

Selection Myths

A Conceptual Replication of HR Professionals' Beliefs About Effective Human Resource Practices in the US and Canada

Peter A. Fisher¹, Stephen D. Risavy², Chet Robie², Cornelius J. König³, Neil D. Christiansen⁴, Robert P. Tett⁵, and Daniel V. Simonet⁶

¹Ted Rogers School of Management, Ryerson University, Toronto, ON, Canada

Abstract. After nearly two decades of awareness on the research-practice gap in human resource management, this study updates and expands on the seminal findings of Rynes et al. (2002) specific to personnel selection. In a sample of 453 human resource (HR) practitioners in the US and Canada, we found that the research-practice gap persists. Notably, compared to the 2002 findings, HR practitioners tended to be worse at identifying personnel selection myths than was shown by Rynes et al. over 15 years ago, while those who reported *not* conducting validity studies were surprisingly *better* at identifying several myths as false. Several potential avenues for advancement are suggested in light of the disturbing stubbornness of the research-practice gap in personnel selection.

Keywords: personnel selection, research-practice gap, myths, replication

Efforts to address the disconnect between academic findings and organizational practices are critical to evidence-based management (Terpstra & Limpaphayom, 2012). As human resource (HR) expenses can account for more than half of organizational expenditures, it is imperative executives make well-informed decisions about practices and policies (Society for Human Resource Management, 2017). A tremendous amount of research targeting human resource management (HRM) practices is publicly available, thus offering diverse paths to organizational success. Yet evidence suggests that HRM practices are not driven by empirical research, but by intuition, tradition, and widely held myths (e.g., Gill, 2018). This "research-practice gap" has been a subject of a great deal of discussion and remains one of the primary challenges faced by management academics (Banks et al., 2016).

Among various major HRM practices, personnel selection is arguably the most critical, yielding the raw labor talent to which training and development, motivation, promotion, leadership, and other HR interventions can be applied (Ployhart et al., 2017). The present study examines the endorsement by HR professionals of several myths fundamental to the practice of selection, updating and expanding

on the seminal findings on the research-practice gap offered by Rynes et al. (2002). Given that close to two decades have passed since Rynes et al.'s call for increased attention to the gap, we sought an update to assess progress on this critical issue based on a contemporary sample.

Background

Terpstra and Rozell (1997) suggested many reasons why practitioners do not implement effective selection strategies, including lack of familiarity, disbelief in the usefulness of practices, legal concerns, and resource constraints. This led to a multifaceted approach to understanding the research-practice gap with two primary perspectives: HR practitioners either were unaware of the empirical literature or knew about it but failed to apply it (Pfeffer & Sutton, 2000).

To explore these propositions, Rynes et al. (2002) presented members of the Society for Human Resource Management with a series of true-false items targeting research findings in several subject areas relevant to the practice of HRM. Participants indicated whether they

²Lazaridis School of Business & Economics, Wilfrid Laurier University, Waterloo, ON, Canada

³Department of Psychology, Universität des Saarlandes, Saarbrücken, Germany

⁴Department of Psychology, Central Michigan University, Mount Pleasant, MI, USA

⁵Department of Psychology, University of Tulsa, Tulsa, OK, USA

⁶Department of Psychology, Montclair University, Montclair, NJ, USA

agreed, disagreed, or were uncertain about each statement. This allowed the researchers to "quantify" the existence of the research-practice gap. Of particular relevance to the present research, the most widely held misconceptions were related to personnel selection (i.e., staffing). For example, less than 20% of participants were able to identify intelligence as a stronger predictor of performance than both values and conscientiousness (Rynes et al., 2002). A 2008 replication of Rynes et al. (2002) conducted on Dutch HR professionals found similar results, supporting the existence of a continuing research-practice gap, particularly in the context of selection (Sanders et al., 2008). Similarly, Carless et al. (2009) reported comparable results with an Australian sample of industrial/organizational psychologists and HR practitioners. These findings have generalized to Finland, South Korea, and Spain (Tenhiälä et al., 2016). Moreover, Jackson et al. (2018) recently asked HR professionals and laypeople to rank various selection methods in order of predictive validity and found that both groups diverged from research findings in a similar manner.

Several motivational perspectives on the research-practice gap have emerged, including satisficing with the status quo and avoiding efforts to learn new information (Gill, 2018), or alternatively, practitioners may know about research findings but do not believe them (Rynes et al., 2018). In particular, HR practitioners may be motivated to avoid costly, long-term changes to their practices because of short-term business incentives and institutional power structures (Gill, 2018) or because findings threaten practitioners' beliefs, self-image, or self-interest (Rynes et al., 2018). These self-defensive responses have been found in students learning about the validity of general mental ability testing, whereby those with lower grade point averages are more resistant to this type of testing (Caprar et al., 2016). Regardless of practitioners' intentions toward the implementation of specific best practices, the effective implementation of such practices necessitates knowledge of research findings, and it is here that we focus the current effort.

The Current Study

It is unclear how long it may take for management research findings to permeate organizational practices. Considering it has been nearly two decades since Rynes et al. (2002) documented the research-practice gap, we were interested in seeing what, if anything, has changed and what progress has been made toward closing the gap. While Rynes et al. (2002) demonstrated knowledge gaps across multiple HRM practices, the largest discrepancy, and thus the greatest area for improvement, was in staffing practices. The Australian study by Carless et al. (2009) also found the largest

knowledge gaps in the area of selection. Accordingly, we are interested in how far the field has come in terms of closing the research-practice gap related to the practice of selection.

As the practice of HRM becomes more professionalized, it is also important to track practitioners' knowledge of, and adherence to, evidence-based best practices. As noted by both Bayer and Lyons (2019) and Cohen (2015), demand for professional certifications and specific competencies in HR managers is rising. Historically, HR managers were deeply underappreciated and held little strategic responsibility, and thus, there was little to no barrier to entry into the field, training took place on the job, and there was far less scrutiny on the effectiveness of HRM decisions (Cohen, 2007). In contrast, the current role of HRM as a strategic partner to other core business units requires more systematic education and training and forces HR managers to take ownership of their decisions. By tracking alternative metrics of knowledge mobilization, beyond citation counts, we can inform educators and curricular design to improve the adoption of evidence-based practices.

Research question 1: Are HR practitioners better at identifying personnel selection myths as false now than in 2002?

Beyond its potential persistence, we were also interested in proposed remedies for the research-practice gap. In the 2002 sample, Rynes and colleagues found that job level and a specific certification (Senior Professional in Human Resources) were modestly associated with wide knowledge of research findings. Given that the research-practice gap for selection is (or at least was in 2002) a knowledge gap, it stands to reason that efforts to educate practitioners through formal coursework, immersion in the practice of HR (vs. holding joint roles across functional areas of the business), reading peer-reviewed research, or conducting primary validity studies would reduce the size of the gap. Practitioners who participate in formal education or reading peer-reviewed research should be expected to have a better understanding of existing research findings, leading them to engage in evidence-based practices. Recent research in Germany, however, has found that less than a third of German HR managers attempt to keep up to date with knowledge in the field of selection (Kanning & Thielsch, 2015). The authors found that psychologists make greater attempts than nonpsychologists to stay up to date, but that only 7.6% of German HR managers attempt to read peerreviewed journal articles. On the other hand, Barends et al. (2017) reported that managers in Belgium, the Netherlands, the US, the UK, and Australia have generally positive attitudes toward evidence-based management.

We collected information from practitioners related to the major potential remedies identified by Rynes et al. (2002) that may be relevant to reducing the research-practice gap. We chose to investigate these remedies to contribute to a coherent timeline of how specific information seeking strategies and credentials may influence practitioners' knowledge of research-based practices. The world and practice of HR has changed since 2002, and it is important to determine whether the remedies of the past (e.g., formal education) are relevant in a world plagued by misinformation and characterized by speed. We seek to evaluate if what worked (or was thought to work) in the past holds true today and pose the following research question:

Research question 2: What common remedies for the research-practice gap have a meaningful impact on closing the gap with respect to personnel selection?

Finally, taken in combination, the existence of the research-practice gap in selection and the prevalence of these myths could be symptomatic of the "Myth of Expertise" and scientific determinism: The assumption is that employee success can be precisely predicted with heuristics and intuition (e.g., Highhouse & Rada, 2015). The degree to which HR practitioners consider selection to be a perfect science versus random chance is unknown but qualifies the limits of the remedies identified above in the face of human judgment and decision-making. While it has been suggested that many nonacademic practitioners may simply be unable to correctly evaluate the statistical terminology used to present research findings (Highhouse et al., 2017; Zhang et al., 2018), it is clear that HR practitioners do perceive predictive value in selection tools. Nevertheless, these remedies may only be effective to the extent that practitioners understand their own fallible nature. Thus, we are also interested in determining the degree to which HR practitioners believe selection to be a perfect science:

Research question 3: What percentage of variance in overall employee job performance do HR practitioners believe is predictable at the time of hire?

Method

Participants and Procedure

As part of a larger project surveying HR professionals in North America, a Qualtrics B2B panel was used to sample HR practitioners (N = 453) working in the US (73.7%) and

Canada (26.3%). The US and Canada were sampled to partially replicate Rynes (2002) while also expanding into an adjoining country with a similar culture and set of HR practices. The sampling procedure was meant to be representative of province¹ and state size (e.g., more participants were recruited from larger states/provinces) where any individual organization was represented by, at most, one participant. Consistent with previous research (Highhouse et al., 2017), the Qualtrics B2B panel contained prescreened respondents invited to participate.

All participants included in the final sample reported working in the HR department at their organization as at least part of their job. Most indicated their role included managing/supervising other employees (60.8%), followed by nonsupervisory, salaried individual contributors (15.5%), and executive (C-level, VP, director, etc.) managers (13.1%); 10.6% reported being in other positions. The sample was majority female (75.7%), and both the US and Canada samples were mostly White (US: 72.5% White; Canada: 68.9% White). The sample mean age was 40.56 years (SD = 11.13), and the sample mean tenure as an HR practitioner was 11.49 years (SD = 7.94).

The majority completed at least some university or college (53.9%), followed by high school or less (24.2%), a masters or MBA (19.5%), or a PhD (2.4%). A minority (42.4%) held at least one recognized, HR-related certification [e.g., Certified Human Resources Professional; see the Electronic Supplementary Material (ESM 1) for a full list of the certifications held by participants in the study]. Most participants (64.9%) held a job that would traditionally be considered to be involved in HRM (e.g., HR manager, HR director), while the remainder held other job titles (e.g., regional director, manager). Participants worked in a variety of industries, most commonly healthcare and social assistance (17.2%), manufacturing (8.2%), and government and public administration (7.9%), with a median organization size of 200 employees. Nearly all participants (98.6%) were directly involved in hiring at least one new employee in the past year, and most (69.8%) had decision rights regarding the choice of tests used in hiring.

Selection Myths

Eight of the false statements described by Rynes et al. (2002) specific to selection were presented to participants

¹ Quebec was excluded from our sample because we did not have a French translation of our survey. Prince Edward Island and the Canadian Territories were also excluded because of their relatively small populations and the resulting difficulty of finding HR professionals in those regions to participate in the survey.

(see Table 1, Myths 1–8). Two additional selection myths, derived from findings presented by O'Boyle et al. (2011) and Schmidt and Hunter (1998), were also included: (1) Emotional intelligence is a better predictor of overall job performance than general mental ability/IQ and (2) a skilled graphologist (i.e., handwriting analysis expert) can be helpful in predicting overall job performance.

Participants indicated whether they felt each statement was true or false or whether they were uncertain about the statement. Hanisch (1992) reported that "uncertain" (or the "?" response) is more similar to a response of "false" than "true." Accordingly, responses were coded as 0, 1,

and 3 for false, uncertain, and true, respectively, to compute a single mean "incorrectness" score for each myth. A higher incorrectness score thus represents a higher proportion of the sample believing a myth. The results reported by Rynes et al. (2002) were used to generate parallel metrics permitting direct comparison.

Variance Explained

Participants were asked to estimate the average percentage of variance in overall job performance predictable at

Table 1. Comparison between Canadian and US participants in the contemporary sample

Myth	Canadian participants % false (% uncertain) N = 119	American participants % false (% uncertain) N = 334	Difference test	Effect size
M = 1.58	M = 1.87			
SD = 1.27	SD = 1.24			
(2) Conscientiousness is a better predictor of overall job performance than general mental ability/IQ	18.5% (58.0%)	20.1% (53.6%)	F(1, 452) = 0.59, p = .441	d = 0.08
	M = 1.97	M = 1.87		
	SD = 1.25	SD = 1.26		
(3) Companies that screen job applicants for values have higher overall job performance than those that screen for general mental ability/IQ	17.6% (62.2%)	18.0% (61.1%)	F(1, 452) = 0.04, p = .849	d = 0.02
	M = 2.07	M = 2.04		
	SD = 1.24	SD = 1.24		
(4) Integrity tests don't work well in practice because so many people lie on them	21.8% (45.4%)	23.4% (46.7%)	F(1, 452) = 0.01, p = .932	d = 0.01
	M = 1.69	M = 1.70		
	SD = 1.25	SD = 1.27		
(5) Integrity tests have adverse impact on racial minorities	31.4% (20.3%)	36.5% (23.7%)	F(1, 452) = 0.02, p = .904	d = 0.02
	M = 1.09	M = 1.11		
	SD = 1.06	SD = 1.14		
(6) The most valid employment interviews are designed around an applicant's unique background	25.2% (51.3%)	24.3% (60.7%)	F(1, 452) = 1.96, p = .162	d = 0.15
	M = 1.77	M = 1.97		
	SD = 1.31	SD = 1.32		
(7) Being very intelligent is actually a disadvantage for performing well on a low-skilled job	47.9% (32.8%)	48.9% (30.3%)	F(1, 452) = 0.18, p = .671	d = 0.05
	M = 1.18	M = 1.12		
	SD = 1.33	SD = 1.30		
(8) There is very little difference among personality inventories in terms of how well they predict an applicant's overall job performance	34.5% (37.0%)	39.6% (33.0%)	F(1, 452) = 1.50, p = .343	d = 0.10
	M = 1.39	M = 1.26		
	SD = 1.30	SD = 1.29		
(9) Emotional intelligence is a better predictor of overall job performance than general mental ability/IQ	22.7% (51.3%)	28.7% (53.3%)	F(1, 452) = 0.02, p = .889	d = 0.02
	M = 1.80	M = 1.78		
	SD = 1.29	SD = 1.35		
(10) A skilled graphologist (i.e., handwriting analysis expert) can be helpful in predicting overall job performance	44.5% (22.7%)	47.9% (22.2%)	F(1, 452) = 0.13, p = .723	d = 0.04
	M = 1.01	M = 0.96		
	SD = 1.17	SD = 1.17		

Note. MBTI = Myers-Briggs Type Indicator. All p-values nonsignificant at p < .05, corrected for false-discovery rate according to Benjamini and Hochberg (1995).

the time of hire. To accommodate varying degrees of participant experience in dealing with validation findings, we included "endpoints" as interpretive aids – participants were provided with the following to aid in responding to the item: "Responding 0% would indicate that you believe that there is absolutely no way to predict how well an applicant will perform on the job and that there is no relationship between overall job performance and what is known at the time of hire. Responding 100% would indicate that you believe that there is a perfect science to predicting how well an applicant will perform on the job and that you can predict with perfect accuracy the overall job performance of newly hired employees based on what is known at the time of hire."

Results

Our first research question asks whether HR practitioners in our contemporary sample would be able to identify selection myths better than the participants in the Rynes et al. (2002) sample. We first conducted exploratory analyses to determine whether there were differences in the beliefs of Canadian and American HR practitioners. To account for the number of parallel significance tests being conducted, we chose to correct for the false-discovery rate by using Benjamini and Hochberg's (1995) methodology. Table 1 presents the results of these analyses with statistical comparisons based on analyses of variance. There were no statistically significant differences in beliefs between the Canadian and American participants, and so all participants were collapsed into a single, contemporary sample for subsequent analyses.

Table 2 presents the current results alongside corresponding metrics derived from Rynes et al. (2002), with statistical comparisons based on analyses of variance. To account for the number of parallel significance tests being conducted, we again relied on Benjamini and Hochberg's (1995) methodology to correct for the false-discovery rate using two-tailed tests. Of the eight myths included in both studies, six evidenced statistically significant differences between the two samples' abilities to correctly identify myths. Interestingly, four of the six were *more accurately* identified by the Rynes et al. (2002) sample, suggesting a *widening* of the research-practice gap in those instances.

In addition to the myths included in both our contemporary sample and the original Rynes et al. (2002) sample, we included two additional myths (Myths 9 and 10). O'Boyle and colleagues (2011) provided compelling evidence that general mental ability is a much stronger predictor of overall job performance than emotional intelligence. The majority of participants (52.7%) indicated

they believed the contrary. Schmidt and Hunter (1998) further reported that handwriting samples, independent of content, have no relationship to job performance. Fewer than half the participants (47%) in the contemporary sample believed as much, and a sizable minority (22.3%) indicated a belief that a skilled graphologist could be helpful in predicting job performance.

Our second research question regarded our interest in the usefulness of various proposed remedies to the research-practice gap (e.g., reading peer-reviewed research, earning HR designations, regularly conducting validity studies). We partitioned our sample accordingly to test for these potential subsample differences. Table E1 in ESM 1 presents these results in detail. As in the previous analyses, we relied on Benjamini and Hochberg's (1995) methodology to correct for the false-discovery rate. Participants who had earned one or more HR designations were no more capable of correctly identifying the statements as false than participants without such designations. Participants holding a traditional HR job (e.g., HR manager, HR generalist) were more capable of identifying the statement, "Although people use many different terms to describe personalities, there are really only four basic dimensions of personality, as captured by the Myers-Briggs Type Indicator (MBTI)," F(1, 442) = 9.80, p = .002,d = 0.31, as false than participants holding a job without a traditional HR title (e.g., regional director, manager) but did not otherwise differ. Participants who reported not reading the peer-reviewed literature were more capable of correctly identifying the statements, "Conscientiousness is a better predictor of overall job performance than general mental ability/IQ" and "The most valid employment interviews are designed around an applicant's unique background" as false, F(1, 450) = 7.37, p = .007, d = 0.26, and F(1, 449) = 7.06, p = .008, d = 0.25, respectively, but did not otherwise differ. Participants who reported regularly conducting validity studies were less capable of correctly identifying several of the statements as false. Seven of the 10 statements (Myths 1, 3, 5, 6, 7, 8, and 10) exhibited statistically significant differences in favor of participants who reported *not* regularly conducting validity studies.

We also computed bivariate correlations to assess several continuous-variable predictors of correct myth identification. Tenure as an HR practitioner was not related to the number of myths correctly identified as false, r = .01 (p = .775). The corresponding finding for the highest level of education completed was r = .03 (p = .602), and for organization size, it was r = .07 (p = .119).

An anonymous reviewer pointed out that both our study and that of Rynes et al. (2002) fail to disaggregate organizations by size or industry. We conducted a series of multinomial regressions exploring the potential effects of organization size on correct myth identification. None of

Table 2. Overall study results and comparison between contemporary sample and 2002 sample

Myth	Contemporary sample % false (% uncertain) N = 453	Rynes et al. (2002) % false (% uncertain) N = 959	Difference test	
				Effect size
(1) Although people use many different terms to describe personalities, there are really only four basic dimensions of personality, as captured by the MBTI	20.1% (30.2%)	49% (23%)	F(1, 1,410) = 101.25, p < .001	d = 0.57
	M = 1.79	M = 1.07		
	SD = 1.25	SD = 1.27		
(2) Conscientiousness is a better predictor of overall job performance than general mental ability/IQ	19.6% (25.6%)	18% (10%)	<i>F</i> (1, 1,410) = 26.43, <i>p</i> < .001	d = 0.29
	M = 1.90	M = 2.26		
	SD = 1.26	SD = 1.22		
(3) Companies that screen job applicants for values have higher overall job performance than those that screen for general mental ability/IQ	17.9% (20.8%)	16% (27%)	F(1, 1,410) = 0.93, p = .335	d = 0.06
	M = 2.05	M = 1.98		
	SD = 1.24	SD = 1.22		
(4) Integrity tests don't work well in practice because so many people lie on them	23.0% (30.7%)	32% (34%)	F(1, 1,410) = 22.34, p < .001	d = 0.27
	M = 1.70	M = 1.36		
	SD = 1.27	SD = 1.25		
(5) Integrity tests have adverse impact on racial minorities	35.2% (42.0%)	31% (50%)	F(1, 1,409) = 0.32, p = .573	d = 0.03
	M = 1.10	M = 1.07		
	SD = 1.12	SD = 1.03		
(6) The most valid employment interviews are designed around an applicant's unique background	24.6% (17.3%)	70% (11%)	F(1, 1,409) = 318.67, p < .001	d = 0.99
	M = 1.92	M = 0.68		
	SD = 1.32	SD = 1.17		
(7) Being very intelligent is actually a disadvantage for performing well on a low-skilled job	48.7% (20.4%)	42% (12%)	F(1, 1,409) = 21.56, p < .001	d = 0.27
	M = 1.13	M = 1.50		
	SD = 1.31	SD = 1.42		
(8) There is very little difference among personality inventories in terms of how well they predict an applicant's overall job performance	38.3% (27.7%)	42% (30%)	F(1, 1,409) = 5.02, p = .025	d = 0.13
	M = 1.30	M = 1.14		
	SD = 1.29	SD = 1.23		
(9) Emotional intelligence is a better predictor of overall job performance than general mental ability/IQ	27.2% (20.1%)			
	M = 1.78			
	SD = 1.33			
(10) A skilled graphologist (i.e., handwriting analysis expert) can be helpful in predicting overall job performance	47.0% (30.7%)			
	M = 0.98			
	SD = 1.17			

Note. MBTI = Myers-Briggs Type Indicator. Bolded values are significant at p < .05, corrected for false-discovery rate according to Benjamini and Hochberg (1995)

the regression coefficients were statistically significant at the .05 alpha level, suggesting that organization size does not relate to HR professionals' beliefs about the effectiveness of these HR practices. Chi-squared analyses were undertaken to assess industry effects based on industries with 20 or more respondents (as we did not specifically stratify by industry in our sampling procedure). The only chi-squared analysis that was statistically significant was "Integrity tests don't work well in practice because so many people lie on them," $\chi^2(10) = 23.03$, p = .011. Practitioners from business services were the most likely to respond false (34.8%), followed by healthcare and social

assistance (29.5%), manufacturing (24.3%), education – other (23.8%), retail (22.2%), and government and public administration (5.6%). We are unsure why practitioners in government and public administration perceive the effectiveness of integrity tests to be so low. It is especially concerning that practitioners in the retail sector hold such a dim view of integrity testing when research supports such testing in reducing retail employee theft (cf. Bernardin & Cooke, 1993).

Our third research question examined the percentage of variance in overall job performance that HR managers believe can be explained at the time of hire. Figure 1 presents a frequency histogram of participant responses

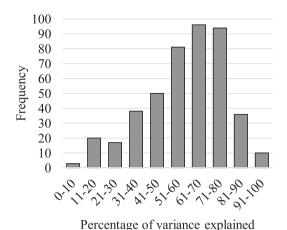


Figure 1. Estimates of percentage of variance in overall job performance predictable at time of hire.

distributed around a mean of 59.6%, with a standard deviation of 18.9%.

Finally, we explored whether any of the previously identified proposed remedies for the research-practice gap had any influence on estimates of percentage of variance in overall job performance predictable at the time of hire. Due to the number of analyses and a lack of any *a priori* hypotheses, again we used Benjamini and Hochberg's (1995) methodology to correct for the false-discovery rate. The only significant difference obtained was between participants who reported conducting versus not conducting validity studies, F(1, 406) = 15.88, p < .001. Participants who reported conducting validity studies (n = 167, M = 63.88, SD = 19.03) estimated that more variance in overall job performance could be predicted than those who reported not conducting validity studies (n = 241, m = 56.29, n = 18.82; Cohen's n = 1.40).

Discussion

Personnel selection practice affords numerous choices regarding the constructs to target and corresponding measures to include in a selection battery. Decades of empirical findings clearly favor certain constructs and measures over others, and it stands to reason that dissemination of such findings should lead to improved hiring practices. The research-practice gap evident in previous studies in this area (e.g., Rynes et al., 2002) challenges this seemingly straightforward and ultimately pragmatic expectation, raising the questions as to whether the gap may be closing over time and the sorts of factors that might explain it.

Our findings indicate a relative stagnation in the effective dissemination of best practices established in research to the actual practice of selection. Despite nearly two decades of concrete, empirical awareness of the existence and prevalence of the research-practice gap in selection, little progress has been made in closing it. Indeed, for four of the eight myths permitting direct comparisons, contemporary practitioners were significantly worse at identifying the statements as false than the participants in the Rynes et al. (2002) sample [the three myths were "Although people use many different terms to describe personalities, there are really only four basic dimensions of personality, as captured by the MBTI" (Myth 1); "Integrity tests don't work well in practice because so many people lie on them" (Myth 4); "The most valid employment interviews are designed around an applicant's unique background" (Myth 6); and "There is very little difference among personality inventories in terms of how well they predict an applicant's overall job performance" (Myth 8)]. Our findings further demonstrate the relative ineffectiveness of several plausible, "traditional" remedies for the research-practice gap, such as earning an HR designation, reading peer-reviewed research, and conducting validity studies.

These results support Gill's (2018) suggestion that HR managers simply do not want to learn or implement best practices derived from empirical research findings. Given that several of the myths presented to participants in the current study were derived from a well-cited review conducted over two decades ago (Schmidt & Hunter, 1998), the contemporary HRM zeitgeist might be expected to hold many of these research findings as self-evident. Nevertheless, our contemporary sample of selection professionals was unable to identify a given myth as false as often as half of the time. The myth related to graphology, for example, was correctly identified as false by only 44.5% of the participants, suggesting that the use of graphology may be an international issue, beyond France and Israel, as reported by Edwards and Armitage (1992). On the other hand, recent research has shown that very small percentages of HR professionals are using graphological assessments in their selection processes in Canada (2.5%) and the US (3.0%; Risavy et al., 2019).

The findings related to our final research question suggest that, on average, HR managers have an overly optimistic view of what percentage of variance in overall job performance can be explained at the time of hire. Participants' mean response to this item (59.6%, SD = 18.9%) overshot the highest meta-analytic operational validity reported by Schmidt and Hunter (1998), which was achieved when combining general mental ability (GMA) tests and integrity tests to predict overall job performance (multiple R = .65, $R^2 = .42$). The wide variance in responses suggests that there is still a considerable amount of work to be done to educate practitioners about how well selection

tools can predict valued work behavior, and the overestimation is consistent with Highhouse's (2008) suggestion that many practitioners are overconfident in the predictive ability of various selection measures. However, relatively few participants indicated that an extremely high percentage of performance variance can be predicted at the time of hire. This might indicate that practitioners tend to accept the stochastic nature of selection and do not believe it to be an exact science. Nevertheless, when taken together with the findings from our first research question, it is unlikely that the selection professionals included in our sample have achieved such a phenomenal prediction in their own practice. In particular, given that relatively few participants were able to correctly identify GMA as a superior predictor of overall job performance (i.e., 17.9-48.7%, across four myths relating to GMA) and similarly few were unable to identify the usefulness of integrity tests (i.e., 23.0% and 35.2%, for two myths relating to integrity) and structured interviews (24.6%), it is unlikely that GMA tests, integrity tests, or structured interviews are relied upon in practice as heavily as research would recommend.

Implications for Research and Practice

Recently, several new, researcher-oriented strategies have been suggested in the management literature, which may help to guide researchers toward bridging the research-practice gap. Rynes and Bartunek (2017) offered several suggestions including, among other things, more (and more diverse) systematic reviews, the creation of different types of publications and new features in existing publications, and more studies of how evidence-based management works in practice.

Rynes and colleagues (2018) noted that public trust and academic credibility may be increased through (among other tactics) focusing on bigger, more important problems and grabbing attention through narrative, metaphors and analogies, graphics, and more translatable statistics. They also urged academics to anticipate and address resistance to specific findings by (among other tactics) using dialectic methods and two-sided arguments with refutation and experiential methods. Interestingly, many of these suggestions are mirrored in a recent review of evidence-based medicine as gap-closing suggestions in that domain (Djulbegovic & Guyatt, 2017). Specific instructions for HR practitioners to incorporate management research into their work have also been put forth by Rousseau and Barends (2011); for example, their paper provides specific instructions for how practitioners can conduct a search for information in a database of research articles (e.g., ABI/INFORM). At a more individual level, researchers may be able to better communicate their findings with visual aids (Zhang et al., 2018), storytelling (Zhang et al., 2019), contextualized validity information (Highhouse et al., 2017), or optimized video communication (Putorti et al., 2020). A further recommendation has been to create an independent organization with the express goal of disseminating management research findings to practitioners in terms that they understand (HakemZadeh & Baba, 2016). We wholeheartedly echo each of these ideas and support a proactive approach by researchers to bridge the research-practice gap.

Limitations and Future Research

Current findings bear consideration in light of several caveats. First, the variety of HR designations held by participants in our sample was large, and even the most prevalent designation was held by only a small subset of the sample. As a result, we collapsed across all designations and made comparisons between those who did and did not hold an HR designation, rather than between groups possessing different designations. Some designations may confer greater reliance on empirical research in selection practices; thus, research is needed to clarify consistency of the research-practice gap across varied HR designations.

Second, our contemporary sample (n = 453) was small in comparison to the Rynes et al (2002) sample (n = 959). While it is sufficient to compare the two samples with more than adequate statistical power, it may be worth considering potential power issues in the analyses where the contemporary sample is subdivided.

Third, our finding that participants who reported reading peer-reviewed journal articles were no more capable of correctly identifying the statements as false does not account for what participants considered to be peerreviewed journal articles. Indeed, some participants may have regarded popular online publications, presenting findings with little-to-no actual empirical support, as "peer-reviewed." In contrast to our finding that 57% of our contemporary sample read peer-reviewed research, Rynes et al. (2002) found in their original study that fewer than 1% of practitioners reported "usually" reading the Journal of Applied Psychology, Personnel Psychology, and Academy of Management Journal, which are generally considered among the top peer-reviewed research journals. Unfortunately, we do not have the data to examine this disconnect more closely.

Furthermore, it must be noted that participants in this study were only presented with *myths* (i.e., statements were all factually false). This was consistent with the statements presented by Rynes et al. (2002), where each statement relevant to selection was false. It is possible that a different distribution of responses would be found if true statements were embedded among the myths. Participants

may have expected a minimum number of true statements, leading them to rate the myths as more true on average.

Additionally, our sample was limited in scope to American and Canadian HR professionals. There are enormous differences between, for example, European countries and the US in terms of working regulations, salaries, socioeconomic characteristics, languages, cultures, education, and political and historical backgrounds. Thus, the results of this study may not generalize outside of Canadian and American workplaces.

Finally, our finding that participants who reported regularly conducting validity studies were *less* capable of correctly identifying several of the statements as false does not account for *what* participants considered to be a "validity study." Similar to the ambiguous nature of "peerreviewed research," it is unclear whether our practitioner sample has the same understanding of what constitutes a validity study as an academic sample might – again, current data do not permit more definitive comparison.

Conclusions

Ultimately, the results presented here, in combination with previous research, support a more pluralistic conceptualization of scholarly impact (Aguinis et al., 2019). High citation counts evidently mean little in terms of impact on actual management practices. From an outward-looking perspective, it is only by documenting and updating our understanding of management practices that we can gain insight into the type of research produced by scholars that becomes relevant and useful to practitioners. Similarly, from an inward-looking perspective, it is important for academics to benchmark the contributions of our field by tracking the degree to which generally accepted, core findings are penetrating day-to-day practices and decisionmaking. Without research such as this, we are bound to become siloed and increasingly divergent from practical, real-world issues facing managers. Indeed, the disconnect between real-world practices and empirically supported best practices suggests that this is already the case.

Electronic Supplementary Material

The electronic supplementary material is available with the online version of the article at https://doi.org/10.1027/1866-5888/a000263

ESM 1. Full list of the certifications held by participants in the study and detailed results of tests for effects of proposed remedies to the research-practice gap in subsamples

References

- Aguinis, H., Ramani, R. S., Alabduljader, N., Bailey, J. R., & Lee, J. (2019). A pluralist conceptualization of scholarly impact in management education: Students as stakeholders. *Academy of Management Learning & Education*, 19(1), 11–42. https://doi.org/10.5465/amle.2017.0488
- Banks, G. C., Pollack, J. M., Bochantin, J. E., Kirkman, B. L., Whelpley, C. E., & O'Boyle, E. H. (2016). Management's science-practice gap: A grand challenge for all stakeholders. *Academy of Management Journal*, 59(6), 2205–2231. https://doi.org/10.5465/amj.2015.0728
- Barends, E., Villanueva, J., Rousseau, D. M., Briner, R. B., Jepsen, D. M., Houghton, E., & Ten Have, S. (2017). Managerial attitudes and perceived barriers regarding evidence-based practice: An international survey. *PLOS One*, 12(10), e0184594. https://doi.org/10.1371/journal.pone.0184594
- Bayer, J. E. & Lyons, B. D. (2020). Reexamining the demand for HR certification in the United States. *International Journal of Selection* and Assessment, 28(1), 85–97. https://doi.org/10.1111/ijsa.12266
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. Journal of the Royal Statistical Society: Series B (Methodological), 57(1), 289–300. https://doi.org/10.1111/j.2517-6161.1995.tb02031.x
- Bernardin, H. J., & Cooke, D. K. (1993). Validity of an honesty test in predicting theft among convenience store employees. *Academy of Management Journal*, 36(5), 1097–1108. https://doi.org/10.2307/256647
- Caprar, D. V., Do, B., Rynes, S. L., & Bartunek, J. M. (2016). It's personal: An exploration of students' (non)acceptance of management research. Academy of Management Learning & Education, 15(2), 207–231. https://doi.org/10.5465/amle.2014.0193
- Carless, S. A., Rasiah, J., & Irmer, B. E. (2009). Discrepancy between human resource research and practice: Comparison of industrial/organisational psychologists and human resource practitioners' beliefs. *Australian Psychologist*, 44(2), 105–111. https://doi.org/10.1080/00050060802630015
- Cohen, D. J. (2007). Strategic partnerships between academia and practice: The case of nurturing undergraduate HR education. In V. G. Scarpello (Ed.), *The handbook of human resource management education: Promoting an effective and efficient curriculum* (pp. 331–342). Sage. https://doi.org/10.4135/9781412976688.n18
- Cohen, D. J. (2015). HR past, present and future: A call for consistent practices and a focus on competencies. *Human Resource Management Review*, 25(2), 205–215. http://dx.doi.org/10.1016/j.hrmr.2015.01.006
- Djulbegovic, B., & Guyatt, G. H. (2017). Progress in evidence-based medicine: A quarter century on. *Lancet*, *390*(10092), 415–423. https://doi.org/10.1016/S0140-6736(16)31592-6
- Edwards, A. G. P., & Armitage, P. (1992). An experiment to test the discriminating ability of graphologists. *Personality and Individual Differences*, *13*(1), 69–74. https://doi.org/10.1016/0191-8869(92) 90220-J
- Gill, C. (2018). Don't know, don't care: An exploration of evidence based knowledge and practice in human resource management. *Human Resource Management Review*, 28(2), 103–115. https://doi.org/10.1016/j.hrmr.2017.06.001
- HakemZadeh, F., & Baba, V. V. (2016). Toward a theory of collaboration for evidence-based management. *Management Decision*, 54(10), 2587–2616. https://doi.org/10.1108/MD-06-2015-0243
- Hanisch, K. A. (1992). The job descriptive index revisited: Questions about the question mark. *Journal of Applied Psychology*, 77(3), 377–382. https://doi.org/10.1037/0021-9010.77.3.377

- Highhouse, S. (2008). Stubborn reliance on intuition and subjectivity in employee selection. *Industrial and Organizational Psychology*, 1(3), 333–342. https://doi.org/10.1111/j.1754-9434.2008. 00058.x
- Highhouse, S., Brooks, M. E., Nesnidol, S., & Sim, S. (2017). Is a .51 validity coefficient good? Value sensitivity for interview validity. *International Journal of Selection and Assessment*, 25(4), 383–389. https://doi.org/10.1111/ijsa.12192
- Highhouse, S., & Rada, T. B. (2015). Different worldviews explain perceived effectiveness of different employment tests. *International Journal of Selection and Assessment*, 23(2), 109–119. https://doi.org/10.1111/jjsa.12100
- Jackson, D. J. R., Dewberry, C., Gallagher, J., & Close, L. (2018). A comparative study of practitioner perceptions of selection methods in the United Kingdom. *Journal of Occupational and Organizational Psychology*, 91(1), 33–56. https://doi.org/10.1111/joop.12187
- Kanning, U. P., & Thielsch, M. T. (2015). Wie bilden Personalpraktiker/ innen sich weiter? [How do human resources practitioners educate themselves?]. Zeitschrift für Arbeits- und Organisationspsychologie, 59(4), 206–214. https://doi.org/10.1026/0932-4089/a000195
- O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32(5), 788-818. https://doi.org/10.1002/job.714
- Pfeffer, J., & Sutton, R. I. (2000). *The knowing-doing gap*. Harvard Business School Press.
- Ployhart, R. E., Schmitt, N., & Tippins, N. T. (2017). Solving the supreme problem: 100 years of selection and recruitment at the journal of applied psychology. *Journal of Applied Psychology*, 102(3), 291–304. https://doi.org/10.1037/apl0000081.supp
- Putorti, E. S., Sciara, S., Larocca, N. U., Crippa, M. P., & Pantaleo, G. (2020). Communicating science effectively: When an optimised video communication enhances comprehension, pleasantness, and people's interest in knowing more about scientific findings. *Applied Psychology: An International Review*, 69(3), 1072–1091. https://doi.org/10.1111/apps.12193
- Risavy, S. D., Fisher, P. A., Robie, C., & König, C. J. (2019). Selection tool use: A focus on personality testing in Canada, the United States, and Germany. *Personnel Assessment and Decisions*, 5(1), 62–72. https://doi.org/10.25035/pad.2019.01.004
- Rousseau, D. M., & Barends, E. G. R. (2011). Becoming an evidence-based HR practitioner. *Human Resource Management Journal*, 21(3), 221–235. https://doi.org/10.1111/j.1748-8583.2011.00173.x
- Rynes, S. L., & Bartunek, J. M. (2017). Evidence-based management: Foundations, development, controversies and future. Annual Review of Organizational Psychology and Organizational Behavior, 4(1), 235–261. https://doi.org/10.1146/annurevorgpsych-032516-113306
- Rynes, S. L., Colbert, A. E., & Brown, K. G. (2002). HR professionals' beliefs about effective human resource practices: Correspondence between research and practice. *Human Resource Management*, 41(2), 149–174. https://doi.org/10.1002/hrm.10029

- Rynes, S. L., Colbert, A. E., & O'Boyle, E. H. (2018). When the "best available evidence" doesn't win: How doubts about science and scientists threaten the future of evidence-based management. *Journal of Management*, 44(8), 2995–3010. https://doi.org/10.1177/0149206318796934
- Sanders, K., van Riemsdijk, M., & Groen, B. (2008). The gap between research and practice: A replication study on the HR professionals' beliefs about effective human resource practices. The International Journal of Human Resource Management, 19(10), 1976–1988. https://doi.org/10.1080/09585190802324304
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124(2), 262–274. https://doi.org/10.1037/0033-2909.124.2.262
- Society for Human Resource Management (2017). SHRM Customized Human Capital Benchmarking Report. https://www.shrm.org/ResourcesAndTools/business-solutions/Documents/Human-Capital-Report-All-Industries-All-FTEs.pdf
- Tenhiälä, A., Giluk, T. L., Kepes, S., Simón, C., Oh, I. S., & Kim, S. (2016). The research-practice hap in human resource management: A cross-cultural study. *Human Resource Management*, 55(2), 179–200. https://doi.org/10.1002/hrm.21656
- Terpstra, D. E., & Limpaphayom, W. (2012). Using evidence-based human resource practices for global competitiveness. *International Journal of Business and Management*, 7(12), 107–113. https://doi.org/10.5539/ijbm.v7n12p107
- Terpstra, D. E., & Rozell, E. J. (1997). Why some potentially effective staffing practices are seldom used. *Public Personnel Management*, 26(4), 483–495. https://doi.org/10.1177/009102609702600405
- Zhang, D. C., Highhouse, S., Brooks, M. E., & Zhang, Y. (2018). Communicating the validity of structured job interviews with graphical visual aids. *International Journal of Selection and Assessment*, 26(2-4), 93-108. https://doi.org/10.1111/ijsa.12220
- Zhang, D. C., Zhu, X., Ritter, K., & Thiele, A. (2019). Telling stories to communicate the value of the pre-employment structured job interview. *International Journal of Selection and Assessment*, 27(4), 299–314. https://doi.org/10.1111/ijsa.12264

History

Received February 4, 2020 Revision received July 20, 2020 Accepted August 20, 2020 Published online November 12, 2020

Peter A. Fisher

Ted Rogers School of Management Ryerson University 55 Dundas St. West Toronto, ON M5G 2C3 Canada peter.fisher@ryerson.ca