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Empirically Supported Interventions and HR Practice

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An underlying assumption of human resource practice is that HR interventions are supported by empirical evidence. We expect that applications be based on a sound empirical base. We expect, and are expected to show, that HR interventions that have an impact on careers or entry to occupations are defensible with respect to legal requirements. That is, we expect practitioners to apply solutions that have a solid “scientific” grounding. Regrettably, HR practice often runs ahead of research and leads to the adoption of interventions that do not have empirical support, or do not have support for the specific purposes for which they are used. In arguing for a new mandate for HR, David Ulrich, writing in the Harvard Business Review, put it this way:

“Should we do away with HR?...The debate arises out of serious and widespread doubts about HR’s contribution to organizational performance. ...I must agree that there is good reason for HR’s beleaguered reputation. It is

often ineffective, incompetent, and costly; in a phrase it is value sapping. Indeed, if HR were to remain configured as it is today in many companies, I would have to answer the questions above with a resounding ‘Yes-abolish the thing’ (Ulrich, 1998; p. 124)”

There are two cases which demonstrate Ulrich’s point: the widespread acceptance of competency-based selection and performance systems and the growing interest in and use of “emotional intelligence” as part of interventions. Many organizations have developed competency profiles for their employees, which are related to the organization’s mission or goals and which are believed to be crucial to success in the organization. Many consulting firms and organizations have developed “competency dictionaries” to help identify requisite competencies. Practitioners offer training seminars on how to identify competencies and on how to develop competency based selection and performance

HIGHLIGHTS

- Lack of Agreement on Definition
- Lack of Agreement on Methodology
 - Lack of Empirical Evidence
 - HR Science vs HR Practice
- Empirically Supported Interventions



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systems. Competency-based systems are “hot”. Emotional Intelligence (EI) is a more recent phenomenon, in part, developing as a backlash to the emphasis on general cognitive ability in selection. In fact, one of the leading proponents of EI, Daniel Goleman claims it is more important than IQ (Olive, 1998) and a whole industry has developed around this concept with many consulting companies offering workshops on identifying and developing EI in organizations. Will competency-based selection and EI become the new graphology? If you recall, some HR practitioners used graphology or handwriting analysis to select candidates for executive positions before empirical evidence discredited the procedure. If you examine the research databases with respect to competency-based selection and EI, you will discover some distressing facts.

Lack of Agreement on Definition

First, there is no agreed upon definition of what constitutes “competency” or “emotional intelligence”. Boyatzis (1982), who is credited with popularizing the term, suggested that a competency was a combination of a motive, trait, skill, aspect of one’s self-image or social role, or a body of relevant knowledge. In other words, a competency is any characteristic of an individual that might be related to successful performance. Boyatzis’ definition of competency left much room for debate over its application to performance. Zemke’s (1982) comments at that time on the definition of competency remain valid today:

“Competency, competencies, competency models, and competency-based training are Humpty Dumpty words meaning only what the definer wants them to mean. The problem comes not from malice, stupidity or marketing avarice, but instead from some basic procedural and philosophical differences among those racing to define and develop the concept and to set the model for the way the rest of us will use competencies in our day-today training efforts.” (Zemke, 1982, p.28)

Competency definitions tend to reflect either individual or specific organizational concerns. Over time, competencies have been variously (and inconsistently) defined as the knowledge, skills, abilities, and other attributes required to perform desired future behaviour (Blancero, Boroski, & Dyer, 1996, p.387); an individual’s demonstrated knowledge, skills, or abilities (Ulrich, Brockbank, Yeung, & Lake, 1995, p.474); a characteristic and measurable pattern of knowledge, skill, behaviours, beliefs, values, traits and motives which underlies, and drives superior performance in a defined job context (Linkage, Inc., 1996, p. 6); skills and traits that are needed by employees to be effective in

a job (Mansfield, 1996); those behaviours and characteristics necessary for top performance (Hay/McBer, undated); knowledge and skills that underlie effective performance (McLagan, 1996); knowledge, skills, abilities and behaviours required for successful performance of job duties (Mirabile, 1985, p.13); an underlying characteristic of an individual which is causally related to effective or superior performance in a job (Mitrani, Dalziel, & Fitt, 1992); the aptitude necessary to enhance basic abilities and to raise job performance to a higher level (Miyawaki, 1996); an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation (Spencer & Spencer, 1993); and behaviours that superior performers exhibit more consistently than average performers (Klein, 1996). The Public Service Commission of Canada defines competencies as the characteristics that underlie performance or behaviour at work (Slivinski and Miles, 1996).

In fairness, there may be more agreement among these definitions than is apparent. Each definition tends to be a partial definition. They generally contain parts of three elements. First, most suggest that competencies are the knowledge, skills, abilities, and other traits or factors (KSAOs) that underlie effective or successful job performance; second, the KSAOs must be observable or measurable; and third, the KSAOs must distinguish among superior and other performers. Perhaps competencies, then, can be defined as measurable attributes that distinguish outstanding performers from others in a defined job context (Catano, Cronshaw, Wiesner, Hackett, & Methot, 2000).

There is a similar lack of agreement on what constitutes “emotional intelligence”. Goleman (1995, 1998) defines emotional intelligence (often abbreviated as EQ, for emotional quotient) as a set of abilities that include self-control, zeal and persistence, and the ability to motivate oneself along with the ability to persist in the face of frustration; to control impulse and delay gratification, to regulate one’s moods and keep distress from swamping the ability to think, to empathize and to hope (Goleman, 1995). Mayer and Salovey (1997), who had developed the concept of EQ, proposed that emotional intelligence represents a group of abilities that are distinct from the traditional verbal-propositional/spatial-performance dimensions of intelligence. They defined EQ as:

the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotions and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997 p.6).

Goleman's (1995) and Mayer and Salovey's (1997) definitions are not the same. As well, people working in this area have a tendency to change the definition of EQ to suit their purposes. There is also disagreement about whether emotional intelligence is more an inherent potential, or whether it is a set of learned "abilities", "competencies" or "skills." Polednik and Greig (2000) argue that EQ, as defined by Goleman, represents different personality traits or characteristics. This lack of agreement makes it difficult to know what is really meant by the construct and, more importantly, to identify it as a job requirement.

Lack of Agreement on Methodology

Second, there is no agreed upon methodology for identifying competencies, or of measuring emotional intelligence. The methodology used to determine the competencies generally follows the procedures outlined by Dubois (1993) and involves:

1. selection of a criterion group which includes both high and low performers within each job;
2. collection of data from the criterion group on how it performs the target job through observation and interviews (including information on how individuals act, think, and feel while doing their jobs); and
3. identification of patterns within the data that differentiates high and low performers.

There is, however, considerable variation from this methodology. For example, the Public Service Commission of Canada (Slivinski and Miles, 1997) proposes the following model for use in identifying competency profiles:

1. Consider the level at which the work is performed
2. Consider the role
3. Consider the stage of organizational development
4. Consider other relevant contextual variables
5. Identify relevant competency categories and competency clusters
6. Select individual competencies
7. Collect additional supporting information
8. Review, customize, finalize
9. Establish the relative importance and level of mastery of each competency
10. Create behavioural indicators

Noticeably absent from this model is any concern with identifying competencies which separate superior from average performers or any indication that the selection of the competencies is based on anything other than a manager's opinion. The application of

the competency model in this Public Service model, as well as in others, has become divorced from the original competency theory of David McClelland (1973).

In the case of EQ, lack of agreement on methodology is reflected in the failure to establish a sound measure of EQ that is directly related to the construct. Bar-On's (1997) EQi is the oldest and arguably the most commonly used measure of EQ. The factor structure of the EQi does not appear to be related to either Goleman's or Mayer and Salovey's conceptions of emotional intelligence. In fact, the EQi subscales have moderate to high correlations with the Big Five personality measures (Newsome, Day, and Catano, 2000). Whether newer measures of EQ that are based more closely on either Mayer and Salovey's or Goleman's conceptions of EQ have more success remains to be determined.

Lack of Empirical Evidence

There is little, if any, research that has critically examined the bottom-line effectiveness of competency-based systems or emotional intelligence. There is little, if any, research that validates the relationship of either competency-based systems or emotional intelligence to performance or organizational effectiveness. Proponents of both competency models and emotional intelligence argue that people high in selected competencies or in emotional intelligence have a positive effect on an organization's bottom line. Goleman is quoted as saying, "In top management posts, emotional intelligence abilities like initiative and self-confidence or collaboration matter twice as much as IQ. And the higher you go in the organization, the more EQ matters. For the top leaders, its about 85% of what characterizes the star performer"(Olive, 1998). Where is the empirical support for Goleman's position? The research literature convincingly demonstrates that cognitive ability (IQ) is one of the best, if not the best, predictor of job performance. Utility analysis shows that cognitive ability adds significantly to a company's "bottom line" (Schmidt and Hunter, 1998). The identification of KSAOs through job analytic procedures has a long-established track record of leading to the selection of the most appropriate job applicants from a larger pool. Can the same be said for competency-based systems? Where is the evidence? Noticeably absent from the Public Service competency model is any requirement for the user to establish the effectiveness of the resultant competency profile. How does the Public Service know that the competency model is producing more productive employees or a more effective organization? The few studies that have addressed these questions produce either inconsistent results or results that do not support

either competency-based models or the use of EQ in selecting job candidates (Catano et al., 2000). Despite the lack of empirical research on these topics, both competency models and EQ have had an impact on HR practice, even though those practices may not be legally defensible and may prove problematic to the client should a rejected applicant proceed to court or a human rights tribunal.

HR Science vs HR Practice

The competency and EI literature illustrate the need for better linkages between research and practice in human resources. Other practices could have served this purpose equally well; e.g. the use or misuse of 360-degree feedback. HR practitioners and HR researchers should appreciate the need for greater dialog between “scientists” and “practitioners”. Practitioners must understand the need to base interventions on empirical evidence; scientists must understand the need for research to solve immediate, practical problems. These linkages will become ever more important as the field of HR moves to establish itself as an independent profession. The first steps are being taken towards this end through establishing a credentialing system. Regulatory systems, as they do in other professions, exist to ensure the protection of the welfare of the public and clients of the practitioner and to guarantee that the practitioner operates in accordance with accepted standards of professional ethics and practice guidelines. The process does not end with the first step of certifying the professional’s credentials. Practitioners in other disciplines are expected to provide interventions that not only “do no harm” but actually provide benefits to the client.

Empirically Supported Interventions

The HR profession should consider following the lead of other disciplines that have a practice component. In clinical psychology, the branch of psychology that uses interventions to deal with individual problems is moving toward practice guidelines that state practitioners should use only those interventions (i.e., treatments) which can be supported through empirical evidence. Clinical psychology is moving away from accepting a practice as valid because a practitioner claims it is effective through the administration by the practitioner with a specific client. Only those interventions that can be supported through empirical evidence are accepted as meeting a practitioner’s ethical obligations to the profession. The American Psychological Association (APA) has announced to the public and to third-party payers (insurance companies and HMOs) those psychological interventions that are supported by empirical research as effective in the treatment of mental disorder and psychological problems. The identification of these accepted practices has had a tremendous influence on both the training and provision of service in clinical psychology (Hunsley, Dobson, and Mikail, 1999).

As you might imagine, this has not been a process without controversy. It is a process accepted by many as heralding a bright future for professional psychology and rejected by others as a dangerous and misleading process. Regardless of individual reaction, it is very unlikely that the process of endorsing professional practices based on empirical evidence will disappear (Hunsley, et al., 1999). What are the criteria for accepting a professional practice as being one that has beneficial outcomes

Table 1. Criteria for Empirically Supported HR Treatments

<p>A. Well-Established Treatments</p> <p>I. At least two good between group design experiments demonstrating efficacy in one or more of the following ways:</p> <ul style="list-style-type: none"> a. Superior (i.e., statistically significantly) to a control condition or to another treatment. b. Equivalent to an already established intervention in experiments with adequate sample sizes. <p>OR</p> <p>II. A large series of single case design experiments (n > 9) demonstrating efficacy. These experiments must have:</p> <ul style="list-style-type: none"> a. Used good experimental designs and b. Compared the intervention to another treatment as in Ia.
<p>Further Criteria for both I and II:</p> <ul style="list-style-type: none"> III. Experiments must be conducted with manuals outlining the steps involved in the intervention. IV. Characteristics of the client samples must be clearly specified. V. Effects must have been demonstrated by at least two different investigators or investigating teams.
<p>B. Probably Efficacious Treatments</p> <p>I. Two experiments showing the treatment is superior (i.e., statistically significantly) to a waiting-list control group.</p> <p>OR</p> <p>II. One or more experiments meeting the Well-Established Treatment Criteria Ia or Ib, III, and IV, but not V.</p> <p>OR</p> <p>III. A small series of single case design experiments (n > 3) otherwise meeting Well-Established Treatment Criteria II, III, and IV.</p>
<p>Adapted from Hunsley, et al. 1999.</p>

for the client? Clinical practices were placed into two categories, “Well-Established Treatments” or “Probably Efficacious Treatments” if they met a set of criteria based on scientific research. The criteria presented in Table 1 are those adopted by the APA but modified slightly to place them in an HR context.

The criteria outlined in Table 1 represent a research agenda for establishing the efficacy of HR interventions. Those familiar with research designs and protocols will recognize that these criteria are not onerous. At the minimum, the criteria say that before an intervention can be used, there must be at least two, well-designed studies that meet acceptable research standards and show that the treatment is at least equal, if not statistically superior to another practice. Regrettably, both competency models and emotional intelligence research fail to meet these minimal standards. Research conducted in-house by consulting companies or test developers does not qualify. The research must be open to peer review and published in respectable scientific journals. This does not mean that either competency models or emotional intelligence may not be effective treatments; it means that the well-designed research has not been done to substantiate their effectiveness as organizational interventions. The HR profession has an obligation to ensure that the practices it sanctions meets

criteria such as those presented in Table 1. HR practitioners have an obligation to ensure that the interventions they propose to clients meet acceptable professional standards. HR scientists have an obligation to do the empirical research in support of HR interventions.

Conclusion

Ulrich (1998) proposed new initiatives to ensure the relevancy of HR's mandate. I would argue that regardless of its mandate, HR risks being marginalized unless it makes a concerted effort to develop and implement only those interventions that are supported by empirical evidence. This is the practice being followed in psychology, health and medicine. Adopting empirically-based criteria to judge the efficacy of HR practices and treatments will require the HR profession to deal with the issues of training, credentialing, practice, and research. As a profession it will have to establish a national infrastructure to coordinate these ventures and to consult, inform, and educate HR scientists and practitioners. Unless the HR profession holds itself accountable for the practices it offers to clients and to the public it will indeed become an irrelevant profession, much like the practice of graphology.

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