Seven common misconceptions about human resource practices: Research findings versus practitioner beliefs

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Executive Overview

Recent research suggests that HR practices can have considerable impact on both individual and organizational performance. These findings strongly suggest that not knowing this HR research can be costly to organizations. In this article, we pinpoint areas where HR practitioners seem to be most unaware of research findings related to effective HR practices, based on responses by a large sample of HR managers. The seven questions that exhibited the greatest disagreement between current research findings and respondents' beliefs are explored, along with their management implications and suggestions for implementing the findings.

Managers as a class are anything but stupid. But there is evidence that the job-specific knowledge bases of many, and perhaps most, executives are quite substandard. In turn, low knowledge bases may lead executives to make decisions that are less than optimal—and sometimes not even satisfactory.[1]

Considerable research demonstrates that most organizations do not employ state-of-the-art human resource (HR) practices.[2] One reason for the gap between research and practice is that very few practicing HR managers read the research literature.[3] Two major explanations have been offered as to why this is the case. The first is that HR research has become excessively technical, thus discouraging practitioners from attempting to keep up with the latest research findings.[4] This view assumes that practicing HR managers regard research findings as potentially useful, but inaccessible. The less sanguine view is that HR practitioners do not read the research because they see it as irrelevant or impractical for their needs.[5]

Whatever HR managers may feel about academic research findings, evidence is accumulating that certain HR practices are consistently related to higher individual performance, organizational productivity, and firm financial performance.[6] At least two research trends over the past two decades have increased our ability to detect relationships between HR practices and performance. The first is the development of statistical techniques which allow aggregation of many studies in order to reach more reliable conclusions about both average effects and contextual moderators.[7] The second is the emergence of the Strategic HR literature, which has stimulated much more research into the relationships between HR practices and performance at the level of the *firm* rather than the individual.[8] This last step means that we no longer have to wonder about the degree to which relationships found at the individual level are mirrored at higher levels of aggregation.

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As one example of such firm-level research, a study by Welbourne and Andrews found that new companies that placed a high value on HR (as assessed by content of their prospectuses) and that included high levels of organizationally based

pay-for-performance had a five-year survival rate of 92 percent as compared with 34 percent for companies that were low on both dimensions.[9] As another example, Huselid found that an increase of one standard deviation in scores on a "high-performance HR practices" scale (which included such practices as employee attitude surveying, paying for performance, formal communication programs, and use of employment tests) was associated with a 23 percent increase in accounting profits and an 8 percent increase in economic value.[10]

With research showing bottom-line effects of certain HR practices, the lack of research knowledge can clearly be costly to HR managers and their organizations. Indeed, although a direct causal link cannot be drawn, Terpstra and Rozell found that companies whose HR professionals read the academic research literature have higher financial performance than those that do not.[11]

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Although the results of HR research are clearly relevant to practicing managers, not so clear is the extent to which HR managers' current beliefs are consistent (or inconsistent) with the latest findings. The areas of greatest inconsistency should dominate efforts to inform managers about HR research. We therefore conducted a survey to determine which particular areas of research findings most need more effective dissemination to practicing HR managers.

Research Findings versus Managerial Beliefs: Assessing the Gap

HR professionals are most directly responsible for acquiring and disseminating knowledge about best practices in "people management" throughout the organization. Although much of the day-to-day implementation of HR practices resides with line managers, it is the HR function's role to help executives develop a human resource strategy that is at once consistent with both the organizational business strategy and with best practices revealed by empirical research.[12]

To examine the extent to which the beliefs of HR professionals are consistent with established research findings, a 35-item questionnaire was constructed.[13] Content of the questionnaire was based on the major categories contained in the Human Resource Certification Institute's (HRCI) Professional in Human Resources (PHR) certification exam. However, in contrast to the certification exam (which focuses heavily on definitional, legal, and procedural issues), the present survey focused on *research* findings regarding the effectiveness of particular HR practices. Items were constructed that were based on up-to-date research results. Respondents indicated whether they agreed, disagreed, or were uncertain about each item, allowing us to determine where practitioner beliefs diverge most sharply from research findings.

The survey was sent to a stratified random sample of 5,000 Society for Human Resource Management members whose titles were at the manager level and above. This sampling strategy was designed to ensure that respondents would be among the most seasoned HR professionals, with significant responsibilities for HR policy and implementation. Responses were received from 959 recipients before the cutoff date, for a response rate of 19 percent. Nearly half the respondents (49 percent) were HR managers, while 26 percent were directors, 18 percent vice presidents, and 7 percent from other functional areas. The average respondent had 14 years of experience in HR. These high levels of experience and job responsibility suggested that our respondents should be relatively well-informed members of the HR profession.

The Seven Most Common Misconceptions

For the remainder of this article, we discuss the seven HR research findings that were least believed by our responding group of HR managers. The first four of these findings pertain primarily to issues of selection (i.e., employee traits that are most strongly associated with performance and effective means of assessing them). The next two pertain to issues of effective performance management—performance appraisal and performance improvement. The final item concerns problems with relying on survey data to determine the importance of pay (and other potential motivators) in people's behavior.

1. On average, conscientiousness is a better predictor of employee performance than intelligence.

Although 72 percent of participants agreed with this statement, a substantial amount of research suggests that it is incorrect. A recent meta-analytic summary of nineteen different selection methods reported a predictive validity coefficient of .51 for tests of intelligence (or general mental ability,

GMA), as compared with an average validity of .31 for measures of conscientiousness.[14] This means that, on average, GMA explains roughly 25 percent of the variance in employee performance, while conscientiousness explains only 9 percent. The authors conclude:

> Research evidence for the validity of GMA measures for predicting job performance is stronger than that for any other method . . . literally thousands of studies have been conducted over the last nine decades. . . . Because of its special status, GMA can be considered the primary personnel measure for hiring decisions.[15]

Not only is GMA the single best overall predictor of likely performance, but the positive economic effects of assessing it in selection can be very substantial. For example, based on estimates derived from comparing the productivity of the most- and least-productive workers, Jack Hunter estimated that the use of rank-ordered ability scores in the federal government would increase productivity by more than $13 billion relative to simply using a minimum cutoff score at the 20th percentile. Similarly, he estimated an increase of $12 million per year for a much smaller unit, the Philadelphia police department.[16]

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Given the strength of these findings, why do so many managers—especially ones trained in HR management—assume the opposite? Although many explanations are possible, we think two are particularly likely.

First, as a culture, Americans have long held negative stereotypes about highly intelligent people.[17] One such stereotype is that intelligent people are brilliant but impractical ("ivory tower intellectuals"), while a second views them as capable, but socially inept ("nerd, geek, egghead"). A third stereotype likens intelligent people to the hare in Aesop's fable—erratic performers who are brilliant on occasion but who generally underperform the "slow and steady" in the long run.[18] A final stereotype portrays intelligent people as rude, arrogant, and difficult to manage. For example, in his recent book *Working with Emotional Intelligence*, Daniel Goleman repeatedly gives examples of intelligent people with extremely negative social traits, such as being "unbelievably arrogant" or "brutally acerbic, socially awkward, with no social graces or even a social life."[19]

The resilience of such stereotypes suggests that many people hold implicit theories of intelligence that associate high levels of GMA with a variety of unattractive personal characteristics. Conscientiousness, on the other hand, is viewed positively by most people, and the stereotype of a conscientious person is nearly always good. In reality, however, intelligence is virtually uncorrelated with such personality traits as conscientiousness, agreeableness, and emotional stability.[20] Thus, for every highly intelligent introvert there is a highly intelligent extrovert; for every brilliant neurotic, there is someone who is both highly intelligent and emotionally stable.

A second (but probably less likely) reason that managers may underestimate the importance of intelligence to job performance is that people may not believe that employee intelligence varies much *within* particular job categories. For example, Goleman has argued that "in professional and technical fields the threshold for entry is typically an IQ of 110 to 120. . . . Since everyone [in these fields] is in the top 10 percent or so of intelligence, IQ itself offers relatively little competitive advantage."[21] However, in a very-large-sample study designed explicitly to test this narrow-variability-in-IQ hypothesis, the average variability of intelligence within each of 80 applicant pools for specific job categories was found to be only 10 percent less than the full variability exemplified in national norms.[22] Thus, very substantial differences in intelligence still exist among applicants for any given type of job.

There are several implications of these findings (see Table 1). The first is that because both GMA and conscientiousness are important predictors of performance in virtually all jobs, both characteristics should be assessed as thoroughly as possible in the employee selection process.[23] A second implication is that the higher the level of job complexity, the more selection should be weighted toward GMA (see Endnote 14). How might this be done?

Research suggests that the best way to assess GMA is through paper-and-pencil testing.[24] Several good paper-and-pencil tests are available for such purposes, such as the Wonderlic Personnel Test, which only takes 12 minutes to administer and which correlates very highly with more intensive methods of assessing intelligence.[25] Another point in its favor is that its items are not exotic or highly abstract but rather look like typical items

Table 1
Common Misconceptions, Research Findings, and Implications

Research-Inconsistent Beliefs	What Research Shows	Ways to Implement Research Findings
1. Conscientiousness is a better predictor of employee performance than intelligence.	The average validity coefficient is .51 for intelligence, .31 for conscientiousness. They are *both* important predictors of performance, but intelligence is relatively more important. At the very lowest levels of job complexity (unskilled work), their importance is about equal. However, as jobs increase in complexity, intelligence becomes more and more important.	• Select new employees on both intelligence (general mental ability, GMA) and conscientiousness. Well-validated measures of both constructs are available. • In addition to pencil-and-paper tests, GMA can also be assessed through job-knowledge tests, work samples, or simulation interview questions.
2. Companies that screen job applicants for values have higher performance than those that screen for intelligence.	Intelligence is the best single predictor of performance. Although values fit does predict employee satisfaction and retention, little evidence exists of a direct link to performance. Even if a link is shown some time in the future, it is unlikely to approach the magnitude of the effect size for intelligence.	• Even if you are interested in people's values, assess GMA and conscientiousness first. • Define what values are important to you. Then, assess them through procedures such as behavioral description interviews or accomplishment records to see whether people actually behave in ways consistent with the desired values. • Consider which personality constructs are likely to reflect the values you want; then measure personality using well-validated instruments.
3. Integrity tests don't work well in practice because so many people lie on them.	People try to make themselves look a little more ethical than they actually are. This does not seem to affect the usefulness of these tests as predictors of performance.	• Integrity tests can be used in combination with ability tests to yield very high overall predictability of job performance.
4. Iintegrity tests have adverse impact on racial minorities.	Racial and ethnic differences on integrity test scores are trivial. Hispanics have been found to score .14 standard deviations higher than whites; Asians, .04 standard deviations higher; Native Americans, .08 standard deviations higher, and African-Americans, .04 lower.	• Combining integrity tests with tests of GMA may reduce the amount of adverse impact in overall selection systems because minorities and whites have nearly equivalent scores on integrity tests.
5. Encouraging employees to participate in decision making is more effective for improving organizational performance than setting performance goals.	On average, performance improves 16 percent when goal-setting is implemented. The average effect from employee participation is < 1 percent. Participation can produce both positive and negative outcomes. Employees must have a clear picture of *what* they are participating *for*—that is, what they are trying to achieve—in order for participation to be successful.	• Develop goals that are inspiring, challenging, and that stretch people's capabilities. • Once goals are clearly communicated and accepted, enlist broad participation, and do not shut down ideas. • Support participation and goal attainment through the reward system, such as with gain sharing or other group incentive programs.
6. Most errors in performance appraisal can be eliminated by providing training that describes the kinds of errors managers tend to make and suggesting ways to avoid them.	Performance-appraisal errors are extremely difficult to eliminate. Training to eliminate certain types of errors often introduces other types of errors and sometimes even decreases accuracy. The most common appraisal error is leniency, and managers often realize they are committing it. Mere training is insufficient to eliminate these kinds of errors; more systemic action is required such as intensive monitoring or forced rankings.	• Training, practice, and feedback about how to avoid appraisal errors are necessary, but insufficient, for eliminating errors. • Eliminating errors may require alternative approaches to evaluation, such as forced distribution (e.g., General Electric). • Top managers should serve as strong role models for the performance evaluation process and attach managerial consequences to the quality of performance reviews.

Table 1
Continued

Research-Inconsistent Beliefs	What Research Shows	Ways to Implement Research Findings
7. If employees are asked how important pay is to them, they are likely to overestimate its true importance.	People tend to *understate* the importance of pay to their decisions due to social desirability considerations and lack of self-insight. Research that examines people's *behaviors* in response to pay (rather than their attitudes) tends to show very strong motivational effects.	• Recognize that employee attitude surveys are subject to a variety of cognitive biases such as social desirability and lack of self-insight. • Wherever possible, study employee *behaviors* in addition to attitudes; the two will not always converge.

from a junior high or high school exam. In addition, considerable research suggests that applicants typically view ability tests as valid means of assessment and therefore are not likely to be put off by companies that require them.[26]

Although direct assessment of ability thus has two important features to recommend it (high validity and low cost), it also has some liabilities. For example, cognitive ability tests do produce adverse impact against certain groups and, rightly or wrongly, receive a considerable amount of negative press.[27] Thus, companies that are trying to balance a number of outcomes (e.g., applicant reactions, workforce diversity) in addition to achieving validity may choose to assess GMA in less direct ways, but in ways that also have substantial validity.

For example, research has shown that structured interviews, work samples, and simulations that assess job knowledge are likely to be moderately correlated with GMA, as well as being good predictors of job performance.[28] Assessing job knowledge in these ways has the additional advantages of having very high face validity to applicants and lower levels of adverse impact against minorities, while still retaining considerable validity. The most important implication, however, is that deliberate attempts to assess and use GMA as a basis for hiring should be made for *all* jobs. Failure to do so leaves money on the table.

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2. Companies that screen job applicants for values have higher performance than those that screen for intelligence.

A large majority of our responding SHRM managers agreed with this statement (57 percent), although available research evidence does not support it. At the outset, it should be said that there is far less research on the effects of selecting for values than there is about selecting for GMA or personality. Still, much evidence suggests that selecting for GMA leads to higher performance, and very little evidence suggests the same for values.

The available research comes in two forms. One stream focuses on values *congruence* or values *fit*. The importance of employee values has frequently been conceptualized in terms of compatibility between organizational and applicant values, rather than as a matter of positive versus negative values in an absolute sense.[29] For example, some companies focus very strongly on assessing and rewarding individual performance (e.g., Lincoln Electric or General Electric), while others motivate and reward almost entirely on the basis of group efforts and results (e.g., Southwest Airlines, Nucor). Thus, the logic goes that individualistic values would be an asset at Lincoln or GE, but a serious detriment at Southwest or Nucor.

Research has generally shown that values fit has positive consequences for employee attitudes and length of service.[30] However, there is much less evidence of a positive relationship between values fit and *performance*.[31] For example, one study found that workers who had congruent values received higher supervisory ratings when work tasks were interdependent, but *lower* evaluations when work was not interdependent.[32] Another found that workers who believed their values were congruent with the organization's displayed more citizenship behaviors but not higher task performance.[33] Thus, in distinct contrast to the research on intelligence, the limited evidence on values congruence suggests rather small and inconsistent effects on performance.

Although researchers have primarily studied the relationship between values and performance in terms of values *fit*, a second stream of research focuses on the effect of values on performance *indirectly* through research on employee personal-

ity. For example, research suggests that when managers and recruiters talk about the kinds of values they are looking for, they most often mention such characteristics as "work ethic, teamwork values, desire for improvement, liking pressure, and liking variety and change."[34] Although managers tend to describe these traits as *values*, many researchers have studied them as *personality* traits. Thus, for example, the values of "work ethic" and "desire for improvement" can be translated into the personality trait of conscientiousness, while the value of "liking variety and change" translates into openness to experience.

From this perspective, we have already seen that although some values (or personality traits) such as "work ethic" are assets to performance, they are not as important as intelligence. Thus, from either perspective (values fit or values per se), the idea that values are more important predictors of performance than intelligence is not supported by the research evidence. We would suggest, however, that more research should be done to assess this question, both at the individual and the organizational level.

Although some values (or personality traits) such as "work ethic" are assets to performance, they are not as important as intelligence.

3. Although there are "integrity tests" that try to predict whether someone will steal, be absent, or otherwise take advantage of an employer, they don't work well in practice because so many people lie on them.[35]

Only 32 percent of our responding HR managers realized that this was an inaccurate statement. Because the statement seems highly plausible on its face, analysis of the evidence concerning integrity tests requires breaking the statement into pieces.

First, research shows that applicants *can* distort their answers on integrity tests (and other selection devices such as resumes) in order to make themselves look better to employers.[36] In addition, many applicants probably do distort their answers to some extent, particularly when they believe the scores will be used for selection or promotion purposes.[37] Interestingly, however, the fact that applicants can (and probably do) distort their responses to integrity tests does *not* make them ineffective as predictors of performance.[38] In fact, the average corrected validity coefficient for integrity tests is a very respectable .41, with counterproductive behaviors such as theft, absenteeism, or violence being somewhat better predicted (.47) than overall job performance (.34).[39]

These findings raise the interesting question of why integrity tests maintain their validity, despite the potential for deliberate response distortion. One possibility is that most people distort their responses to roughly the same degree, so that the "faking factor" becomes more or less a constant (and thus a non-differentiator) in the prediction equation. Another possibility is that the extent of response distortion may be correlated with valid predictors such as conscientiousness or emotional stability.[40] Whatever the reason, to the extent that distortion is occurring, it does not appear to destroy the usefulness of integrity tests as selection devices.

It should also be noted that integrity tests work very well in conjunction with tests of GMA. This is because cognitive ability is essentially uncorrelated with the underlying dimensions tapped by integrity tests, particularly conscientiousness. Because highly intelligent people are no more (or no less) likely to be honest or conscientious than those with lesser ability, using integrity tests along with ability tests yields completely unique incremental information. In fact, the highest overall validity for any combination of two selection methods appears to be obtained by using integrity tests in conjunction with tests of GMA.[41]

4. One problem with using integrity tests is that they have high degrees of adverse impact on racial minorities.

Despite their validity, managers may nevertheless be nervous about using integrity tests for a variety of other reasons. One possibility is that integrity tests, while valid, may eliminate larger proportions of minority than majority candidates. Although nearly 70 percent of our respondents thought that this might be true, it is not the case.

Recent large-sample research evidence reveals that differences in integrity test scores across racial and ethnic groups are trivial (although gender differences are not).[42] Thus, another potential advantage of using integrity tests in conjunction with cognitive ability tests is that, unlike ability tests, integrity tests are unlikely to produce adverse impact. Furthermore, although evidence suggests that integrity tests are not among the best-liked selection devices, they generally are seen by applicants as an appropriate means of differentiating among candidates.[43]

5. On average, encouraging employees to participate in decision making is more effective for improving organizational performance than setting performance goals.

Although considerable research has shown this statement to be false, only 17 percent of respondents clearly disagreed with it. Evidence regarding this issue comes from a number of sources.

First, meta-analysis has been used by Ed Locke and his colleagues to examine the comparative effectiveness of various performance-improvement interventions.[44] This research suggests that on average, performance improves by 16 percent following goal-setting interventions, as compared with less than 1 percent for employee participation. Moreover, the effects of goal-setting appear to be positive in virtually all cases, whereas increased participation actually leads to decreases in performance in a substantial minority of cases.

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The weak results for participation seem puzzling, given the number of corporate success stories that seem to have employee participation at their core (e.g., Southwest Airlines, Rosenbluth Travel, or Springfield Remanufacturing). However, other research suggests that the success of participation programs may depend on the order in which performance interventions are introduced. Specifically, it appears that in order for participative management to succeed, employees must first know *what* they are attempting to achieve through participation. In other words, goal-setting or some other means of conveying performance expectations may have to precede employee participation in order for it to be effective. As Cusumano and Selby wrote after studying Microsoft for several years: "Although having creative people in a high-tech company is important, it is often more important to *direct* their creativity."[45] For this reason, Microsoft work assignments are characterized by strong emphasis on project deadlines, multiple milestones on the path to project completion, and frequent merging of different employees' pieces of code to see how well the project is moving toward completion.

Research by McKinsey and Company on high-performing work teams also suggests the value of challenging goals for increasing the effectiveness of participation.[46] In their study of factors that distinguish high-performing teams from mediocre ones, they were surprised to find that the typical emphasis on building "teamwork" and "teamwork values" was ineffective for producing peak levels of team performance. Rather, the true distinguishing factor was the existence of a challenging, meaningful task that inspired team members and stretched their capacities. Although the concept of teamwork is different from that of participation, the pre-eminent role of a challenging goal in focusing employee efforts appears to be common to both.

In summary, participative management strategies are unlikely to be effective unless employees are clear about performance goals and objectives. However, for most employees, the major source of information about what is expected and how they are performing is the annual performance review. This is unfortunate because previous research suggests that when performance appraisal is the major vehicle for communicating information about performance, confusion about goals and objectives appears to be more common than not.[47] Therefore, other performance management strategies that incorporate both objective targets and supra-individual goals (e.g., project milestones or group incentive systems) would appear to provide a better chance of producing coordinated, effective participation (see Table 1).

6. Most errors in performance appraisals can be eliminated by providing training that describes the kinds of errors managers tend to make and suggesting ways to avoid them.

Although 70 percent of our HR respondents agreed with the preceding sentence, research clearly shows it to be false. A long line of research shows that performance appraisal is one of the most problematic HR practices, as well as one of the most difficult to improve.[48] In particular, rater training of the type described above (simply describing errors and suggesting ways to eliminate them) has been found to be notoriously ineffective for improving appraisal accuracy.[49] For one thing, many managers do not believe that they, personally, make the errors described by the trainer.[50] In addition, research has shown that training to reduce certain kinds of errors can actually *increase* inaccuracy by introducing other types of errors.[51]

Rather, improvement of performance appraisal appears to require a fairly intensive set of activities. These include active participation in rating videotaped performers against performance specifications, providing written justifications of their ratings, (usually) making several errors in relation to "correct" appraisal ratings, having group discussions of ways to overcome the errors, and providing further practice sessions, spaced over time.[52] Even so, it should be emphasized that stud-

ies that have shown rating improvements as a result of these methods have assessed rater accuracy by using carefully constructed videotape scenarios, where the correct rating can be known and where raters are not personally involved with the "picture-people" they are rating. Thus, it is still unclear whether managers who are able to correctly evaluate videotaped performances by unknown actors actually transfer this learning to subsequent ratings of their own employees.

When dealing with "real employees," it is generally believed that getting rid of appraisal errors—particularly leniency—requires very substantial monitoring of appraisals and clear statements by top management that leniency or other forms of inaccuracy are not acceptable.[53] For example, General Electric found that they were unable to eliminate excessive leniency from performance appraisals until they began to insist that managers rank employees on a bell curve and attached substantial penalties to managers for failure to do so. Although this system appears to be working well at GE, it should be noted that this strong ratings differentiation is accompanied by many other supportive actions, such as three thorough performance reviews of managers each year, very aggressive career planning, highly differentiated monetary rewards linked to appraisal distributions, and refusal to promote managers who will not make the distinctions. Although one can certainly debate whether you can truly have accurate appraisals when every unit is required to rate on the same bell curve (this recently became a major issue at the Ford Motor Company), one positive feature is that measurement studies have shown that it is in fact easier to make accurate *rankings* than accurate *ratings*.[54]

7. Surveys that directly ask employees how important pay is to them are likely to overestimate pay's true importance in employees' actual decisions.

Although 56 percent of the HR managers responding agreed with this statement, the fact is that people are more likely to *under*-report the importance of pay than to over-report it. Moreover, this tendency has been known for quite some time. As far back as 1966, researchers cautioned that self-reports of pay importance are likely to provide underestimates due to people's tendency to answer surveys in socially desirable ways.[55] That is, people are likely to understate the importance of pay due to norms that view money as a somewhat crass source of motivation.

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Evidence that people under-report pay importance comes from two different types of studies. One type compares individuals' direct self-reports of pay importance with importance as inferred from their preferences for various job descriptions. By measuring each job in terms of its underlying characteristics (i.e., different levels of pay, promotion potential, work duties, job security, and the like) and then comparing jobs with subjects' overall assessments of job attractiveness, the importance of each underlying job characteristic to overall assessments can be inferred without asking direct questions about importance. In such studies, pay has generally been found to be a substantially more important factor when inferred from participants' overall evaluations of job attractiveness than from their direct reports of pay importance.[56]

A second type of study uses the psychological principle of projection to infer how people evaluate characteristics that are heavily laden with social desirability. In the largest study of this kind, a Midwestern utility assessed the relative importance of ten job characteristics (including pay) to 50,000 applicants over a thirty-year period.[57] Based on applicants' self-reports, pay appeared to be the fifth most important characteristic to men and seventh to women. However, when asked to rate the importance of those same ten attributes to "someone just like yourself—same age, education, and gender," pay jumped to first place among both men and women.[58] In other words, people seem to believe that pay is the most important motivator to everyone except themselves.

Recognizing that employees are likely to understate the significance of pay is important, so that managers are not lulled into a false sense of complacency about their pay policies. More generally, this survey item calls attention to the broader need for managers to understand the limitations of rating and ranking survey methodologies. Although such surveys are not entirely useless as a basis for managerial decision making, they do have very serious limitations in terms of designing HR policies. For example, survey findings are likely to be highly unstable across minor variations in method, such as the number of job characteristics included, specific terminology used to describe the various

characteristics (e.g., "high pay" versus "fair pay"), purpose of the survey (pure research versus policy making), and whether or not respondents are assured anonymity.[59]

For these reasons, managers are likely to benefit more from research that examines how employees actually *behave* differently under alternative employment practices than from studies of perceived importance. Studies of this type in the compensation area suggest that pay is indeed an important motivator of behavior.[60] For example, Locke and colleagues' meta-analysis found the introduction of monetary incentives to produce the largest and most reliable increases in job performance (median = 30 percent)—almost twice as large as the effects of goal setting or job enrichment. Thus, Locke et al. concluded, "Money is the crucial incentive . . . no other incentive or motivational technique comes even close to money with respect to its instrumental value."[61]

Putting Research into Practice

Previous academics and practitioners have documented a variety of reasons why research findings are not implemented in organizations.[62] However, our survey of HR managers suggests that one of the main reasons is lack of knowledge. Although this might seem unsurprising, some argue that improved mechanisms of information dissemination have made lack of knowledge a trivial problem. For example, Pfeffer and Sutton argue: "We now live in a world where knowledge transfer and information exchange are tremendously efficient, and where there are numerous organizations in the business of collecting and transferring best practices. So, there are fewer and smaller differences in what firms know than in their ability to act on that knowledge."[63]

Some argue that improved mechanisms of information dissemination have made lack of knowledge a trivial problem.

Our results belie the assertion that knowledge transfer is "tremendously efficient." Indeed, what is particularly striking about our results is that with the exception of the research on integrity tests and values, all the other findings (i.e., regarding goal-setting, performance appraisal, intelligence, and conscientiousness) have been known for at least a decade and, in some cases, considerably longer than that. Moreover, our respondents are HR practitioners who have the most to gain from knowing this research: mid- to high-level HR managers and executives. In addition, our results also suggest that differences in knowledge across firms are likely to be large rather than small; some executives in our sample believed only 9 of the 35 research findings (26 percent), while others believed 30 of the 35 (86 percent).

One obvious solution to this problem would be for practitioners to read more of the research literature. Indeed, in our sample, practitioners who usually read academic research journals tended to agree with 23 of the research findings, as compared with the sample mean of 20—an improvement of 15 percent. However, the problem with this strategy is that very few practitioners appear to read this literature. Specifically, fewer than 1 percent of our sample indicated that they usually read the academic literature, while 75 percent reported that they *never* do so.

Thus, it appears that outlets such as *The Executive* and other efforts to disseminate research knowledge[64] to practitioners are sorely needed. In addition, very explicit attempts to turn findings into "maps for action"[65] may prove useful in helping practitioners to translate research into action. Then, as they conduct their implementation attempts, researchers can document the successes and failures via "action research."[66]

In closing, we remind the reader that what we know from a large and growing body of HR research has become considerably clearer over the past two decades. Failure to be aware of the findings from this research is likely to put one (and one's company) at a competitive disadvantage. At the same time, although enhanced knowledge can be an important asset for improving organizational performance, it is not by itself enough. Rather, improved knowledge acquisition must be paired with effective implementation. Results from our SHRM managers suggest that the transfer of knowledge from research to practice remains imperfect, even in this world of increasingly efficient markets for information.

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[18] An example can be seen in this quote from 120 years ago: "A great many of the most 'precocious' youths have dropped out of memory, while some of the plodding, but untiring and persevering ones, are holding the reins of government or guiding the counsels of school and senate." Thayer, 1882, quoted in Stross, R. E. 1997. *The Microsoft way.* Reading, MA: Addison-Wesley: 32.

[19] Goleman, D. 1998. *Working with emotional intelligence.* New York: Bantam Books: 22, 35, 40.

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[32] Adkins, Ravlin, & Meglino, op. cit.

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Executive Commentary

Richard A. Hansen
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As a practitioner, I feel somewhat defensive in commenting upon what is a direct criticism of what we do. The authors contend that human resource officers are not aware of current research and therefore may not engage in the most effective strategies. I confess that I would have made some of the "errors" noted by the authors.

As an example, let me take the issue of the relative effectiveness of intelligence, conscientiousness, and values in predicting employee performance. Based on my experience I probably would have made the "error" of favoring conscientiousness and values. However, certain aspects of my work environment may lead to outcomes that are different from the authors' findings.

My company actively recruits candidates from selective MBA programs. All of the candidates I see are bright. As a practical matter, since all the candidates are bright, the distinguishing characteristics of any one candidate are more likely to be conscientiousness or values fit. In selecting MBAs, we deal with a population where there is significant restriction of range in measured intelligence. Harvard doesn't graduate many MBAs of low IQ. In such a population, conscientiousness or values fit may be a more effective predictor than IQ. Most of the selection decisions that a senior HR officer directly influences are appointments to similar professional and technical positions where the range of candidates actually interviewed have already been screened on "intelligence."

I have a sense that executives need to believe in what they do. If we do something, we probably need to think that it is "right." If I select someone based on conscientiousness rather than intelligence, it is hard to admit that I am following a flawed procedure.

Try to get an "integrity" test past your lawyers who envision defending it in court. If I can't use such tests, cognitive dissonance is going to push my thinking to reject their usefulness.

Performance appraisals are not going to go away. As an HR officer, the intervention I can "sell" to management is probably limited to training. Can I admit that my tool is ineffective?

The most disturbing finding in the article is that HR officers understate the importance of pay. If you measure belief by behavior, I submit that most of us spend an inordinate amount of time and effort on issues of compensation. We act as if pay were a very important issue. My colleagues are highly focused on issues of compensation and compensation design. Perhaps HR officers are also victims of "social desirability." We know compensation is important and we pay attention to it, but we also know that HR folks should focus on the softer aspects of motivation and may respond to questions in a way that is congruent with what we think we should be doing.

I think that, for most HR officers, belief follows practice. We tend to believe in those things we do and are able to implement. We operate in a constrained environment where the range of choices is limited. We also give socially desirable answers to questions that may not reflect practice. Unfortunately, I don't think that greater exposure to the literature will have much impact on us.

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