

Are we 'bridging the divide' in IWO psychology?

Dean Bartlett

Jan Francis-Smythe

Angie Carter

Caroline Steele Jane Arthur



Abstract.

This paper examines the knowledge transfer process within the profession of work and organisational psychology. In consonance with the theme of the 2011 congress, it considers the extent to which proposed 'bridging mechanisms' can provide useful vehicles for operationalising the pursuit of the dual goal of improving both the well-being of individuals and the effectiveness of work organizations. It considers the way in which the profession attempts to ground its concepts in a sound evidence base and then successfully mobilise this knowledge at the interface of research and practice. It does so by critically examining the scientist-practitioner model and the ways in which this model can be operationalised by practitioners and researchers. The criticism which is aimed at academics is that their research is irrelevant; it explores narrow concepts too often with student samples. Practitioners, on the other hand, are accused of too infrequently bringing scientific findings from the research literature to their practice. The problem has been cast in terms of both one of knowledge production and also knowledge transfer and is typified, at least in one direction – the impact of research upon practice, by what has in other professions, most notably medicine and more recently management, been called evidence-based practice. Denise Rousseau, in her 2005 presidential address to the American Academy of Management defined evidence-based management (EBM) as "translating principles based on best evidence into organizational practices" and there have been a number of attempts to invoke a similar model of evidence-based practice in the field of work and organisational psychology. In 2007 Anderson described the academic-practitioner divide as 'natural', suggesting the way forward was to focus on 'bridging mechanisms' describing six which had been proposed at the 1995 SIOP conference. What is the situation over decade later? To what extent have these bridges been built? This paper explores the nature and extent of these bridges by presenting case studies and findings from a UK survey of IWO psychologists.

Evidence-Based Practice.

We asked our respondents how often they consulted various types of evidence in their work and the results are presented in Table 1. What do these data tell us? It is noteworthy that when we look at the most common responses not a single one of all the types of evidence we asked about were consulted on a weekly basis. Rather, the practitioners in our survey consulted most types of evidence only sometimes (i.e. monthly, but less than once a week). Of this evidence, it appears that the most common type of evidence that respondents reported using was from sources other than journals. We can therefore surmise that such evidence is unlikely to have been subject to peer review.

Table 1. Frequency With Which Respondents Referred To Different Types Of Evidence.

Type of Evidence	Frequently (once a week)	Sometimes (once a month or more)	Rarely	Never
Industry reports	13 %	42 %	38 %	7 %
Market research	8 %	27 %	51 %	14 %
Meta-analyses	8 %	28 %	54 %	11 %
Empirical research studies	25 %	48 %	24 %	3 %
Literature reviews	14 %	43 %	38 %	4 %
Reference books	30 %	50 %	17 %	3 %
Theoretical papers	18 %	46 %	33 %	3 %
Research reports (from sources other than academic journals)	20 %	57 %	20 %	3 %
Organisational reports (e.g. financial reports, strategic reports)	22 %	40 %	32 %	5 %
Organisational data (e.g. attrition statistics, absence rates)	22 %	43 %	30 %	5 %
Technical manuals	14 %	35 %	41 %	10 %
Professional practice networks	19 %	48 %	30 %	4 %

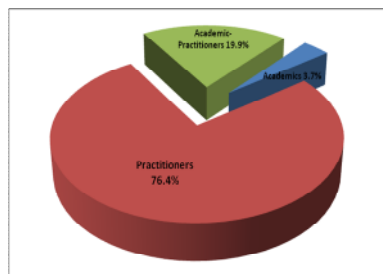
Some researchers have suggested that a key source of evidence underpinning evidence-based practice ought to be meta-analyses (e.g. Briner and Rousseau, 2011), however as Table 1 indicates, the majority of respondents (65 %) refer to meta-analyses only rarely or never. On the other hand, nearly 80% of respondents referred to reference books and a similar proportion referred to empirical research studies on a weekly or monthly basis. It is interesting to note, however, that while roughly a quarter referred to empirical studies frequently, a similar proportion referred to them only rarely. Another interesting finding is the surprisingly large number of respondents who refer to non-academic research reports, although it is not possible to ascertain whether these are secondary reports of research which was reported in academic journals or, rather, primary research reported in non-academic journals. Such findings could suggest that practitioners are less interested in academic research and, conversely, more interested in evidence which is or relevance to their clients, although the relatively small number of respondents who regularly refer to market research would run counter to this argument. As well as asking what type of evidence our respondents used, we also asked them where they accessed it and our results showed that the most common sources of evidence were general web search engines such as Google, people in their professional networks and work colleagues coming joint third with their own private reference collection (see Table 2).

Table 2. Top Three Sources of Evidence.

	%	N
General web search engine (e.g. google)	86.1	142
People in my professional network	78.2	129
Colleagues who I work with/ My own private reference collection	71.5	118

Sample.

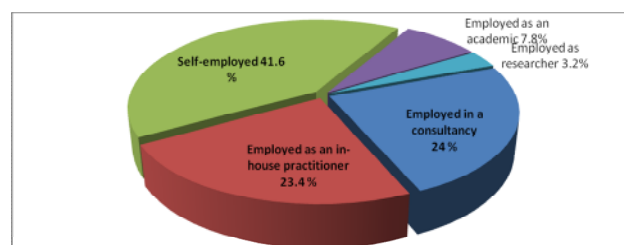
We conducted a survey (N=163) of occupational psychologists based in the UK. The characteristics of our sample are reported below (please note that small differences in N and % occur due to missing data for some questions).



UK-Based Qualifications

	%	N
Chartered Occupational Psychologist	81.3%	122
Practitioner in Training	18.8%	22
HPC Registered Occupational Psychologist	67.1%	96

The largest group of our respondents were self-employed. The remainder of our sample were split approximately half and half between either being employed in a consultancy or else employed as an in-house practitioner. Only a very small fraction of our respondents were employed as academics or researchers.



Thus, to summarise our sample we have around 160 highly qualified IWO psychologists from the UK who are engaged mainly in practice. One of our main interests was in gaining some sort of indication of the extent to which their practice is evidence-based.

What Do Practitioners Think is Important for Developing Client Solutions?

We also asked our practitioner respondents how they made decisions about what the best solution for the client would be and the top three responses are presented in Table 3.

Table 3. Top Three Bases of Decision-Making Regarding the Best Course of Action for a Client.

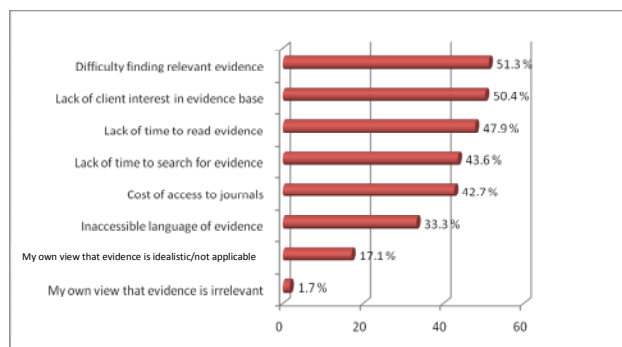
	%	N
Previous experience	66.7	82
How quickly the solution can be delivered	61.3	73
Advice of others	61.3	73

Overall then, when we consider the data presented in Tables 1, 2 and 3, it would appear that one way of reading our results would be to say that our respondents tended to check out Google or ask someone they know when looking for evidence. Rather than allowing scientific evidence to be the main driving force in relation to their work with clients, practitioners tended to rely upon their own previous experience and consider how quickly they can deliver a solution. Our survey did not allow us to explore the types of critical evaluation processes our respondents employed during their efforts to locate and interpret evidence. We did, however, notice a difference when we split our sample up into two different subsamples, one consisting of respondents who were exclusively practitioners and the other consisting of a group of respondents who identified themselves as having both an academic and a practitioner role, with the latter group of respondents referring to various types of scientific evidence (consisting specifically of meta-analyses, empirical research studies, literature reviews, theoretical papers and reference books) significantly more frequently than those who were solely practitioners. Furthermore, they used such scientific data and evidence significantly more than the practitioner group in making decisions about the client solution.

Barriers to Adopting an Evidence-Based Approach to Practice.

We asked practitioners about the barriers they faced in adopting an evidence-based approach to their practice and the results are presented in Figure 1, below. The graph indicates that the barriers experienced by the respondents to our survey tend to be practical and that they are not as prevalent as one might imagine, with only around half of our sample reporting even the most commonly reported barrier. Furthermore, the suggestion that academic evidence is often irrelevant is not consistent with our findings, with only 1.7% of respondents reporting this sentiment.

Figure 1. Barriers to Adopting Evidence-Based Practice.



Bridging the Divide in IWO Psychology.

Anderson (2007) suggested a number of specific 'bridging mechanisms' for addressing the research-practice gap in IWO psychology and we explored some of these, along with others, in our survey. Table 4, below, indicates the types of activities which are involved in such bridging mechanisms and the proportion of respondents who were engaged in practice that reported doing them (N=146).

Table 4. Practitioners Engaged in the Following Bridging Activities:

Conducted a research project * (p<.05)	75 %
Made a presentation or lecture in a university	60 %
Given a talk to other occupational psychologist practitioners	58 %
Supported or mentored an intern/ work placement/ student project in your organisation	54 %
Presented my work at a research conference *(p<.09)	48 %
Responded to a consultation	45 %
Sought information about research from a professional body	36 %
Worked collaboratively with a University research group or partnership*(p<.007)	34 %
Been a member of a Board of Directors	25 %
Been on a Government working party/ commission *(p<.000)	17 %
Been on a student assessment panel	15 %
Been involved with a research council	10 %
Been a member of an editorial board of a research journal	7 %

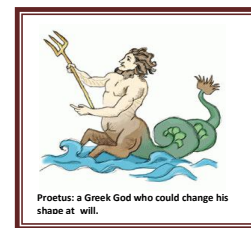
One would perhaps expect that those who would be able to contribute most to the bridging the scientist-practitioner divide would be the select few who are both academics and practitioners and we compared the results of the subsample of respondents who fell into that category with those of the respondents who were 'pure' practitioners. This analysis revealed that academic-practitioners engaged in a variety of 'bridging activities' significantly more than those who were solely practitioners, as indicated by the * symbol in Table 4 above, where p values are given for the observed differences. In each case, a significantly higher proportion of academic-practitioners reported engaging in the corresponding activity. In relation to the other activities, no significant differences were found and some of these remaining data could certainly be interpreted as indicative of a willingness for practitioners to engage with academic issues and concerns, with 60% reporting that they have given a presentation or lecture in a University for example and over half reporting that they support students who are conducting student projects or those completing periods of work experience. The data also indicate that there remain some relatively under-exploited bridging mechanisms. For example, some of the bridging mechanisms which were least popular in our survey are perhaps amongst the most powerful – practitioners being involved with the funding and publication of research through their participation in the work of funding councils or journal editorial boards, for example, are arguably the most direct and powerful ways in which research could be aligned more closely with practice-oriented concerns.

The Relevance of Academic Research.

As reported in Figure 1, only a small minority (1.7%) of practitioners felt that academic research was irrelevant. We asked our relatively small subsample of those who held an academic role (N=36, the majority of whom were also practitioners) about the way in which practice influenced their research. The vast majority of this subsample (80%) reported that they always or usually identify the potential contributions that research or theory could make towards improving practice. Just under half (48%) reported that either agree or strongly agree that, when developing a research question they consider the practitioner problem as the most important starting point (although only a small sample, it was surprising that academics reported this more frequently than academic-practitioners). An identical proportion reported that when conducting literature reviews, they structure them around important practitioner concerns rather than previously published academic literature, although here the relative preference of the academics vs. the academic-practitioners was reversed. Two other findings worth noting were that around two-thirds reported that they based their judgements about what to research based upon current topics which were relevant to industry and only a quarter felt that practice not being amenable to rigorous scientific operationalisation was a barrier to their adopting a practice-based approach to their research.

Case Study – Protean Career Theory.

The application of theory to practice is an integral but sometimes neglected aspect of the scientist-practitioner model which underlies practice in IWO psychology. An illustration comes from a case study involving the use of Protean career theory. Here, the emphasis was upon the design and rigorous evaluation of an intervention, rather than upon 'theory-testing'. 43 line managers attended a 1 day initial training course aimed at integrating the protean career ideals within their current performance appraisal process. 3 months later 37 managers attended a follow up half day to discuss the way they had implemented the model within their teams. Evaluation of the initial training indicated that one of the key learning outcomes was a change in the managers' perception of the term 'career' from something meaning management progression to something more open and analysis of follow-up data provided evidence of key benefits to the organization.



Conclusion.

In a 2006 debate over the status of the research-practice divide in IWO psychology, Hodgkinson wrote that:

"the rigorous evidence base underpinning our practices is what fundamentally sets us apart ... from other professionals seeking to enhance productivity and well-being in the workplace ... In other words, the scientist-practitioner model is the unique selling point (USP) of the IWO psychology profession." (p. 174).

Such a model stresses the importance of using scientific findings to inform professional practice in much the same ways as those proposed by Briner and Rousseau (2011) however it also emphasises the centrality of the scientific method which has an important process dimension. Hodgkinson (2006) highlights the way in which IWO practitioners apply their critical evaluation skills to evaluate not only the body of scientific evidence which empirically supports their practice, but also "to critically evaluate the impact of their interventions and adjust their actions accordingly" (p. 174). The results of our survey give an indication of the types of evidence that practitioners consult and the practical ways in which they go about identifying and accessing that body of evidence. We have also reported upon the prevalence of some of the perceived barriers to adopting an evidence-based approach amongst our practitioner respondents and provided a short case study of the scientist-practitioner model in action. One of the limitations of our survey is that it does not permit an in-depth elucidation of the critical evaluation processes in which practitioners engage. We therefore conclude by suggesting that further research is now required in order to explore more fully the ways in which practitioners operationalise the scientist-practitioner model in their practice and how researchers are able to more fully contribute to the overarching enterprise of improving the workplace for both individuals and for their employing organisations.

References.

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- Briner, R.B. and Rousseau, D.M. (2011). Evidence-Based I-O Psychology: Not There Yet, *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4(1), pp.
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