

Prepared Comments:

**A Generic Competency Model for Generating Valid Interview Questions
and Anchored Rating Scales**

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2014 Society for Industrial and Organizational Psychology Conference
Panel Discussion

"How to Develop Valid Interview Questions and Anchored Rating Scales."

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POST TABLE 1: *A Generic Competency Model to Generate Valid Interview Questions and Anchored Rating Scales*

Thank you ... I plan to informally read my comments to ensure that I can fit them into my allocated time. I will minimize citations, however, my narrative and sources will be available through both the conference website and my personal website. Also, this presentation is offered from the perspective of a practitioner who feels boundless respect for the contributions of the other panel members to our field.

POST TABLE 2: *Summary of Nine Studies When Building A Generic Competency Model*

Since 2005, I have done nine unpublished studies to build a generic competency model for use in developing job-related structured interviews **with** answer scoring anchors and evidence for validity. This is a logical extension of research I was involved in about 20 years ago and reflects some of the issues that have emerged in that time (Green, Alter, & Carr, 1993).

Currently, the model consists of 20 competencies, which are linked to 8 activity statements. Each of the activity statements has been adapted to form 160 past-event interview questions. Progress is also being made in developing equivalent situational and behavioral questions with dilemmas. In addition, each of the 160 questions has drafts of answer-scoring anchors to use in evaluating candidate responses.

I started by building a list of 547 non-redundant, activity statements using the *Dictionary of Occupational Titles* and an early version of the *O*NET*. They were then grouped into trial competencies. Then, a series of competency models were built, and in the spirit of action research, used with two client applications. Three retranslation studies were done, with SMEs allocating activities and interview questions to the competencies. When the model is used to create interviews, it is

expected that a draft version of the interview would be edited by SMEs. In short, the model is simply part of a starter kit to prime SMEs in interview development. Hopefully, it will make structured interviewing easier to implement.

POST TABLE 3: A Competency, Activity Statement, Interview Question, and Three Levels of Rating Anchors

Now, on a series of TABLEs you will see an example of one competency, an activity statement, a past-event question, and a set of answer-scoring anchors that were built through the research. (To make this viewable by the audience I will show *one* physical page of information in three slides).

The top of the page shows the competency titled, “Lead and Influence.” It is written in behavioral language. Trait words have been scrubbed out. The competency was built by grouping similar activity statements and then using a rational process to generate meaningful definitions and respectful language while minimizing overlap with other competencies. This competency is 100 words long and breaks the norm of having a one-sentence competency (or no competency at all). This is done in the belief that interviewers would benefit from access to the full competency in order to structure probes, to rate answers, and to challenge the ratings of other interviewers.

Notice that *the highlighted activity statement* is ***read the situation and choose the best way to lead***. It is also used in the wording of the competency. I believe that this is the basic building block for developing structured interviews that link with other HR applications.

POST TABLE 4: *Activity Statement and Interview Question*

For example, in the middle of the page you will see that the same activity statement that was used in the competency was converted into an interview question. This reflects a linkage from the job to the interview question and can

provide some evidence for the content validity of an inference made when using that question.

POST TABLE 5: *Three Levels of Answer Rating Anchors*

Finally, in the bottom part of the page, you see a sample of bullets for three levels of descriptive answer-scoring anchors. Each of the anchors contains behavior descriptions that are designed to be selected by the interviewer as a candidate is responding. And, the anchors are progressive, with each level continuing the themes in other levels. Please note that the anchor titles refer to ***evidence for a proficiency***. I avoided words like “outstanding,” “average,” or “low,” as they may encourage more subjective judgments, rather than a more objective evaluation of evidence.

POST TABLE 6: *A comparison of a descriptive anchor to a word theme anchor*

But, I still am not completely happy with these anchors. They don't have the zest of the benchmarks, or “word theme” anchors, offered with situational interviews (Latham, Saari, Purcell, & Campion, 1980). For example, take the situational question about coming to work when one's family is sick. The anchor was, “Since they only have colds, I'd come to work.” I still smile when I say this ... I bonded with this anchor. After first reading it in 1980, I have remembered it verbatim for all of these years. When I had kids in the house, my self-talk was occasionally something like, “Since they only have colds, I'll go to the conference in San Francisco.”

In other words, the word theme anchor was “sticky.” Instead of just encouraging objectivity with descriptive language, this anchor subtly reflected both a description of verbal behavior and some feelings that engaged me with the anchor. Also, it seems that a word theme anchor would require less cognitive

processing by an interviewer who is scoring an answer (Green et. al., 1993). But this needs research. We do not really know the optimal way to format anchors.

Another thought. Sticky anchors for evaluating individual answers may help us with a cognitive overload in scoring, but they don't help with the challenge of cross scoring a candidate's answers (Pulakos & Schmidt, 1995). For example, in a behavior-based interview, what if the candidate gives an answer to a task orientation question that provides *primary information* about task orientation and *secondary information* on another competency ... like productive coping? Here I am talking about a "2fer." One answer may be good for evaluating responses to two or more questions. However, it is virtually impossible for the smartest, most highly trained interviewers to remember all secondary information in a candidate's answers, bundle it up, and then apply it to scoring the interview. Mechanical cross scoring strategies are complicated and put off interviewers. And, just discarding the secondary content in an answer with answer scoring doesn't seem right. Perhaps technology can lead us out of this problem with notepad scoring during an interview.

Regardless of the challenges in cross scoring, answer scoring is a better way to evaluate answers than competency rating. There is evidence that answer scoring with anchored rating scales yields higher validities and reliabilities (Taylor & Small, 2002; Wiesner & Cronshaw, 1988). Also, there is a relevant legal precedent as indicated by (Gutman & Dunleavy, 2012). In *Guardians of New York v. Civil Service Commission* (1980), it was held that one of the criteria for using a content validation strategy is to adopt a scoring system that can identify applicants who are likely to be better job performers.

Here is a different thought. Recall that one of my objectives in building the model was to develop a systematic way to develop paired behavioral and situational questions with dilemmas, and one set of anchors. In my first attempt, It took me

about 20 hours to write eight parallel questions. They were boring and I couldn't imagine asking them.

POST TABLE 7: *Build dilemmas from a choice between job activities*

So, my question writing morphed into another approach (1) using the activity statement contained in a question as one choice in a dilemma, and (2) creating a second, related activity statement that would be the opposing choice in a dilemma. This produced a neat pair of choices for a dilemma.

a. read a situation and choose how to lead (in the current model)

versus

b. use your on-going and tested leadership style (created to form a dilemma)

POST TABLE 8: *Build equivalent behavioral and situational questions*

After several failed starts with this approach I realized that my task was not just to write parallel questions with a dilemma. It was to write *equivalent* questions that are:

1. Potentially job related
2. Presented with a realistic dilemma
3. Positioned in a situation
4. Similar in length
5. Suggestive of negative consequences
6. Comparable in social desirability
7. Closed with a "did do" or "would do" question

No wonder that it was difficult to write paired questions. I was juggling seven standards with each question that I wrote. However, when the standards were clear to me things got a lot easier. Here is a behavioral question.

POST TABLE 9: *A behavioral question with a dilemma.*

In a leadership role it is sometimes necessary to deal with negative attitudes. A failure to meet this type of challenge will put a blemish on a career that is difficult to erase. One choice would be to use your use your on-going and tested leadership style that you feel comfortable with. Or, you could read the situation and choose how to lead in a tailor-made way for the circumstances. When were you in a situation like this and what did you do?" (83 words)

(Paul ends reading the behavioral question)

POST TABLE 10: *A comparable situational question*

You are in a leadership role that requires you to deal with negative attitudes. A failure to meet this type of challenge will put a blemish on a career that would be difficult to erase. One choice would be to use your use your on-going and tested leadership style that you feel comfortable with. Or, you could read the situation and choose how to lead in a tailor-made way for the circumstances. What would you do in a situation like this? (82 words)

The situational question is very similar, but ends with, "What *would you do*, to read the situation and choose how to lead?"

It seems that one byproduct of this experiment with questions is that behavioral questions may join situational questions as being more resistant to impression management. Also, we may have a new type of behavioral question with a dilemma to validate. But, when writing equivalent questions I started to feel that I was mashing together apples and oranges. Behavioral and situational questions have a different focus, different standards for administration, and use different forms of job analysis. It may be impossible to create equivalent questions. And

this is OK. There is evidence for the validity of both types of interview questions, and the most effective research question might be, “when is it best to ask a behavioral or situational question?”

Finally, Julia asked us to create humorous anchors to end each presentation. So, here is one set of anchors that could be used for both the behavioral and situational questions. I hope that you enjoy them.

POST TABLE 11: *Humorous anchors for scoring paired situational and behavioral questions with dilemmas*

QUESTION: Different leadership situations will present you with choices on how to lead. Describe a time when you effectively ***read a situation and chose how to lead.***

5. Shows flexible leadership that adapts to the situation

... my mood disorder enables me to mean on some days and a teddy bear on others ...

3. Shows habitual leadership with little adaptation

... *I have consistently used the same one year of experience I gained over the last 30 years ...*

1. Avoids taking leadership actions

... *Elvis came to me in a dream and told me that I should be cool and just take care of my own business ...*

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TABLE 1: *Prepared Comments on How to Develop a Generic Competency Model to Generate Valid Interview Questions and Anchored Rating Scales*

FINAL

Prepared Comments by Paul C. Green

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TABLE 2: *Summary of Nine Studies When Building A Generic Competency Model*

Study One: Built a list of 547 activity statements from the DOT and O*NET

Study Two: Built a competency model from the activity statements with a client

Study Three: Expanded to a 38 competency model based on personality

Study Four: Reduced model to 30 competencies and re-allocated

Study Five: Reduced model to 22 competencies and re-allocated

Study Six: Developed 176 behavioral questions aligned with 22 competencies

Study Seven: Built a cashier interview and trained interviewers

Study Eight: Developed a 19 competency model and re-allocated

Study Nine: Developed a 20 competency model with questions and anchors

TABLE 3: *A Competency and Activity Statement*

COMPETENCY: LEAD AND INFLUENCE ... is the process of choosing the right combination of task and people orientation in order to guide people in a specific direction. Effective leaders often adapt their style to reflect the needs of the situation and expectations of the followers. This involves ***reading a situation and choosing the best way to lead***, repeating a clear message to lead and influence, recognizing others' performance when leading, using incentives when leading, as well as modeling desired behaviors. Leadership may also be seen in the use of authority to gain compliance, participation to gain commitment and negotiations when needed.

ACTIVITY STATEMENT: ***read the situation and choose the best way to lead***

TABLE 4: *Activity Statement and Interview Question*

ACTIVITY STATEMENT: ***read the situation and choose the best way to lead***

INTERVIEW QUESTION: Different leadership situations will present you with choices on how to lead. Describe a time when you effectively ***read a situation and chose how to lead***. What were the important clues on what to do?

TABLE 5: *Three Levels of Answer Rating Anchors*

5. EVIDENCE FOR THE PROFICIENCY

- combines task and people orientation
- guides people in a specific direction
- adapts style to reflect situation
- tailors recognition to what is wanted
- negotiates to improve outcomes
- models desirable behaviors to follow

3. MIXED EVIDENCE FOR THE PROFICIENCY

- mainly uses authority *OR* participation
- guides people in a general direction
- habitually uses the same style
- uses programs / awards to give recognition
- negotiates because it is necessary / required
- may reflect good and bad leadership habits

1. EVIDENCE AGAINST THE PROFICIENCY

- low interest / willingness in leading
 - unclear about goals / direction
 - unpredictable / changing style
 - little recognition of individual actions
 - accepts demands without negotiation
 - disengaged / lack of leadership action
-

TABLE 6: *Comparison of a descriptive anchor to a word theme anchor*

- Descriptive Anchor: Comes to work regardless of circumstances
 - Word Theme Anchor: “Since they only have colds, I’d come to work.”
-

TABLE 7: *Build dilemmas from a choice between job activities*

a. read a situation and choose how to lead (in the current model)

Versus

b. use your on going and tested leadership style (created to form a dilemma)

TABLE 8: *Seven indicators of equivalent behavioral and situational questions*

1. Presented with a realistic dilemma
 2. Positioned in a situation
 3. Similar in length
 4. Suggestive of negative consequences
 5. Comparable in social desirability
 6. Closes with a “did do” or “would do” question
-

TABLE 9: *A behavioral question with a dilemma*

“In a leadership role it is sometimes necessary to deal with negative attitudes. A failure to meet this type of challenge will put a blemish on a career that is difficult to erase. One choice would be to use your *use your on-going and tested leadership style* that you feel comfortable with. Or, you could *read the situation and choose how to lead* in a tailor made way for the circumstances. When were you in a situation like this and what did you do?” (83 words)

TABLE 10: *A comparable paired situational question with a dilemma*

You are in a leadership role that requires you to deal with negative attitudes. A failure to meet this type of challenge will put a blemish on a career that would be difficult to erase. One choice would be to use your use your on-going and tested leadership style that you feel comfortable with. Or, you could read the situation and choose how to lead in a tailor-made way for the circumstances. What would you do in a situation like this? (82 words)

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... *I have repeatedly used the same one year of experience I gained over the last 30 years ...*

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... *Elvis came to me in a dream and told me that I should be cool and just take care of my own business ...*
