R. F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology, 18*, 135-164.
- Mischel, W. (1976). Toward a cognitive social learning reconceptualization of personality. In N. S. Endler & D. Magnusson (Eds.), *Interactional psychology and personality*. Washington DC: Hemisphere.
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K. R., Schmitt, N. (2007). Reconsidering the use of personality tests in personnel selection contexts. *Personnel Psychology, 60*, 683-729.
- Sanchez, J. I., & Levine, E. L. (2000). Accuracy or consequential validity: which is the better standard for job analysis data? *Journal of Organizational Behavior, 21*, 809-818.
- Sanchez, J. I., Prager, I., Wilson, A., & Viswesvaran, C. (1998). Understanding within-job title variance in job-analytic ratings. *Journal of Business and Psychology, 12*, 407-420.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology, 44*, 703-742.

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JAMES SHARF, PHD
SHARF & ASSOCIATES

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PRESIDENT'S MESSAGE, FROM COVER-----

It is important to remember that each of the tasks, no matter how many tasks are ultimately identified, must contain the same level of detail when compared to each other.

KSAOs

There is substantial research on constructs, job dimensions and competencies to assist the job analyst in creating a KSAO list (e.g., Ackerman, Sternberg, & Glaser, 1989). This existing research can be useful in several ways. First, existing research can be used to define the KSAOs to be targeted without reinventing the wheel. Second, existing research can help to minimize or avoid extensive overlap in KSAO definitions, which results in more reliable rating scales later in the test development stage. Third, existing KSAO definitions (or information) can be used prior to the beginning of the job analysis to elicit the KSAOs job incumbents view are needed for successful performance in the specific job(s) to be analyzed. Alternatively, an existing KSAO list can be used to refine a preliminary KSAO list derived inductively from job incumbents (e.g., from interviews or focus groups).

I tend to refer to the existing research after collecting preliminary job analysis information from incumbents. Specifically, I use it in two ways. First, I use existing research to refine the initial KSAO definitions generated. Second, I use it to identify KSAOs that may have been missed in this initial KSAO generation process. An advantage to this approach is that it minimizes any potential biases or preconceived notions about the job(s) the analyst may have before conducting the job analysis. Personally, I am a proponent of objective and unconstrained thinking to create the best job analysis data possible. I am sure there are others who advocate a more deductive, top-down approach from the start using as much of the available research as possible. This is a fun debate for another time and another place.

Job Analysis Surveys

Standardized job analysis surveys (or inventories) can be very tedious but invaluable in gathering extensive task and KSAO information from a large and representative sample of job incumbents. They are tedious more for the respondents than for the developers, although there are strategies for minimizing the burden placed on survey participants. For example, the survey can be divided into smaller, more manageable sections, each administered separately

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to a different group (or subsample) of respondents (e.g., one group of respondents complete the task ratings and a second group complete the KSAO ratings). When adopting this strategy, it is important to provide the KSAO respondents with the tasks to refer to when assigning their ratings. Respondents cannot reliably and validly rate how important a KSAO is to successful task completion unless they can refer to the (same) task list.

All other factors being equal, if the job analyst can obtain ratings from all job incumbents, s/he should. In my career, I have been fortunate enough to be able to insist on including the entire incumbent population. I know others may not be so fortunate. It is very helpful and informative in a litigious environment to obtain every incumbent's perspective on the job. I recommend that all job analysts be creative in collecting as much job data as possible.

Task and KSAO Linkage

All the data collected to this point (e.g., from job interviews, job observations, focus groups and surveys) are necessary but not sufficient to define the critical tasks and KSAOs for the job for use in developing and validating a selection procedure. To be complete, it is important to have job incumbents link the KSAOs to the critical tasks. One might ask, if we already have job incumbents' ratings that indicate the KSAOs are important, why link them to tasks? Especially since this is, definitively, the most tedious part of a job analysis for both respondents and developers. The answer is that the linkage "proves" that the KSAOs are needed to perform the tasks. Having data on these linkages provides a direct demonstration that each is important.

How does the analyst use the task-KSAO linkage data? This is a good question and can result in considerable debate. For example, if there are 100 critical tasks and one KSAO links directly to 50 of those tasks and a second KSAO also links directly to 50 of those tasks, are they equally important? If there are 100 critical tasks and one KSAO links directly to 20 of those tasks and another KSAO links directly to 80 of those tasks, is the later four times more important? Does it deserve 80% of the total weight? Since the tasks do not necessarily have equal frequencies, must the job analyst take task frequency into account when considering task-KSAO linkage? Only the job analysts and the incumbents involved in the job analysis can answer these questions. I would just recommend that each job analyst ask these questions and clearly answer them before moving on to test development.

I hate to conclude with a trite saying, but....good data in – good data out. In other words, good job analysis data will result in a much more reliable and valid test.

References

Ackerman, P. L., Sternberg, R. J., & Glaser, R. (1989). *Learning and individual differences: Advances in theory and research*. New York: Freeman and Company.

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Job Analysis, Back from the Future *

Ted Hayes

The Gallup Organization

Consistent with year's past the PTC/MW Quarterly series wraps up the year with job analysis. There is some irony in holding job analysis until the final issue. It is one of the first content areas an applied psychologist learns about in graduate school and all defensible HR systems rely upon at least an initial job analysis. From a discipline perspective, it used to be the case that the best minds in I/O would publish at least one article involving job analysis, or might even spend their careers studying and applying job analysis. But that's not the case anymore, and one must ask why.

Over the past 20 years, three streams have converged to diminish the study of job analysis. One was the (re)emergence of "non-cognitive" predictors of job performance, notably biodata (Mael, 1991) and personality (Barrick & Mount, 1991). This combined with the work of Hunter (1986), who argued persuasively for the non-behavioral, job knowledge-mediated model of the relation between cognitive ability and job performance. Clearly, other researchers and efforts (e.g., Project A) contributed to this stream as well. The net effect was a redirection of interest away from overt job behavior – long the foundation of job analysis – and toward cognitive and interpersonal processes. It was during this time that a famous psychologist told me at a SIOP conference that in his opinion, job analysis was "the barnacle of I/O."

A second stream was the possibility that job analysis had at least temporarily overheated, almost as if it had run too fast for too long. Some of the last great studies on job analysis were carried out in the late 80's-mid 90's (e.g., Buffardi, Fleishman, Morath, & McCarthy, 2000; Harvey, Friedman, Hakel, & Cornelius, 1988; Friedman, 1988). Some academics began to question whether there was any "quote-true score-unquote" to study in job analysis, which further marginalized the field in graduate programs.

The final, maybe most insidious, stream has been the competency movement. Essentially, managers and businesspeople decided on their own to leapfrog behavior-based job analysis and analyze work in terms of chunks of "competencies." I have done this myself, and while I would claim that I (and other PTC/MW members) know what the limitations of the data are, it is easy to see how someone without an I/O background would easily misuse the process and results.

The really bad news is that if competencies go away, they may be replaced by something even less savory.

The cognitive and personality revolutions, the marginalization of job analysis, and the emergence of competencies have all converged in the job analysis marketplace. It is unlikely that the tide will ebb. Nevertheless, the future is quite bright for job analysis, not in terms of re-packaging old studies in new boxes but in engaging current practices and new directions. In the old formulation, there was work-oriented job analysis – what got done regardless of how well or who did it – and worker-oriented job analysis – the salient attributes required for work performance. As we move into the future, one might suggest three new directions that, to use the old job analysis lingo, might be called standards-oriented job analysis, performance-oriented job analysis, and career-oriented job analysis.

Standards-oriented job analysis is the most familiar of the three methods. It might be used when the analyst or manager needs to establish the skeleton of the work performed on the job – use of certain types of equipment, environmental factors, minimum standards of expected behavior. Standards-oriented job analysis would exactly describe the position itself for the purposes of establishing minimum job requirements. While important in some applications, this type of analysis could be performed by interns, graduate students, and other low- or entry-level professionals.

Performance-oriented analysis would be more expansive than current worker-oriented job analyses. It might help move toward greater use of synthetic job validity (e.g., Hoffman, 1999). The goal would be to identify critical performance criteria and link them to human attributes using some stated taxonomy, or maybe more than one of them. It would be critical in this model to identify all of the critical criteria – after all, performance is what you measure of it – and have some data showing how the attributes link to these outcomes. This would re-create the original studies on the Position Analysis Questionnaire (PAQ) to an extent (e.g., McCormick, Jeanneret, & Mecham, 1972). However, while the framework is similar, there is much more known now about human work performance and predictors at different levels than was available when the PAQ was developed. Different criteria are now available or considered – multisource feedback, employee engagement, organizational citizenship behavior, counterproductive work behavior – relative to what was done in the original PAQ studies. Additional emphasis might also be given to what is referred to as "cognitive

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* *Editor's Note.* An earlier version of this article appeared as a PTC/MW President's Note in November 2006.

task analysis” – more narrative description of how people approach and resolve work challenges for high performance (see Vogt, King, & King, 2004, for an example in the personality realm). Another branch on this limb is operational forecasting. This type of job analysis would be specialized and would involve multiple methods. By focusing on other than minimal performance and using multiple criteria, the result would be a product more deeply embedded in the nomological network of work than has ever been available before.

The final approach, *career-oriented job analysis*, is the most novel of the three methods. Career-oriented job analysis might incorporate aspects of competency modeling. The goal is to be integrative and generative – how does one start out in this job, what (if anything) would be the next rung, and what is a likely career path? Also, career-oriented job analysis would need to be interactive. It might show what training courses would be required, for example, for an associate to be a competitive candidate for promotion. There might be stated requirements for expatriate assignments and graduate-level education. This approach could even be pursued from the perspective of the organization for succession planning purposes. Of course, the bottom line of a career-oriented job analysis is that no one is guaranteed a promotion or even maintaining one’s job. However, clarifying that there is a path and it progresses in a programmatic way would have an energizing effect on almost any company in terms of fairness, development, and merit-based employment practices.

After years of marginalization, it seems the bench strength of academic-based job analysis researchers is thinning. But the skill sets required for job analysis – among them, measurement, individual differences, and behavioral definition – have become more important in the world of work, not less, especially as organizations become relentlessly more global, diverse, and efficient. Managers being turned out in by today’s business schools are simply uninterested in the subtle distinctions between work and worker-oriented analyses, but they really want the information job analysis can provide. Can we capitalize on that need?

Job analysis is coming back from the future. It’s sure to look different than it did before, but don’t we all. It is doubtful that those old reliable multi-hundred task lists are going to be acceptable ever again except under the most limited of circumstances. There is no mystery, other than in plaintiff’s imagination, about what firefighters do and whether/how firefighters in Municipality “A” differ from those in Municipality “B.” Beyond description and minimum standards, though, the key to the renewal of job analysis is to integrate disparate approaches to job analysis, even at the

baseline standards-oriented level. Let’s anticipate what questions we need to answer before they are asked. Ultimately, job analysis is one of the most fundamental activities that I/O psychologists do well. That competency is one we can go back to the future with.

References

- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1-26.
- Buffardi, L. C., Fleishman, E. A., Morath, R. A., & McCarthy, P. M. (2000). Relationships between ability requirements and human errors in job tasks. *Journal of Applied Psychology, 85*, 551-564
- Friedman, L. (1988, April). *Rating tasks on importance, frequency, significance, and difficulty: Does it make a difference?* Paper presented at the 2nd Annual Conference of the Society for Industrial/Organizational Psychology (SIOP), Dallas, TX.
- Harvey, R. J., Friedman, L., Hakel, M. D., & Cornelius, E. T. (1988). Dimensionality of the Job Element Inventory, a simplified worker-oriented job analysis questionnaire. *Journal of Applied Psychology, 73*, 639-646.
- Hoffman, C. C. (1999). Generalizing physical ability test validity: A case study using test transportability, validity generalization, and construct-related validation evidence. *Personnel Psychology, 52*, 1019-1041.
- Hunter, J. E. (1986). Cognitive ability, cognitive aptitude, job knowledge, and job performance. *Journal of Vocational Behavior, 29*, 340-362.
- Mael, F. A. (1991). A conceptual rationale for the domain and attributes of biodata items. *Personnel Psychology, 44*, 763-792.
- McCormick, E. J., Jeanneret, P. R., & Mecham, R. C. (1972). A study of job characteristics and job dimensions as based on the Position Analysis Questionnaire (PAQ). *Journal of Applied Psychology, 56*, 347-368.
- Vogt, D. S., King, D. W., & King, L. A. (2004). Focus groups in psychological assessment: Enhancing content validity by consulting members of the target population. *Psychological Assessment, 16*, 231-243.

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Qualifications:

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Responsibilities include:

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- Helping coordinate with vendors and contracting organizations in support of project.
- Providing ad hoc support to associated projects during surge periods.

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The candidate should have thorough knowledge of MS

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JOB ANNOUNCEMENTS, FROM PAGE 15-----

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- ✓ Membership directory
- ✓ Networking opportunities

...and more! Look for your membership renewal notice in your e-mail inbox in January 2008.

Seeking Participants for Cooperation in the Workplace Survey

Seeking your participation in an online survey that will be used to develop a measure of cooperation in the workplace.

If interested, please email **Luke Brooks-Shesler** (George Mason University) at lbrookss@gmu.edu with the word "yes" in the subject line. You will then receive via email an ID and a link to the survey. The survey takes approximately 30 minutes. You will also be asked to forward a survey link and an ID to your supervisor and to a coworker who is not your supervisor. The link will take your supervisor and coworker to an online survey in which they provide their perceptions of various aspects of your behaviors at work.

The results of this pilot study are confidential. Individual responses will not be shared with you, your supervisor or your coworkers. However, results will be available in aggregate form, should you be interested.

Thank you! **Dr. Jose Cortina, Luke Brooks-Shesler, George Mason University.**

Deadline: **December 31, 2007.**

Member News

Welcome New Members!

Regular Members

Jesus Erdheim, Human Resources Research Organization (HumRRO)

Magana Mungai, The Pittman McLenagan Group, L.C.

Student Members

Daniel Robbins, University of Baltimore

Our Condolences To...

Family, friends and colleagues of **Dr. Marvin Dunnette**, who passed away on 9/18/07 in St. Paul, MN. Dr. Dunnette (1926-2007) was a gifted and accomplished I-O psychologist and a mentor to many. Ph.D. in I/O psychology, University of Minnesota, 1954. Professor of Psychology, University of Minnesota, 1961-98. Co-founder and Board Chairman of Personnel Decisions, Inc. (PDI) and Personnel Decisions Research Institute (PDRI). Fellow of APA Divisions, 1, 5, & 14. Past President of SIOP (APA Div. 14), 1966-67. Author/editor of many classic journal articles, chapters, and books, including, "Fads, Fashions, and Folderol in Psychology" (American Psychologist, 1966), *Personnel Selection and Placement* (1966), *Managerial Behavior, Performance, and Effectiveness* (1970), *Handbook of Industrial and Organizational Psychology* (1976), *Handbook of Industrial and Organizational Psychology, 2nd Edition, Volumes 1-4* (1990, 1991, 1992, 1994). Survived by his wife Dr. Leaetta Hough, I/O psychologist and Past President of SIOP (2005-06).

Congratulations To...

Carla Swander on being awarded the Stephen Bemis Memorial Award for 2007 at this year's annual IPMAAC Conference. Congratulations also to **Deborah Gebhardt** (Human Performance Systems) for being PTC/MW's nominee for this year's Bemis Award.

Seymour Adler (Aon Consulting) on being awarded Fellow status in the Association for Psychological Science (APS) this month for his sustained outstanding contributions to the advancement of psychological science.

Elizabeth Conjar, **Beth Heinen**, **Whitney Botsford**, and **Michael Ford** (George Mason University) on being awarded the Academy of Management's (AoM) Research Methods Division 2007 Best Student Paper

award for their manuscript entitled, "Examination of Work-Family Conflict Measures: A Review and Meta-Analysis."

Transitions and Appointments

After 34 years, **David Campbell** retired from active service with the Center for Creative Leadership (CCL) at the end of June. Campbell will continue to have a presence at CCL for the next several months and will maintain his office in Colorado Springs as he transitions several projects.

☪☪☪

Have news to share with your fellow PTC/MW members? The Member News section is the perfect forum to announce job transitions, awards and honors earned, presentations and publications, interesting projects completed, and more.

*If you have news to share with fellow PTC/MW members, please contact PTC/MW Newsletter Editor **Mike Ingerick** at (703) 549-3611 or mingerick@humrro.org.*

PTC

Meta-analysis of Predictors of Performance in Clerical, Administrative, and Support Positions: Call for Papers

Seeking unpublished papers and reports from 1980 or later for a meta-analysis of predictors of clerical/administrative job performance. Predictors under consideration include cognitive domains (e.g., verbal, quantitative), personality characteristics, and procedural knowledge and skill (e.g., computer/technology literacy); we are particularly interested in computerized clerical measures. Seeking criterion-related validity studies examining a broad range of criteria (e.g., absenteeism, work samples, supervisory ratings).

Please send any relevant materials (including sample size and description, effect sizes, and any additional information, such as reliabilities) to **Rod McCloy** (RMcCloy@HumRRO.org) by **January 18, 2008**.

Every effort will be made to preserve the confidentiality of individual organizations. We will not report any information for individual organizations or by other variables that would make organization identification obvious. We also will report occupational information at a job family or occupation level (e.g., O*NET/SOC) rather than use organization-specific job titles.

PROFESSIONAL CALENDAR

by Lance W. Seberhagen, Seberhagen & Associates, sebe@erols.com

- Dec 7** HR Leadership Forum. Dan Hilbert, Orca Eyes, Inc. "Building Talent Dynasties: Keys to the Boardroom." Arlington, VA. Contact: www.hrleadershipforum.org. Reservations required.
- DEC 12** *PTC/MW. LUNCHEON MEETING. Dr. Cassi Fields, Fields Consulting Group, McLean, VA. PTC/MW Presidential Address. Pier 7 Restaurant, Washington, DC. Contact: Dr. Brian Katz, Personnel Decisions Research Institute (PDRI), 703-812-3043 or www.ptcmw.org.*
- Dec 13** Metropolitan New York Association of Applied Psychology. Dinner Meeting. Kevin Murphy, Pennsylvania State University. "Content Validity and the Easter Bunny." Contact: www.metroappspsych.com.
- 2008** 2008
- JAN 9** *PTC/MW. LUNCHEON MEETING. Dr. James Sharf, Sharf & Associates, Employment Risk Advisors, Alexandria, VA. Topic to be announced. Pier 7 Restaurant, Washington, DC.*
- Jan 11** HR Leadership Forum. Daniel Pink. "A Whole New Mind: Skillsets Required to Succeed Now and in the Future." Arlington, VA. Contact: www.hrleadershipforum.org. Reservations required.
- Feb 1** HR Leadership Forum. Daniel Dulworth. "The Connect Effect: Building Strong Personal, Professional, and Virtual Networks." Arlington, VA. Contact: www.hrleadershipforum.org. Reservations required.
- FEB 13** *PTC/MW. LUNCHEON MEETING. Speaker to be announced. Pier 7 Restaurant, Washington, DC.*
- Feb 26-28** American Society for Training and Development. TechKnowledge Conference. San Antonio, TX. Contact: ASTD, 703-683-8100 or www.astd.org.
- Feb 26-29** Worldwide Business Research. Conference. "Human Capital Management for Defense." Arlington, VA. Contact: WBR/HCMD, 888-482-6012 or www.hcmd2008.com.
- Feb 28** Metropolitan New York Association of Applied Psychology. Dinner Meeting. Michael Beer, Harvard University. Topic to be announced. Contact: www.metroappspsych.com.
- Feb 28 – Mar 1** Society for Psychologists in Management. Conference. San Antonio, TX. Contact: SPIM, www.spim.org.
- Mar 3-5** Association of Test Publishers. Conference. Dallas, TX. Contact: ATP, 866-240-7909 or www.testpublishers.org.
- Mar 6-8** American Psychological Association. Conference. "Work, Stress, and Health." Washington, DC. Contact: Wesley Baker, APA, 202-336-6033 or www.apa.org/pi/work.
- Mar 7** HR Leadership Forum. Kathy Granger. "Measuring the Quantitative and Qualitative Impact of Learning." Arlington, VA. Contact: www.hrleadershipforum.org. Reservations required.
- Mar 10-12** Society for Human Resource Management. Conference. "Employment Law & Legislation." Washington, DC. Contact: SHRM, 703-548-3440 or www.shrm.org.
- MAR 12** *PTC/MW. WORKSHOP. Speaker to be announced. Pier 7 Restaurant, Washington, DC.*
- Mar 14-16** Colorado State University. IO-OB Conference. Denver, CO. Contact: www.ioob.net or www.colostate.edu/Depts/Psychology/io/ioob.shtml.

Future SIOP: San Francisco, April 10-12, 2008. New Orleans, April 2-4, 2009. Atlanta, April 8-10, 2010. Chicago, April 14-16, 2011.

PERSONNEL TESTING COUNCIL OF METROPOLITAN WASHINGTON

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PTC/MW Elected Officers, 2007				
Office	Name	Affiliation	Work Phone	E-Mail
<i>President</i>	Cassi Fields, Ph.D.	Fields Consulting Group	(703) 506-9400	cassi.fields@fields-consulting-group.com
<i>Past President</i>	Ted Hayes, Ph.D.	The Gallup Organization	(202) 715-3154	ted_hayes@gallup.com
<i>President-Elect</i>	Martha Hennen, Ph.D.	U.S. Postal Service	(202) 268-6831	martha.e.hennen@usps.gov
<i>Vice President</i>	Rich Cober, Ph.D.	Marriott International	(301) 380-4811	richard.cober@marriott.com
<i>Secretary</i>	Jennifer Hurd, Ph.D.	Federal Bureau of Investigations	(202) 324-3921	j_m_hurd@yahoo.com
<i>Treasurer</i>	Brian Katz, Ph.D.	Personnel Decisions Research Institutes	(703) 812-3043	brian.katz@pdri.com
<i>Recorder</i>	Jeff Cucina, Ph.D.	U.S. Customs and Border Protection	(202) 863-6298	jcucina@gmail.com

PTC/MW Committee Chairs, 2007				
Committee	Name	Affiliation	Work Phone	E-Mail
<i>Nom/Elections</i>	Ted Hayes, Ph.D.	The Gallup Organization	(202) 715-3154	ted_hayes@gallup.com
<i>Membership</i>	Alana Cober, Ph.D.	Transportation Security Administration	(571) 227-1812	alana.cober@dhs.gov
<i>Legal</i>	Eric Dunleavy, Ph.D.	DCI Consulting	(202) 828-6900	edunleavy@dciconsult.com
<i>Newsletter</i>	Mike Ingerick, M.A.	HumRRO	(703) 549-3611	mingerrick@humro.org
<i>Website</i>	Zack Horn, M.A.	Aptima, Inc. and George Mason University	(703) 966-8156	zackhorn@gmail.com
<i>Training</i>	David Hamill, M.S.	Previsor	(703) 674-3341	dhamill@previsor.com
<i>Calendar</i>	Lance Seberhagen, Ph.D.	Seberhagen & Associates	(703) 790-0796	sebe@erols.com

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