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TIP

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TIP The Industrial-Organizational Psychologist

Vol. 36/No. 4 April, 1999

FEATURED ARTICLES

EDITORIAL DEPARTMENTS

A MESSAGE FROM YOUR PRESIDENT

Elaine Pulakos

It's hard to imagine that I'm already writing my fourth, and last, SIOP Presidential column. The year has been very busy and productive, thanks to those serving on the Executive Committee and as Committee Chairs. I would like to devote this column to recognizing these hard-working individuals as well as highlighting some of their specific contributions to SIOP.

The Executive Committee and Other Elected Members

First, I want thank to the other "Presidents"—**Angelo DeNisi** (President Elect) and **Kevin Murphy** (Past President), who provided helpful advice throughout the year on various matters. Angelo also had the job of chairing the Election Committee which requires a significant amount of time and effort. **Bill Macey** will complete his third and final year as SIOP Secretary. Having served in this position a few years ago, I know what a demanding job this is, and want to acknowledge Bill for his outstanding service. I also want to recognize the efforts of **Jeff McHenry**. As our Financial Officer, Jeff has made significant contributions, including the development of a much-improved budgeting process and assisting with financial matters involved in the SIOP Foundation, among others.

I would also like to extend my appreciation to five other elected members, the APA Council Representatives, who not only effectively represent us on APA Council but also serve as advisors to the Executive Committee. Angelo DeNisi's 3-year term ended in January of 1999, and our current representatives are **Wayne Camara, Georgia Chao, Neal Schmitt,** and **Mary Tenopyr**.

Nancy Tippins (Member-at-Large and Chair of the Long Range Planning Committee) and our other elected Members-at-Large, **Jan Cleveland** and **Ann Marie Ryan**, analyzed and provided recommendations about several key issues including SIOP's pro bono initiative, planning for the future of the Administrative Office, and implementing strategic planning for SIOP committees. Thanks to Nancy, Jan, and Ann Marie for their hard work dealing with these complex issues.

The Standing Committee Chairs

A major achievement this year was getting the SIOP Foundation fully up and running. Under the direction of **Irv Goldstein**, the Foundation Committee developed operating principles and informational materials. They also initiated a fundraising campaign. I want to thank Irv and his committee for all of their work on this important effort.

Fran Yammarino and **Bob Dipboye** chaired our two major SIOP recognition committees — the Awards Committee and Fellowship Committee, respectively. A great deal of work is involved in advertising for these programs, orchestrating committee reviews of nominees, and compiling and integrating evaluation data. Thanks to both Bob and Fran for a job well done.

Debbie Major has served two very productive years as chair of the Education and Training Committee. This committee has been responsible for several important initiatives, including the Doctoral Student Consortium, development of an Instructor's Guide for Industrial and Organizational Psychology, and work on the development of guidelines for education and training at the doctoral level.

Adrienne Colella has also contributed significantly as chair of the Membership Committee. In recent years, decisions about membership have become less clear-cut, as increased numbers of professionals trained in disciplines other than I-O have sought membership in SIOP. This has made the Membership Committee's work more time consuming and difficult, and I thank Adrienne and her committee for their efforts.

Another productive committee has been the Professional Practice Committee. Under **Jeff Schippmann's** leadership, this committee has been working on several initiatives. One project is a survey to assess various issues (e.g., preferences for workshops, areas where SIOP should focus attention, etc.) that will help in planning future SIOP activities. Jeff's committee has also led (in collaboration with the Administrative Office) the development of our member referral directory and consulting company directory. This committee also conducted a project investigating the practice of competency modeling.

As chair of Scientific Affairs, **Fritz Drasgow** has led the development of numerous responses and commentaries on behalf of SIOP. Examples of these include SIOP's comments on the proposed *Standards for Educational and Psychological Testing* and APA's *Ethics of Research with Human Participants.* This has required considerable work, soliciting reviews of documents from SIOP members and compiling their input into integrated responses.

I also want to extend thanks to **Kalen Pieper**, Chair of the State Affairs, whose committee performs an important "watchdog" function for SIOP, identifying state laws and statutory restrictions that hinder the ability of I-O psychologists to become licensed. The committee also works to affect state law where needed.

TIP continues to be the envy of professional society newsletters and we have **Allan Church** to thank for that. Allan became Editor of *TIP* last year and has continued *TIP*'s tradition of excellence, in addition to putting his own new "marks" on our newsletter (e.g., a new look, some new contributors, new features, etc.). Thanks to Allan for all of his hard work on this demanding job.

Speaking of editors, I have two other "editors" to thank—**Ed Salas** (Chair of the Professional Practice Series) and Neal Schmitt (Chair of the Frontiers Series). Both Ed and Neal spend significant time developing new volumes for our two SIOP series, as well as reading and commenting on the chapters produced for the Professional Practice Series and Frontiers Series books.

I also want to recognize **Murray Barrick**, chair of the APA Program Committee and his committee who have developed an outstanding program for this year's convention. Program sessions cover a variety of topics, including personality, organizational justice, feedback interventions, integrity in corporate America, and research methods, among others. So, be sure to check out the APA Program this year!

In order to function properly, the committees rely on a large number of volunteer members. In fact, over 600 SIOP members participated in committees this year. I want to thank everyone who served for their efforts and contributions. Helping to put all of these committees together was **Bernardo Ferdman**, Chair of the Committee on Committees. Bernardo also developed an improved process for placing volunteers on committees.

The SIOP Conference Committee Chairs

I want to recognize the committee chairs involved in the annual SIOP Conference. Our conference continues to grow each year, and the commitment and hard work of the committee chairs involved in this effort is unsurpassed. Specifically, I wish to thank **Ron Johnson**, Chair of the SIOP Conference Committee. Being chair of this committee is a huge job that takes countless hours — not to mention that Ron is in his "second tour" as chair of this committee.

I also wish to thank **Angie McDermott**, who once again chaired the Continuing Education and Workshop Committee, and put together a "sellout" set of outstanding workshop offerings. Also, **Mike Burke**, did an exceptional job as SIOP Program Chair. I recall how difficult I thought it was to deal with 300+ program submissions when I was SIOP Program Chair a few years ago. I can't imagine how Mike dealt with *more than double* that number this year.

Another committee that has contributed significantly is the Placement Committee, chaired by **Linda Sawin**. Since its inception only a few years ago, SIOP's job placement service at the Conference has grown exponentially, and our members want more and more placement services. Towards this end, Linda has developed a plan to implement a year-round placement service which we anticipate will be starting soon.

The Ad-Hoc Committee Chairs

Now, I'd like to turn my attention to our ad hoc committees. First, I want to acknowledge **Beth Chung**, Chair of the Task Force on Ethnic Minorities. This committee has undertaken several initiatives, one of which was establishing a mentoring program for minority members of SIOP.

Next, I want to thank **Phil Craiger** who served as chair of the Electronic Communications ad hoc committee. In this position, Phil led and contributed significantly to development of the SIOP web page, as well as served as an expert advisor on other electronic communications matters.

I also want to recognize **Laura Koppes**, our historian, who is instrumental in ensuring that our history as a society is documented and our records are well maintained.

In addition to chairing the Frontiers Series Committee, Neal Schmitt also chaired the Principles Task Force. This task force was charged with (a) determining what scientific bases exist for statements made in the *Principles* and providing citations for these, and (b) making suggestions for potential revisions. The committee delivered a very well-done and thorough report earlier this year, and I thank them for their efforts.

A new ad-hoc committee, the Public Policy Committee, was initiated this year. The focus of this committee, led by **Katherine Klein**, was to explore how SIOP can become more visible and influential in the public policy arena around issues that are our areas of expertise. Katherine and her committee have made very good progress in identifying options that will best suit SIOP's needs. We are presently collecting more information and further studying these options.

Two other new ad hoc committees formed this year were the Academically oriented Workshop Committee, chaired by **David Hofmann**, and the Professional Development Workshop Committee, chaired by **Jack Kennedy**. David and Jack have been exploring what would be involved in providing academically oriented workshops at the SIOP Conference and providing additional continuing education opportunities for SIOP members. Look for more information on these initiatives in the future.

The Administrative Office

I also want to extent a very special thanks to Lee Hakel and the staff of the SIOP Administrative Office. I am not sure if everyone realizes what an important and central role the Administrative Office has come to play in our operations, or how efficiently SIOP is run as a result of Lee and her staff. I can't say enough about what a great job the Administrative Office does, but all of us who are close to SIOP's operations can't imagine how we would survive without them.

Finally, Thanks to You...

Last but not least, I want to thank you for giving me the opportunity to serve as your President this year. It has been a privilege and a pleasure to do so.

From the Editor: Keep the Customer Satisfied

Allan H. Church
W. Warner Burke Associates, Inc.

Well, Spring is finally here, and, if you are reading this piece, so too is the April 1999 issue of *TIP* (unless of course, you are reading this early on the Web, in which case I suggest you confer with Roseanne Roseanna Danna for her opinion on the matter). Although the usual suspects are all included here as always, we also have a number of interesting features and special articles in this issue, which I will introduce shortly. I hope you find these items interesting, entertaining, and perhaps even insightful. Maybe a few of these articles (or even those from prior issues of *TIP*) will spark some conversation and debate at our upcoming conference in Atlanta. If so, then we have done our job, and if not, we would like to hear from you.

So as you begin to prepare yourself for this year's meeting of the I-O minds (and other less cerebral minglings at the social hour and assorted "theme" gatherings, for lack of a better term), try to remember what you've liked and disliked about *TIP* over the last year so that when you bump into either me or one of our editorial board members, or if you come to the "Meet the TIP Board" session on Saturday May 1st, you can give us your feedback. After all, we're just trying to keep our customers satisfied.

I Can't Get No Satisfaction

Although I am always interested in hearing what our customers (i.e., this means you, oh faithful SIOP members) have to say about *TIP*, I have had my doubts for years about some of the more general business notions that (a) the more focus on the customer the better, and (b) the customer is *always right*. Ever since these concepts were popularized in the early 1990s via a wave of best-selling management books and mainstream business articles (probably in response to the burgeoning TQM movement at time), I have wondered how far they might go and who will stop the insanity. I mean the amount of heavy metal products contained in some of these titles alone like *Putting the Service-Profit Chain to Work* (Heskett et al., 1994) and *Total Customer Service: The Ultimate Weapon* (Davidow & Uttal, 1990), really has to make one stop and think about the message that's being conveyed. Does attention to service quality really require access to some type of bludgeoning device? Well, on second thought, given some of the consultants I know perhaps it does, but I digress.

Now, you may be wondering why such a strong focus on the customers' needs and their being right all the time cause me so much anxiety? Perhaps this is merely a defensive offshoot of my professional existence as an organization consultant who is focused on content knowledge (or, dare I say, *expertise*) rather than process. Or in other words, if the customer is always right then what do I have to offer? Or perhaps my unease is because I know the truth is out there—

That is, that customers and clients truly "can't get no satisfaction" no matter what you do—and as Jack Nicholson would say, I can't handle it. From this perspective, it's like submitting an article for publication—someone is always bound to critique something about it. Or perhaps it is merely an excuse for me to comment about yet another somewhat odd facet of our society (I'll take this one, thank you).

Whatever the reason, the emphasis on providing superior customer service has been taken so far, it seems, that at times it can be confusing as to who is really the service provider and who is the customer. Of course, Katz and Kahn (1978) would say that answer all depends on whether you consider yourself to be part of the input, throughput, or output process. Nonetheless, in this environment the boundaries and roles among them can easily get confused. Sometimes, for example, the people providing the service think that somehow they deserve to be treated like customers by the very people they are supposed to be serving. I mean, it's getting to the point where I think even the local gas station attendant thinks he's the customer, not the other way around, when he all but demands his tip. Talk about taking the service environment too far. It's like going out to eat after a hard day at some chic restaurant that you've heard so much about and being told by the waiter that the chef is not *comfortable* preparing your food the way you requested it. It's like being told by the students in your class that they are the customers, they've paid good money, and that they expect to get good grades (true story, mind you, from our own Practice Network columnist **Mike Harris** not to mention the subject of a recent article in *Quality Progress* by Jim Wallace, 1999). It's like being called by your mortgage broker after making a firm and final offer on a house that you know is already way overpriced and being told that, "you know, you really can go higher, it's ok, I'll approve you for more debt, really." Translation—take on that mortgage and give me my commission.

Don't get me wrong, I am all for treating the customer (any customer for that matter) with dignity and respect. The point is, however, that the customer service mentality can be taken too far. You will know this is the case when the tag line in the medical profession changes from "just what the doctor ordered" to "just what the patient wanted."

The other related problem with an over emphasis on customer service is the notion that the customer is *always right about something* (sometimes anything and everything for that matter). Unfortunately, the fact is that in some instances the customer is, for lack of a better term, totally wrong. I don't know about every I-O or OD practitioner out there, but there are times when a client (and I mean a real, paying consulting client) makes a demand (and I mean a real *firm* demand) for access to some multirater feedback or survey data that was collected under a confidential agreement with respondents. These situations are not pleasant, but from my perspective the protection of the anonymity of the individual must be fought for and ultimately ensured, or the entire system fails.

In these instances, the customer is clearly not right (assuming everything was clear in the contracting stage of the consulting process—another leap of faith at times, I'm afraid). Although one does always have the option of litigation in these matters as **Virginia Boehm** and Bill Gellermann offered in response to a similar scenario back in *TIP* a few years ago (Church, Boehm, & Gellerman, 1994), these are neither pleasant nor easy situations to resolve.

Forget the fact that customers do not always know what they want or even when they want it. Forget that half of the most significant technological inventions in use today were never even dreamed of by our ancestors. Forget that there is a whole industry (advertising and/or marketing—take your pick) devoted to convincing people that any given product is in fact *the* most needed thing in our humdrum lives. Forget the old adage about remembering to treat the problem (cause) not the symptom (i.e., the client's impetus for calling one in the first place—this works for both doctors and consultants, by the way). Forget that research supports this notion (Daily, 1996) and that new management books have since appeared that refute the old management books (Rosenbluth & Peters, 1992). The bottom line is that someone (and I aim to take names) has taken the notion of customer service just a wee bit too far.

How do I know this, you ask? What empirical evidence do I have to support such a preposterous contention? Although numerous personal examples come to mind, the most jarring and surreal (and impetus for this entire diatribe) occurred a few weeks ago. Late one Thursday afternoon I received a call from an existing client, with whom our firm has had a long relationship, requesting that everything be dropped to attend an important meeting several hundred miles away, in the middle of nowhere, the following Monday afternoon. Being in the business that we are, I dutifully dropped everything and readied to meet the client.

We're on the Road to Nowhere

Early Monday morning came, however, and the agenda, directions to the site, appropriate security clearances, and other sundry details remained unconfirmed. Clearly, the person responsible for administering the details (not my client, mind you) was not concerned with *his* customers (i.e., the meeting attendees, me included). Nonetheless, a colleague of mine and I ventured on in response to our client's call to arms. After traveling for some time on a propeller plane (not the most customer-driven type of plane, I can tell you), obtaining directions to the site and our rental car (no comment here), we were informed (at the rental counter no less) that the location of the meeting had been changed entirely and to proceed somewhere else entirely. Away we went to the new location—described as "a distinguished alternative to meeting rooms" designed by "a professional facilitator" promising "meetings of style and substance" and all in the heart of historic small town U.S.A. This place was "high tech" and "high touch," so claimed the brochure.

Although, as it turned out, the new meeting location was not difficult to find (it was interesting to note, however, that the facilitator had indeed named the building after herself), we were the first to arrive, making introductions and discussions of purpose with the professional facilitator rather limited. Apparently, the other participants in the meeting were just as surprised at our presence as we were (except, of course, for our client who eventually arrived under protest). Without so much as a round of introductions, the professional facilitator (who was totally unfamiliar with the composition of this group or her chosen profession, for that matter) proceeded to present the agenda for the meeting and describe in great detail the use of flip charts, the multicolored friendly putty, friendly sticky pads, and squishy squeezy dinosaurs located at each table setting in the "U-room." Needless to say, none of these gimmicks was successful in enhancing the quality of the meeting, though I did enjoy the putty.

A day and half later with only 2 hours left before being mercifully saved by the return drive and flight on the propeller plane (it was looking so much more appealing now), the professional facilitator finally informed the ragtag group of confused, and by this time either angry or mildly unconscious participants, of the true purpose of the meeting—a team-building session intended primarily for 4 (the team members) of the 10 attendees. The rest of us were just so much flotsam and jetsam retinue—which explained why many of us were in a collective fog of cluelessness as to purpose and objectives. In the end, the professional facilitator, who managed to coach the group into producing several pages of gibberish on flip charts received a hearty round of thanks from a number of other individuals in the room. Needless to say, not all professional facilitators give the profession a good name, and for the first time I finally had a full appreciation of some of the negative connotations typically associated with some OD methods. When we finally made our exit, our client thanked us for coming and apologized for the bizarre experience (in that order).

So what's the moral of the story? Clients do not always know what they are doing, why they are doing it, or what they really want from their service providers. In the world of I-O psychology and organization change and development, this means that we as professionals need to be willing and able to challenge the status quo—both at the individual/relationship and systems level. We need to feel empowered to push back without fear of being replaced with another consultant that will do the client's bidding (a phenomena also known as the vendor mindset—see Church & Waclawski, 1998). The more we let ourselves succumb to the "fear" resulting from the best service provider model at the expense of all else including good old "common sense," the more it will limit our ability to be practitioners as opposed to simply being technicians, and the more trips to Abilene (Harvey, 1988), like the one described here, we are going to make. While all that was lost here was 2 days of time, it could have been a great deal worse, all in the name of keeping the customer satisfied.

Where Do We Go Now?

Well, enough of my storytelling and moralizing. It's time to introduce the contents of this issue of *TIP*. As I mentioned earlier, this issue is packed with a variety of interesting and useful items.

Featured Articles

The issue begins with a farewell message from SIOP President **Elaine Pulakos**. Thanks for hanging in there, Elaine, and for keeping the peace in the hallowed halls of the SIOP ExCom.

Next, we have the long anticipated 1998 SIOP salary survey results—presented in living color by **Jennifer L. Burnfield** and **Gina J. Medsker** of Human Resources Research Organization (who cosponsored the survey effort in conjunction with SIOP). They provide a very interesting breakdown of salary levels by various individual level and demographic variables.

Following is an article by **Michael Cole**, which adds to the ever-growing commentary started last issue by **Brent Holland, Bob Hogan**, and **Dana Shelton** in response to an earlier Real World column on the perceptions (generally negative) of psychologists by the general public. Michael's message regarding definitional precision in research is not dissimilar to the one I was making above regarding customer service—everything can be overdone, including psychological terminology. Ironically enough, the columnist who started this thread in the first place tackles the use of jargon in our field in this very same issue.

Richard Phelps, an education economist based in Paris, provides an extended analysis and critique of the National Research Council's report on *Fairness in Employment Testing*. He concludes that the NRC may be far from the pinnacle of objectivity it is intended to be.

I don't know about anyone else, but when I hear the phrase "work-life balance" I always wonder what's being balanced other than say, sleep? All kidding aside, the article by **Scott Behson** presents an interesting (and very applied) look at work-family issues in the world of professional sports.

Recognizing that the latest issue of any publication in the late 1990s would be incomplete without mentioning the name Bill Clinton, **Jim Sharf** offers up an interesting analysis of the President's proposed solution to the gender pay gap. Jim's analysis of the situation could lead one to believe Clinton's plan may only treat the symptom (not the problem) and serves to make matters worse by increasing litigation. Of course, since when has President Clinton shied away from the legal system anyway?

Speaking of proposals, the next article provides a set of guidelines for using multirater or 360-degree feedback for decision-making purposes in organizations. **Dave Bracken** and **Carol Timmreck** have put together a well-conceived document that covers an entire spectrum of issues and concerns in this somewhat dicey yet increasingly prevalent area of I-O practice (and research).

Last but not least, SIOP historian **Laura Koppes** describes the life and times of the individuals for whom the SIOP awards were named. I think some people may be surprised by the number of current (and well known) professionals touched by these I-O originals.

Editorial Departments

Moving right along to our regularly scheduled program, **Mike Harris** of Practice Network starts off by tackling the role of the Internet in I-O psychology. Although online surveys may be one of the current uses of the net and Mike does a nice job covering some of the key issues here, I'm more interested in hearing stories about this I.O.Syke character including whether or not he/she can out perform HAL.

This edition of TIP-TOPics marks the end for **Dawn Riddle** and **Lori Foster** (at least in this capacity—see their column for more details as their careers are indeed evolving). Thanks to both of them for their hard work over the years, keeping us honest and current with respect to graduate student issues. After a walk down memory lane, they discuss the importance of creating a professional persona—something that I should probably pay more attention to myself.

Next, **Janine Waclawski** provides us with a Real World look at consulting jargon and its potential impact on the field. After a brief visit with the thought police, and some comments from **John Michela** and **Dean Stamoulis**, she provides a wholesome meal of buzzword salad, and corporate slander from the pages of *Fortune* magazine—to think we actually use some of these terms on a day-to-day basis. The best part, though, comes when she introduces her own list of SIOPisms. What people will come up with during the SIOP social hour!

This issue's International Forum by **Dirk Steiner** visits first with **Deanne Heinisch** and **Katherine Holt** for a report on a country liaison project for SIOP's International Affairs Committee. Next, **Beryl Hesketh** introduces readers to I-O in Australia, and **Alvaro Tamayo** does the same for I-O practice and research in Brazil.

Turning to the world of training evaluation, **Steven Rogelberg's** Informed Decision column introduces us to **Tanya Andrews** and Brian Crewe who, through a series of interviews with practitioners, examine the current state of the industry in this area. Given that they conclude that most organizations use "smile scales" (or reactions measures) following a training effort rather than hard results criteria, please feel free to read their column, evaluate it, and let them know exactly what you think. In all honesty and seriousness, the issues raised are very important for practitioners and for the field in general. The verbatim comments are particularly interesting (and telling).

Charmine Härtel finishes our columnist contributions with a summary of findings from three different research studies that literally span the globe, on performance management and evaluation practices. Work-family issues again break the surface here with respect to HR policies in Australia.

News and Reports

This issue's news and reports start with an introduction and overview to SIOP's new Pro Bono initiative by **Ann Marie Ryan**. Next, **Eduardo Salas** provides us with a vision and a call for proposals for the popular Professional Practice Book Series. Leona Aiken, Division 5 President, gives us an overview of the signs of life and trends in the field of quantitative measurement (a division of APA to which a number of SIOP members also belong).

Moving to our web-based entrepreneurial portion of this issue, **James Kuthy** offers an introduction to his newly created Center for Organizational and Personnel Psychology located on the web at www.copp-psychology.org dedicated to law enforcement organizational and personnel issues, and **Michael Fetzer** provides a little bit of history regarding the I-O Psychology Forums that he has developed for informal online exchanges about a variety of I-O and related subjects at http://www-dept.usm.edu/~psy/io/forum.htm. All I can say here is that I am just amazed at what's on the web these days, and it's only going to get more interesting as time goes on.

Next, **Heather Roberts Fox** of the APA Science Directorate provides us with a report on two separate Supreme Court-related ADA cases as well as an update on several government reports that may be of interest to SIOP members.

And finally, **Murray Barrick** finishes the issue with a listing of the highlights of the Division 14 (SIOP) program for the 1999 American Psychological Association Convention to be held this August in Boston. He's done an excellent job of pulling together a number of interesting sessions and posters from SIOP members, and I would certainly encourage people to attend. While the APA convention is not exactly like a SIOP conference, it does have its moments.

Lest anyone forget, as always, we close this issue with the latest IOTAS and **David Pollack's** helpful list of upcoming conferences for next year, along with the usual assortment of calls, announcements, and job postings that you have come to expect from *TIP*. Don't forget to send your missives, comments, suggestions, and feedback to Allanhc96@aol.com. (or directly to any of our editorial board members if you prefer). I look forward to hearing from you and seeing you this April in Atlanta!

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Income and Employment of SIOP Members in 1997

Jennifer L. Burnfield and Gina J. Medsker
Human Resources Research Organization

Author's Notes: The Human Resources Research Organization (HumRRO) conducted the 1998 Income and Employment Survey of the membership of the Society for Industrial and Organizational Psychology on behalf of the SIOP Executive Committee and as a service to the SIOP membership. We would like to acknowledge the support of ***Jim Miller*** *and Questar, Inc., who contributed to this project by donating labor and materials to print the surveys and cover letters. We would like to acknowledge the involvement of Lee Hakel and staff in the SIOP Administrative Office, and* ***Dr. Elaine Pulakos****, SIOP President. We would also like to apologize to SIOP members who had their completed survey returned to them; this occurred because of difficulties with the postal service barcodes. Address correspondence to either author at HumRRO, 66 Canal Center Plaza, Suite 400, Alexandria, VA 22314 or at gmedsker@humrro.org.*

The 1998 Income and Employment Survey of the SIOP membership was conducted during the fourth quarter of 1998. Similar surveys were conducted in the second quarter of 1995 and the third quarters of 1989 and 1983. The 1998 survey was designed to be as similar as possible to past surveys to make replication of analyses easier. The 1998 survey was mailed on November 10, 1998 to all SIOP Members, Associate Members, and Fellows with addresses on record ($N = 3{,}282$). Reminder cards were mailed on December 9, 1998. As of January 15, 1999, 1,430 surveys were returned, yielding a response rate of 43.6%; however, data from 30 respondents were excluded because they were either retired or not employed in the United States. This response rate is lower than the rate of 58.3% from 1995 and 72.8% from 1988, but is similar to the rate of 48.0% for 1982. The reason for the lower response rate is likely due to the difficulties with the postal bar codes on the return envelopes, which resulted in some completed surveys being returned to respondents.

Although it is doubtful that the completed surveys which were returned to senders were returned on anything other than a random basis, some statistics can be analyzed to gauge whether the survey sample differs from the SIOP membership as a whole. For the SIOP membership, based on annual reports of primary employment given at the time of dues payment, 33% are employed in academia, 31.9% in consulting, 15.6% in the private sector, and 5.7% in the public sector. For the primary employers reported on the surveys we received, 34.3% were in academia, 31.3% in consulting or self-employment, 15.5% in the private sector, and 7.4% in the public sector. Based on these statistics, the sample appears to be representative of the total SIOP membership.

Table 1 contains an analysis of respondents by gender, type of SIOP membership, employment status, location of employment, and years since obtaining

Table 1:
Characteristics of Samples Across Time (Cross-Sectional)

		1982	1988	1994	1997
Gender					
	Men	84%	79%	71%	67%
	Women	16%	21%	29%	33%
Type of SIOP Membership					
	Associate	n/a	10%	6%	7%
	Member	n/a	82%	86%	86%
	Fellow	n/a	8%	9%	7%
Employment Status					
	Employed Full Time	n/a	87%	89%	86%
	Employed Part Time	n/a	5%	3%	8%
Location					
	Metro New York	14%	14%	11%	10%
	Elsewhere	86%	86%	89%	90%
Years Since Doctoral Degree					
	2-4	n/a	n/a	12%	15%
	5-9	23%	24%	19%	19%
	10-14	19%	22%	18%	14%
	15-19	14%	18%	14%	14%
	20-24	n/a	n/a	14%	13%
	25 or more	n/a	n/a	15%	21%

Note: "n/a" indicates that data are not available.

a doctorate. This table shows that the current sample was similar to samples obtained in previous years, which also supports the expectation that there was no systematic bias caused by the surveys that happened to be returned to senders. Percentages in Table 1 show little change in type of membership, employment status, location, or years since doctoral degree. The trend of an increasing percentage of women in the samples over the 1982 through 1994 surveys continued with the 1998 survey. Other data collected on the survey indicate that most SIOP members (83.1%) are also members of APA, and 81.4% consider Division 14 to be their primary APA division; 31.5% of the respondents are Members, Associates, or Fellows of APS. The principal findings from the survey are cited below.

Principal Findings from the Survey

Highest degree obtained. On highest degree, 92% of the sample had a doctorate, 7% had a master's degree, and less than 1% had a bachelor's degree. As shown in Table 2, the median income for respondents with doctorates was $80,000. Twenty-five percent earned $120,000 or more and 10% earned $180,000 or more. The median income for respondents with a master's degree

Table 2: Demographic Comparison of 1982, 1988, 1994, and 1997 Median Primary Incomes for Selected Groupings of SIOP Members

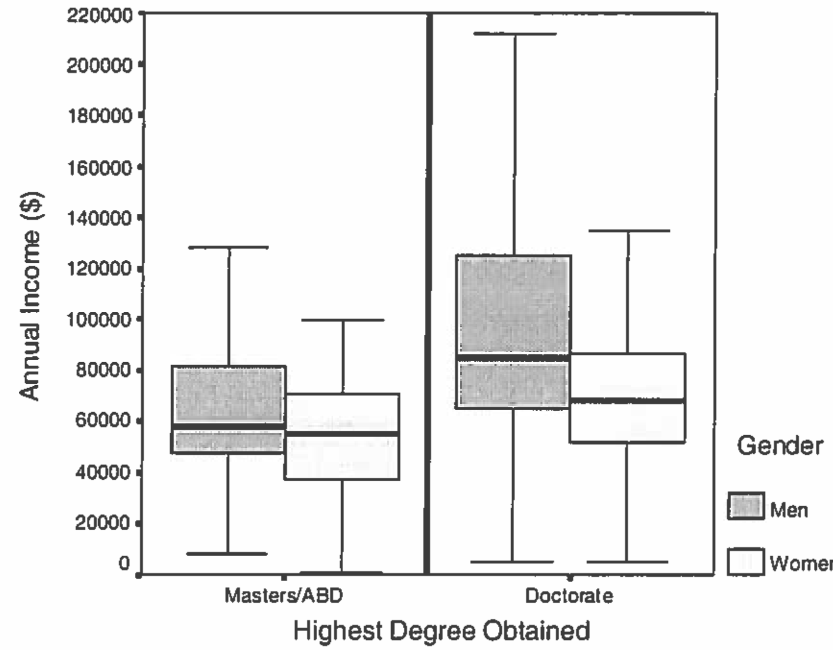
	1982	1988	1994	1997	% Change in median income (1994 to 1997)	1997 Income adjusted to 1988 dollars	% Change in median adjusted income 1988-1997
Degree							
Doctorate	$42,850 (844)	$60,000 (1448)	$71,000 (1124)	$80,000 (1231)	12.70%	$58,966	-1.70%
Masters	43,000 (96)	51,500 (171)	59,500 (104)	55,000 (99)	-7.60%	40,539	-21.30%
Age[a]							
<35	$33,000 (148)	$45,000 (132)	$50,000 (168)	$60,000 (236)	20.00%	$44,224	-1.70%
35-39	40,000 (193)	55,000 (280)	61,000 (227)	70,000 (178)	14.80%	51,595	-6.20%
40-44	45,500 (152)	60,000 (329)	75,000 (216)	80,000 (162)	6.70%	58,966	-1.70%
45-49	50,000 (92)	65,000 (262)	84,000 (247)	100,000 (210)	19.00%	73,707	13.40%
50-54	53,000 (91)	65,000 (144)	85,000 (140)	91,500 (196)	7.60%	67,442	3.80%
55+	n/a	n/a	n/a	92,000 -242	n/a	67,811	n/a
Gender[b]							
Men	$44,250	$62,000 (811)	$75,000 (1290)	$83,000 (954)	10.70% (858)	$61,177	-1.30%
Women	36,000	50,000 (150)	58,500 (342)	65,000 (394)	11.10% (428)	47,910	-4.40%

Note - Numbers in parentheses are sample sizes. The Consumer Price Index (CPI) of 118.3 for 1988 and 160.5 for 1997 were used to adjust 1997 income to 1988 dollars. [a]Includes only respondents with a doctorate. [b]Includes all respondents regardless of degree.

was $55,000. The 1997 median income for respondents with a master's degree is lower than it was in 1994, while the median income for respondents with doctorates increased. For 1982 income, those with a master's degree had a 4% higher median income than those with a doctorate, but this changed to a 14% lower median income in 1988, 16% lower in 1994, and 31% lower in 1997. When the 1997 median incomes are adjusted using the Consumer Price Indexes (CPI) for 1988 and 1997, the adjusted 1997 median income is worth less for both those with doctorates and master's degrees than the actual 1988 income. This indicates that the 1997 median incomes provide less purchasing power than the 1988 median incomes. The negative percentage change from 1988 income to adjusted 1997 income is much smaller for those with a doctorate than those with a master's. Both comparisons of 1994 and 1997 median incomes and the 1988 and 1997 adjusted median incomes suggest that the income difference between education levels has grown during the 15-year period represented.

Age differences. Table 2 shows that median income was higher in 1997 for the 45–49 year age group than for other age groups. On previous SIOP income surveys, the 50–54 year age group had the same or a higher median income than the other age groups. The median income for the 50–54 year age group was 53% higher than the median income for those younger than 35 in 1997, 70% higher in 1994, 44% higher in 1988, and 61% higher in 1982. As a rough approximation of how an age cohort's income changes from early in their career to the income peak of their career, the median income of the 45–49 year age group in 1997 is three times as high as the 1982 median income for those younger than 35. After adjusting the 1997 median income for the 45–49 year age group to its 1982 value using the 1982 CPI, the 1997 adjusted median income is $60,125, which is 82% higher than the $33,000 1982 median income for what is roughly the same cohort.

Gender differences. As in previous years, the median primary income for men ($83,000) was significantly ($p < .001$) higher than the median income for women ($65,000). The mean income for all women in the sample ($77,944) was 41% lower than the mean income for all males in the sample ($131,218). The median income for women was 19% lower than that for men in 1982 and 1988 and 22% lower in 1994 and 1997, so the overall "wage gap" has not appeared to decrease. Some of this discrepancy in primary income may be explained by gender differences observed in other areas. For instance, male SIOP members were more likely to hold doctorates than female members (94% versus 87%, $p < .001$). However, even at the same degree level, males had higher mean and median incomes than females (see Figure 1). Male members also tended to have more professional work experience than female members ($p < .001$). The average length of time since starting professional employment was 19.0 years for males and 11.6 years for females, and the average number of years since receiving the doctorate was 17.1 for males and 9.9 for females.



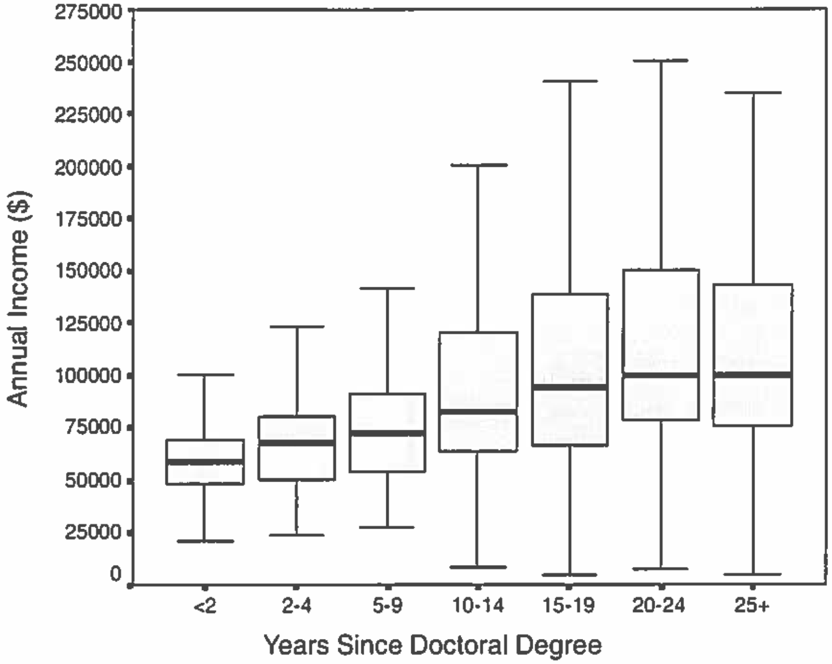
	Masters		Doctorate	
	Men	Women	Men	Women
N:	47	51	805	374
% of Sample:	48%	52%	68%	32%
Percentiles:				
90%	$154,000	$88,800	$200,000	$129,000
75%	83,000	72,000	125,000	87,000
50%	58,000	55,000	85,000	68,000
25%	47,000	37,000	65,000	52,000
10%	29,000	29,200	48,000	40,000
Mean:	$199,404	$59,509	$125,565	$80,249

Note: The mean values reported for some groups may appear highly inflated due to extreme outliers in income responses. Extreme values are not presented in the figure.

Figure 1. Percentiles and descriptive statistics representing 1997 annual income by gender and highest degree obtained.

There was no statistical difference in the percentage of males and females who were located in the New York or Boston Metro areas and other locations.

Status as a partner, principal, or owner. Of the sample, 17.6% indicated that they are the partner, principal, or owner of a consulting or private research organization. A majority of these individuals were male (84.6%). The median 1997 income of partners, principals, or owners of consulting firms ($140,000) exceeded the median income of partners, principals, or owners of private research firms ($112,000). Partners, principals, and owners of consulting firms received higher annual incomes (M = $224,518; SD = $326,949) than others

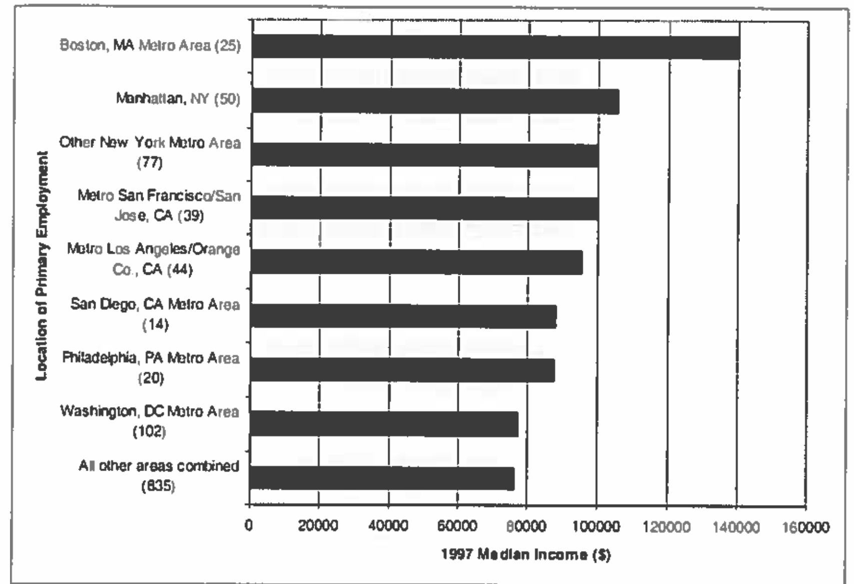


	<2	2-4	5-9	10-14	15-19	20-24	25+
N:	143	162	227	180	176	149	243
% of Total:	11%	13%	18%	14%	14%	12%	19%
Mean ($):	69,087	90,906	83,072	104,107	121,766	153,301	165,889
Percentile:							
90%	$93,200	$109,200	$128,000	$185,500	$228,800	$289,500	$239,500
75%	69,500	80,000	92,000	120,000	140,000	150,000	143,500
50%	59,000	68,000	72,000	82,500	94,000	100,000	100,000
25%	47,500	50,000	54,000	63,750	66,000	77,750	75,250
10%	36,800	39,000	45,000	52,000	50,000	57,700	52,100

Figure 2. Percentiles and descriptive statistics representing 1997 annual income as a function of years since obtaining the doctoral degree.

employed in such firms (M = $94,562; SD = $89,224, $p < .001$). Similarly, partners, principals, and owners of private research firms received higher incomes (M = $134,286; SD = $83,503) than others employed in those types of firms (M = $73,300; SD = $25,549, $p < .01$).

Years since doctoral degree. Figure 2 displays the 1997 annual incomes for SIOP members with doctorates as a function of the number of years since they received their degree. The data show that respondents who received their doctorates more than 20 years ago have the highest median incomes ($100,000). The data also show that the variability in annual income appears to increase over time.



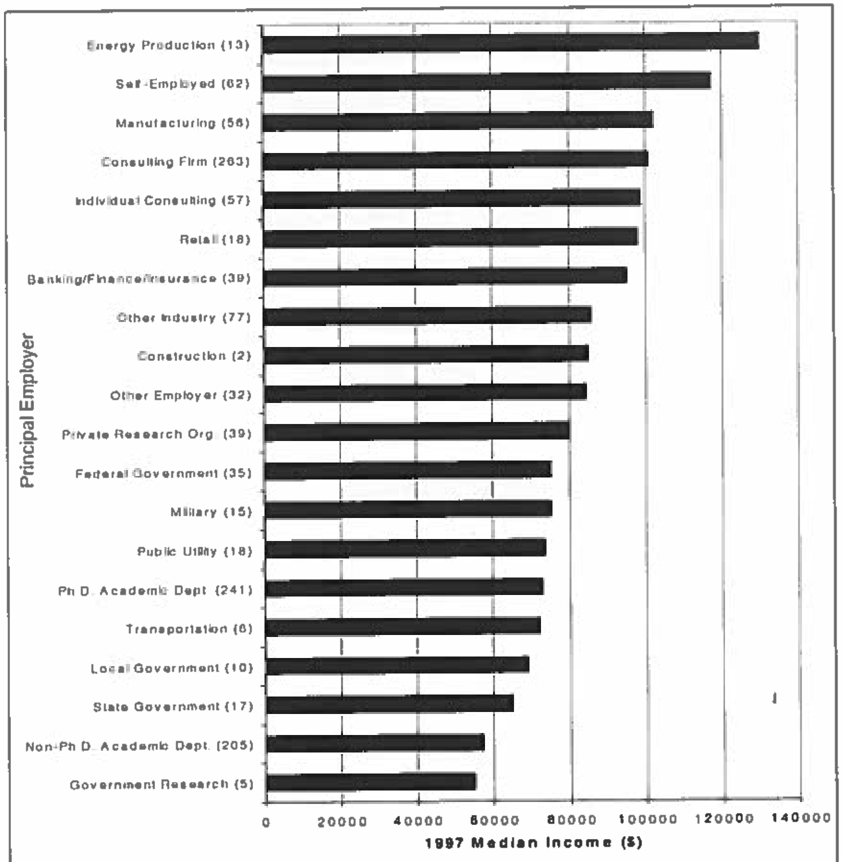
Note: Doctoral respondents only. Sample sizes are in parentheses.

Figure 3. 1997 median income for doctorates as a function of location.

Geographic location of employment. Similar to previous years, respondents located in the Total New York Metro area (Manhattan and Other Metro New York areas combined) received higher incomes than respondents employed in most other locations. Analysis of data from respondents with doctorates showed that the mean income in Manhattan ($180,483) was higher than for any other location and exceeded the total sample mean ($113,817) by 58.6%. The mean income in the Boston area ($153,000) was the second highest and 34.4% higher than the total sample mean. Other areas which had means higher than the total sample mean were Los Angeles/Orange County Metro Area ($136,667), San Diego Metro Area ($144,786), and Other New York Metro Area ($133,038)

In contrast to mean incomes, the Boston median income was higher than that for Manhattan and other areas (see Figure 3). The median incomes for respondents employed in each of the Metro areas and major cities exceeded the median income for other areas not specified ($76,000). The median income for Boston ($140,000) was 84.2% higher than the median income for other areas not specified, and 32.7% higher than the median for the Manhattan metro area.

Type of principal employment. A majority (58%) of the survey respondents with doctorates identified their principal employer as either a consulting firm (n = 270), a Ph.D.-granting academic department (n = 247), or a non-Ph.D.-granting academic department (n = 210). Figure 4 shows that those who worked for an energy production company earned the highest median income ($130,000), followed by respondents who were self-employed ($117,500). Respondents employed in government research organizations ($55,000) and non-Ph.D. aca-

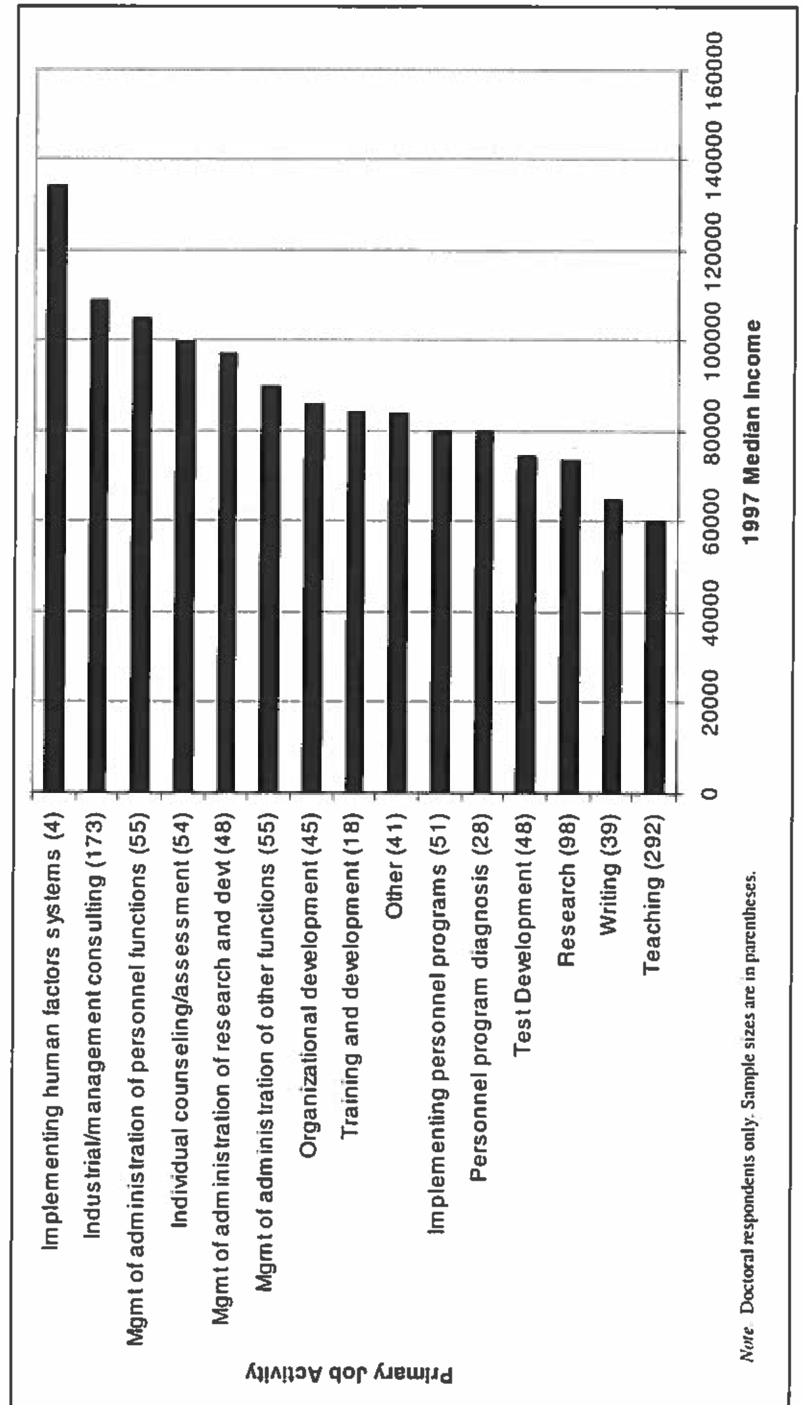


Note: Doctoral respondents only. Sample sizes are in parentheses.

Figure 4. 1997 median income for doctorates as a function of principal employer.

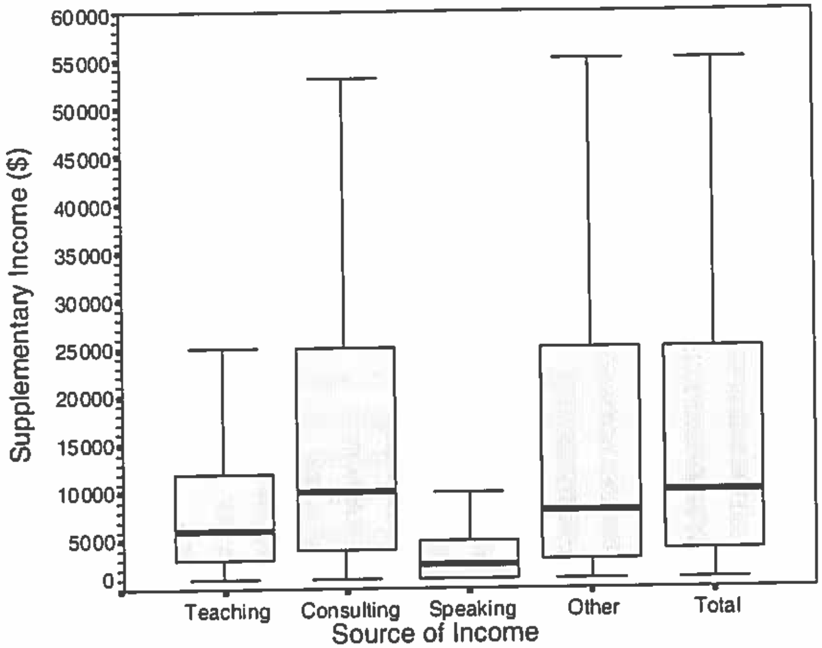
demic departments ($57,000) reported the lowest median incomes. In addition, respondents with doctorates employed in academic business departments reported higher median incomes ($80,000) than respondents employed in psychology departments ($56,000).

Primary job activity. Respondents were asked to indicate the percentage of time they typically spend on certain professional activities. In this study, primary job activity was classified as spending 26% or more time on a job activity. Unfortunately, the broad item response category of "26% to 75%" precluded the ability to accurately identify those who spent a true majority of their time (51% or more) on a certain activity. Figure 5 shows that respondents with doctorates involved primarily in the implementation of human factors design and systems reported the highest median income, $134,000 ($n = 4$); however, this sample size is not large enough to suggest that this is a highly reliable estimate of income for this field. Given the sample sizes for the different cat-



Note. Doctoral respondents only. Sample sizes are in parentheses.

Figure 5. 1997 median income for doctorates as a function of primary job activity.

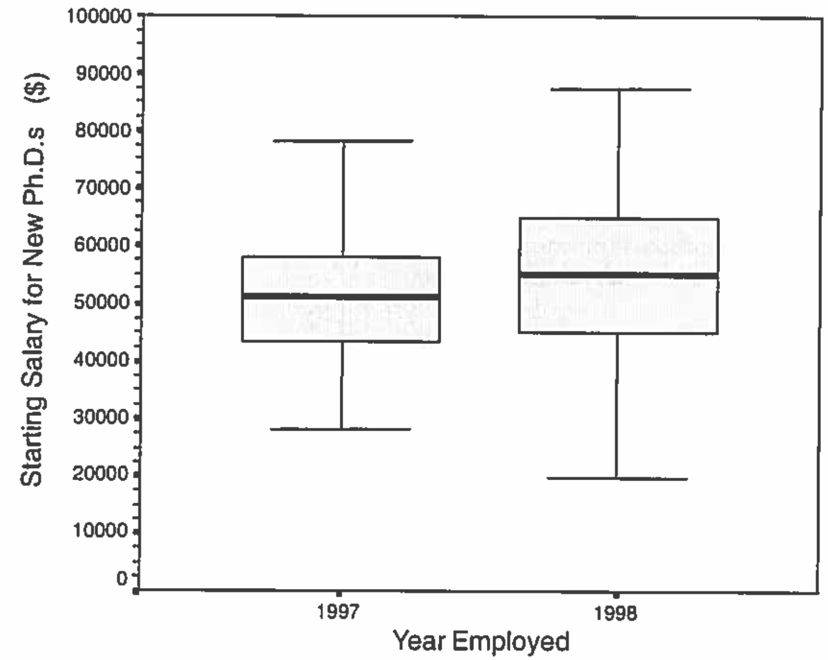


		Teaching	Consulting	Speaking	Other	Total
N:		169	320	60	115	490
Mean:		$31,160	$36,381	$6,600	$22,365	$40,563
Percentile:						
	90%	$25,000	$60,000	$19,100	$60,000	$65,000
	75%	12,000	25,000	5,000	25,000	25,500
	50%	6,000	10,000	2,500	8,000	10,000
	25%	3,000	4,000	1,000	3,000	4,000
	10%	2,000	1,000	1,000	1,000	2,000

Figure 6. Percentiles and descriptive statistics representing the sources of and amount earned in supplementary income.

egories, one can place greater confidence in the next highest median incomes for those who performed industrial or management consulting ($109,000, n = 173) and the management of administration of personnel functions ($105,000, n = 55). Those who indicated that they spent a majority of their time teaching had the lowest median income, ($60,000, n = 292).

Supplementary income. Of respondents with doctorates, 38.3% earned supplemental income from one or more sources other than their principal employer (see Figure 6). The median supplemental income for these respondents was $10,000; 10% of the respondents earned $65,000 or more in supplemental income. Consulting was the most frequent source of additional income and added the highest median ($10,000) and mean ($36,381) additional income.



		1997	1998
N:		95	105
Mean:		$50,600	$53,680
Percentile:	90%	$70,000	$75,000
	75%	58,000	65,000
	50%	51,000	55,000
	25%	43,000	45,000
	10%	34,600	33,200

Figure 7. Starting salaries for newly hired Ph.D.s by year of employment.

Starting salary for new Ph.D.s. The median starting salary for individuals with new doctorates employed by SIOP members in 1997 was $51,000 and in 1998, it was $55,000 (see Figure 7). Ten percent of those hired with new doctorates earned $70,000 or more. The median starting salary for individuals with master's degrees in 1997 was $39,500, and in 1998 it was $38,750. Thus, the median starting salary for individuals with master's degrees decreased by 1.9% since 1997, whereas the median starting salary for those with new doctorates increased 7.8%. It is not known whether these individuals with new doctorates or master's degrees were employed in the field prior to receiving their degree.

Highest primary income (total sample). Respondents in the top 5% of the income distribution reported annual incomes of $250,000 to several million dollars. These respondents tended to be male, aged 45 and older, had doctorates (95.7%), and began professional employment more than 19 years ago. A majority of these high-earning respondents held consulting jobs (40.8%). These characteristics are very similar to those for the top 5% of the income distribution in the 1994 survey.

Job change. A total of 134 respondents (9.6% of the total sample) changed jobs during 1997. Annual income tended to increase with job changes. For these respondents, the median annual income before the job change was $62,000, and after the job change it was $75,000.

Predicting Annual Income

Analyses of Pearson bivariate correlations showed that several variables are positively associated with 1997 annual income ($p < .05$), including the following: (1) gender ($r = .11$, male = 1, female = 0); (2) age ($r = .16$); (3) years of work experience ($r = .21$); (4) employment in industry ($r = .08$) or a consulting firm ($r = .07$); (5) employment in higher-cost urban geographic locations ($r = .06$); (6) status as a SIOP fellow ($r = .06$); (7) status as an owner, partner, or principal of a consulting or research firm ($r = .21$) ; (8) employee work status ($r = .06$, full time = 1, part time = 0); and (9) tenure at primary job ($r = .09$). Negative correlations were found for working in: (1) a psychology department ($r = -.08$); (2) university with or without a Ph.D. program ($r = -.07$); (3) or a government organization ($r = -.06$).

A simultaneous regression was conducted to determine the factors that predict annual income. When all available variables were entered into the analysis, only one variable was determined to be a significant predictor ($p < .05$) of 1997 income (i.e., status as an owner, principal, or partner). This model accounted for 11% of the variance ($p < .05$) in 1997 income (adjusted $R^2 = .04$).

Because the "ownership" variable had a small sample size, it restricted the degrees of freedom for the regression to 445; therefore, a second regression model was tested that excluded this variable ($df = 1052$). With all of the remaining variables entered into the analysis, seven were significant predictors ($p < .05$) of 1997 annual income. The number of years of professional work experience and APA Fellow status were positively related to 1997 annual income. APS Fellow status (relative to the reference category of APS member status) and employment in a university with or without a Ph.D.-granting department, in a government organization, or in a private research firm or other job (relative to the reference category of employment in a consulting firm) were negatively related to 1997 annual income. This model accounted for 9% of the variance in incomes ($p < .001$; adjusted $R^2 = .06$).

Ambiguity in Research: Not Necessarily a Bad Thing

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> The significant discoveries, the best science, requires us to be more venturesome and heretic in research design, and to explore fundamental questions without knowing the answer in advance. The worth of the research outcome is measured by surprise. The greater the surprise, the more interesting the result, and the greater the new knowledge about organizations (Daft and Lewin, 1990)

In a recent issue of *TIP*, Holland, Hogan, and Shelton (1999) provide a harsh, yet honest outlook as to why psychologists are often negatively perceived by the public. In their introspective review, the authors suggest the use of psychological jargon and lack of clearly defined constructs contributes to our unpopular image. In addition, they proffer the disregard of measurable data as detrimental to our reputation with the public (i.e., business, government). To overcome these issues, Holland et al. (1999) suggest spending more time operationally defining the constructs and making measurement decisions based on data. Although I agree with their suggestions (for the most part), I am troubled with Holland et al.'s contention suggesting "... without common definitions, it is impossible to establish convincing generalizations and meaningful relationships between variables (p. 35)." As a psychologist, I agree with the methodological desirability of precision when measuring organizational constructs. However, as an I-O practitioner, I understand that organizations are comprised of robust, multidimensional interactions occurring at the individual, group, and organizational levels. In fact, the actual equivocality of meaning experienced by real people is part of the very dynamic of organizational life. Therefore, the complexity of the organization and purpose of the research should decide the level of precision and/or ambiguity present in the exploration.

The purpose of this response is to discuss these issues and consider the utility and appropriateness of ambiguity in a research design. First, I will discuss precision and the inherent flaws that accompany a rigidly defined construct. Then I will introduce ambiguity as a research tool and present an example from the literature when ambiguity was found to be helpful. Finally, I will conclude with an emphatic assertion that we should refrain from discounting the use of ambiguity and balance the two designs within research.

Precision Vision

Psychologists often argue that to further scientific knowledge we must precisely define the constructs in question. For example, Holland et al. (1999) suggest that communication will be unsuccessful unless essential concepts are

clearly defined. St. Clair and Quinn (1997) report precision can be useful, but also has the capability to close down dialogue. When too much attention is directed toward definitional precision, researchers lose sight of the initial purpose of the investigation. Moreover, researchers' designed constructs may impose a reality on the Ss population that doesn't exist (which is part of the argument for more qualitative research approaches). For example, researchers often spend more effort building an argument for their interpretation of the construct than time spent designing the study. Weick (1979) notes that researchers often forget construct measurement is only a means to understanding. Once the organization is forced into a countable form, it's stripped of what made it worth counting in the first place (Leach, 1967). Such a hazard is especially dangerous when precision overtakes a nascent research domain. Kuhn (1962) notes normal science establishes a paradigm for a way of thinking about a phenomenon. Once institutionalized, the shared paradigm becomes a basis of scholarly conviction. In the worst case scenario, a research domain may be adversely affected by positivist techniques that trivialize research with concern for minor definitional problems unconnected with relevant issues (e.g., Mills, 1959).

Ambiguity as a Research Tool

Before we can agree on a precise, clear operationalization of a construct in question, we must fully understand what we are researching. Such an understanding commonly requires concerted attention to the ambiguity inherent in the exploration (St. Clair & Quinn, 1997). Assuming the question is even worth asking, Daft and Lewin (1990) suggest why ask the question if the researcher understands the phenomenon well enough to operationally define the constructs, state hypotheses, and control confounds. Similarly, Kirk and Miller (1986, p.17) note "... in order to test a hypothesis, the investigator must already know what he or she is going to discover." Thus, constructs that allow some degree of interpretation may not only benefit from researchers' willingness to scientifically test the phenomenon, but also extend our knowledge and understanding in new and creative ways. It is when the research "focus becomes so tightly constrained that there is no disagreement about our constructs that we run the risk of failing to obtain creative insights into phenomena" (St. Clair & Quinn, 1997, p. 102).

Consider for example implementing an organizational change process without some degree of ambiguity. Quinn and colleagues (St. Clair & Quinn, 1997; Spreitzer & Quinn, 1996) discuss the Ford-University of Michigan LEAD Program as an example when ambiguity was appropriate. The goal of the program was to empower middle management to make important organizational changes and become better leaders. The managers received a week of leadership and organizational change education. At no time were they provided a definition of empowerment. Over a 6-month period, managers were urged to empower themselves and make organizational changes. Of 191 LEAD managers involved in the study, 17% made changes in their interpersonal skills, 21% made changes that improved their business unit, 16% made changes at the organizational level while another 36% performed more "global" organizational changes. The authors concluded if they would have provided an empowerment definition, managers might have added an evaluative component that would have restricted their range of thought. Rather, leaving empowerment equivocally defined, managers created their own understanding of empowerment by re-evaluating themselves, managerial roles, and the organization.

The above discussion is not intended to suggest that precision is the death knell of I-O psychology; however, when we continually extol and reward (i.e., publish) scholars for contributions that are irrelevant to real world problems, we are in fact contributing to our positivist image. In the eyes of the practitioner, this "focused" scholarly research is of little use in a manager's attempt to empower or motivate the workforce. We have to do a better job of relating our work to the practicing manager.

A Question of Balance

It is my argument that both precision and ambiguity can be utilized beneficially in organizational research. Without a doubt, precision has allowed the field to empirically examine otherwise amorphous psychological constructs. In addition, without some degree of precision scholars would be divided into camps unable to communicate with one another. Finally, precision allows multifaceted constructs (e.g., conscientiousness) to be segmented into empirically discrete phenomenon. On the other hand, ambiguity is essential when exploring underdeveloped domains to gain a broad understanding of the phenomenon in question. In addition, ambiguity is a useful tool when implementing organizational change processes, and is a pathway to innovation. As professionals in a field whose reputation and image depends on our furthering scientific knowledge while also increasing managers' "bottomline," we must be aware of the impact of our explorations. Precision is helpful in certain situations; however, ambiguity is not necessarily a bad thing!

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Education Establishment Bias? A Look at the National Research Council's Critique of Test Utility Studies

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While there exist "gatekeeping" tests for high school students going to college in the United States (the Scholastic Assessment Test [SAT] and American College Test [ACT]) and for high school students entering the skilled trades (apprenticeships plus licensing exams), in most U.S. states, there is no test for the other high school graduates, other than low-level "minimum competency" exams. Those high school graduates in or entering the "real world" in something other than a skilled trade are either tested at the discretion of individual employers with whom they seek work, or they are not tested at all. Moreover, there exist no gatekeeping exams at all for college graduates.

Much research evidence, manifest here and in other applied psychology journals, supports the proposition that a fairly standard general achievement or aptitude test would offer much of the predictive power to employers that the ACT and SAT offer college admissions counselors, if only employers would use one (e.g., Bishop, 1988; Boudreau, 1988; Hunter & Hunter, 1984; Schmitt et al., 1984). In their own national surveys, college admissions officers assert more confidence in SAT and ACT scores than in high school grade point averages. (National Association of College Admission Counseling, 1996) They are not devious, ignorant, or autocratic people, these college admissions counselors. They are likely more liberal, tolerant, and worldly than most of us, and they read the arguments on both sides of the issue, but they know from experience and research that general achievement or ability test scores are better predictors of performance than are high school grade point averages.[1]

Proposed expanded use of the General Aptitude Test Battery

For years, it was proposed that the federal government's General Aptitude Test Battery (GATB) might be used to provide private employers the same kind of useful information the federal government and college admissions counselors receive. It seems fairly appropriate. The GATB is used to screen and place job applicants in the enormous labor pool of the U.S. federal government (see Hartigan & Wigdor, 1989, chapters 1,2,3)

The federal government, of course, has had an interest in knowing how useful the GATB is. Hundreds of predictive validity studies have been performed on data sets incorporating GATB scores, usually correlated with one or more job performance measures—that is, supervisor ratings, output-per-time period, promotions, earnings increases, and so on. Most readers are probably at least generally familiar with utility analysis, Brogden's formula, which provided a base for its empirical study, and the now fairly predictable conclusions of hundreds of related studies—scores on general ability tests are better predictors of job performance than any other single predictor.

Essentially, general achievement scores probably demonstrate how hard a potential employee worked in school and how high the school standards were. Grade point averages only tell an employer how well a potential employee performed in school relative to other students at her school, if that. Grade point averages are norm-referenced measures, normed at the school level. Given the absence of common or enforced standards in U.S. schools and the attendant enormous variety in their quality, it is no wonder that general achievement test scores explain a large amount of variance in regressions of job performance on groups of predictor variables that include school grade point averages.[2]

John Bishop estimated that using a generalized achievement or aptitude test for job selection would produce an *annual* benefit of $850 to $1,250 per worker. Using Bishop's assumptions for calculating the present value (baseline at age 18 and, thus, a 45-year working life, and a 5% real discount rate) I calculate a range of present values between about $16,000 and $23,000 per worker over their working lives. By comparison with a cost of less than $50 per worker for such tests, the benefits loom enormous. (Bishop, 1988, 1994)

Bishop is estimating "job matching" or "allocative efficiency" benefits. John E. Hunter claimed benefits on a similar scale for "job selection" or "predictive validity" (Hunter, 1983). In efficient job matching, all workers in a market get assigned to jobs such that aggregate output is maximized. In efficient job selection, only the best workers get hired in the first place. Hunter claimed a potential benefit to the U.S. economy of about $80 billion (in 1980 dollars) from a 1-year application of the GATB for job selection in the entire U.S. labor market. (Hartigan & Wigdor, 1989, pp. 237–238) That benefit calculates to about $20,000 per worker.

In the late 1980s, the U.S. Department of Labor seriously considered promoting the use of the GATB throughout the U.S. Employment Service to screen all job applicants for any jobs, not just those in the federal government. The employment service would then provide employers seeking workers each job applicant's GATB scores. (Hartigan & Wigdor, 1989, pp. iii–x)

The National Research Council Committee

The Labor Department requested that the National Research Council (NRC) review the issue and advise it on how to proceed. The NRC formed a Committee with an unusual membership. None of the hundreds of industrial-organizational psychologists who had studied the issue of the practical use of the GATB in testing for employment were invited. Of the 13 members, none were full-time members of university psychology departments (1 was part time in a psychology department). Four members, including the vice-chair, were education school professors and one worked for a consulting firm full time on education issues. The others were a mix from government, industry, and academe.

This Committee wrote a report, *Fairness in Employment Testing: Validity, Generalization, Minority Issues, and the General Aptitude Test Battery*. The tone of the document is not particularly respectful of the rich tradition of erudite research in utility analysis by I-O psychologists. The committee criticized the validity studies of the GATB in several ways, driving down the predictive validity coefficient through a variety of rationales. They conceded a coefficient of 0.22, half the level of the highest, unadjusted predictive validity claimed for the GATB (Hartigan & Wigdor, 1989, pp. 134–171). Cutting the estimates of John Hunter above in half, however, produces present values of about $10,000 per worker lifetime, still enormous by comparison with the meager cost of a standardized test.

Then, in their chapter addressing the economic claims made for the GATB, the Committee claimed flatly that there are no job selection benefits to testing because the U.S. labor market is a zero-sum game. If one employer selects better workers by using GATB scores, the Committee argued, other employers will get the other workers and it's all a wash. All workers work somewhere in the economy.

Analyzing the National Research Council Report

Several aspects of the NRC report *Fairness in Employment Testing* struck me, in addition to its bitter tone: (a) the odd composition of the committee; (b) the odd, repeated insistence of the committee that there was only meager evidence for the benefits of testing, in the face of hundreds of studies in personnel psychology research demonstrating those benefits; (c) the theory of the zero-sum labor market; and (d) the logical contradiction in the report's primary assertions that: all jobs are unique so *general* ability tests will be invalid for each, but there is no such benefit as a "selection effect" because any worker's abilities will be equally useful anywhere they work, no matter what their training and no matter what the field of work.

The Odd Composition of the Committee: Part I

Last year, I telephoned Alexandra Wigdor, the NRC study director and a co-editor of the report, to ask why researchers in personnel psychology were unrepresented on a panel about personnel testing and education school professors were so well represented. She asserted that there was no deliberate effort to exclude personnel psychologists or include education professors. They had sought out the best researchers they could find. It would have been improper, she continued, to have John Hunter on the committee, for example, as the committee would be focusing on his work, and he could be presumed to be biased in favor of it.

The NRC may not have been concerned about having committee members who could easily be presumed to be biased against Hunter's work, however.

The co-chair of the committee, Lorrie Shepard of the University of Colorado's School of Education, had just 2 years before conducted a "cost-benefit" analysis of a new basic literacy test for teachers in Texas in which the analysis was, if not ideologically biased, then very poorly done. Shepard's analysis contained arbitrary inclusions or exclusions of benefits or costs (see Phelps, 1996; Shepard, 1987).

For example, she counted the dismissal of teachers found to be illiterate as a benefit, because students would then be taught by the literate teachers who replaced them. However, in the fine print, one discovers that she decided that "nonacademic" teachers shouldn't be counted in the benefit calculations. Which teachers were "nonacademic?"—kindergarten, music, art, ESL, industrial arts, business education, physical education teachers, and counselors. No matter that the citizens of Texas wanted those teachers to be literate; Shepard decided they didn't need to be. Shepard also miscalculated the value of time by counting the benefit of the dismissed teachers for only 1 year, even though they were dismissed for good and the benefits would string out years into the future.

Shepard also counted costs of teachers' time spent studying for the tests, but no benefit to that studying, as if the teachers learned nothing by studying. Indeed, while she alleged many costs, she counted only that one benefit, from replacing illiterate teachers. There are at least several others.[3]

After this exercise in maximizing costs and minimizing benefits was complete, Shepard declared that the teacher test cost the citizens of Texas $53 million. Just adjusting for the mistakes in her own calculations changes the net present value to a positive $333 million. That's without adding the benefits she never mentioned.

The economists Lewis Solmon and Cheryl Fagnano estimated two other major benefits ignored by Shepard: the long-term labor-market benefits resulting from students learning more from more able teachers; and the attraction to the teaching profession of more able applicants as a result of higher professional standards (Solmon & Fagnano, 1990). They estimated these benefits to be as large as a billion dollars in present value. In another study, the economist Ronald Ferguson found teachers' literacy test scores to be the strongest predictor of Texas' minority students' success in school, stronger than any background variable (Ferguson, 1991).

The Odd Composition of the Committee: Part II

Though the National Research Council committee convened to investigate utility in personnel testing, none of the academic personnel psychologists involved in that research were included among its members. By 1989, there were hundreds who had conducted test utility analyses. Alexandra Wigdor implied, then, that the best researchers available to evaluate this personnel psychology research just happened to be education professors.[4]

Out of curiosity, I made some calculations with binomial probabilities of the odds of picking only education school professors at random from a large pool of test researchers. Let's assume that personnel testing experts are equally distributed across places where personnel psychologists or education school faculty work. That's a big IF, but I want to be conservative. There are about 1,000 college professors in the National Council for Measurement in Education and about 3,900 persons total in the wider-scope Measurement and Research Methodology division of the American Educational Research Association. Similarly, there are about 1,500 persons in the American Psychological Association's Evaluation and Measurement division and over 5,000 in the Society for Industrial-Organizational Psychology.

Depending upon whether one circumscribes the fields narrowly or broadly, personnel measurement experts outnumber school testing experts by a ratio of about 5.7 to 4.3. What are the odds that four school testing experts are the best qualified? Using the standard binomial probability formula, I calculate odds of only 0.03. If personnel measurement experts happen to be more qualified to judge personnel testing issues, the odds drop below even 0.03.

Would the federal government hire microeconomists to evaluate macroeconomic problems? Would it hire inorganic chemists to study an issue in organic chemistry? Would it hire personnel psychologists to evaluate school curricula? Why did the federal government hire education professors and education consultants to evaluate personnel testing issues?... especially given that the United States boasts some of the world's most advanced research and dozens of the world's most respected researchers in personnel testing?[5]

The Meager Evidence of Benefits Argument

Consider the following quotes from ***Fairness in Employment Testing***:

> It is also important to remember that the most important assumptions of the Hunter-Schmidt models rest on a very slim empirical foundation....Hunter and Schmidt's economy-wide models are based on simple assumptions for which the empirical evidence is slight (p. 245).
>
> Some 'fragmentary' confirming evidence that supports this point of view can be found in Hunter et al. (1988)... We regard the Hunter and Schmidt assumption as plausible but note that there is very little evidence about the nature of the relationship of ability to output (p. 243).
>
> There is no well-developed body of evidence from which to estimate the aggregate effects of better personnel selection...we have seen no empirical evidence that any of them provide an adequate basis for estimating the aggregate economic effects of implementing the VG-GATB on a

nationwide basis (p. 247).

...primitive state of knowledge... (p. 248).

Was the NRC Committee correct about the paucity of research? From the 1960s on, hundreds of studies have been conducted by dozens of researchers in personnel psychology affirming positive net benefits to the use of general ability testing in employee hiring.

There are so many studies it becomes more efficient to count just the *meta analyses*. A 1988 meta analysis by John Boudreau, then at Cornell University, covered 87 such studies (Boudreau, 1988). A 1984 meta analysis by Schmitt, Gooding, Noe, and Kirsch covered over 300 studies (Schmitt et al., 1984). A 1997 paper by Schmidt and Hunter presented the validity of 17 different selection procedures over 85 years (Schmidt & Hunter, 1997). Hunter and Hunter conducted a *meta analysis of 23 meta analyses* in 1984, summarizing thousands of validity studies (Hunter & Hunter, 1984)

The Zero-sum Labor Market Argument: Part I

The NRC Committee asserted that, contrary to the claims of personnel psychologists, there are no job selection benefits to testing; the U.S. labor market is a zero-sum game. If one employer becomes more efficient in selecting good workers by using job applicants' GATB scores in making selection decisions, the Committee argues, some other employer will end up with those less efficient workers and it's all a wash. All workers work somewhere in the economy (Hartigan & Wigdor, 1989, pp. 241–242).

The zero-sum labor market argument is erroneous, in my opinion. First, there are the unemployed, comprising about 5% of the labor force. The Committee cites the fact that the unemployment *rate* is fairly stable over time as evidence that the unemployed population is stable (Hartigan & Wigdor, 1989, 235–248). While the *rate* may vary only within a narrow band, the labor market churns people through the ranks of the unemployed and marginally employed over and over.

Using figures from the Bureau of Labor Statistics for the average duration of unemployment (16.6 weeks) and the average number unemployed in 1995 (7.4 million), I estimate the number of individual "spells" of unemployment for 1995 at 23.2 million.[6] That totals to 17.5% of the labor force unemployed *at some time during the year*. (U.S.BLS, Tables 2, 31, 35)

Another 3.3% of the labor force in 1995 were "economic part-time" employees. That is, they wanted to work full time but could not find full-time employment.[7] Add them to the 17.5% above for a proportion of the labor force close to 21%. (U.S.BLS, 1968–96)

Then, there remain "contingent workers," whose number is very difficult to estimate. Anne E. Polivka calculates estimates ranging from 2.7 million workers in jobs less than a year, who expect the jobs to last no longer than 1 year

more, to 6 million workers who simply do not expect their jobs to last. If we subtract the subpopulation of persons classified as "independent contractors or self-employed" from her upper bound, for the reason that those people have chosen a necessarily contingent occupation, we calculate 5.3 million workers who believe their jobs are temporary and probably do not want them to be. That total comprises 4% of the labor force. (Polivka, 1996)

These three subpopulations above—unemployed at some time during the year, economic part-time, and contingent workers—are 25% of the labor force.

That still, however, does not include the large number of workers employed outside their field of training, like philosophy Ph.D.s who work as computer programmers, college graduates in international affairs who work as secretaries, and so on. These workers have jobs that require a lower level degree for entry. These workers are "underemployed."

Finally, there remain an estimated 8.6% of the adult population out of the labor force who have quit looking for work out of discouragement for their prospects.

The National Research Council assumed that if a worker didn't get selected for a job, she would get selected for a different job and that other job would be equivalent in the most important ways to the job she didn't get. That assumption is untenable. The person not selected for the first job could end up unemployed ($p = .175$), unwillingly working part time ($p = .033$), working in contingent employment ($p = .04$), underemployed ($p = ?$), working in a field outside their training, or out of the labor force entirely. This is a large group of adults.

The Zero-Sum Labor Market Argument: Part II

Let's pretend that two college students graduate at the same time from different colleges with degrees in organizational psychology and enter the job market as Worker A and Worker B. They have approximately the same grade point averages, but Worker A attended a college with higher standards, followed courses of more rigor, studied more, and studied harder than Worker B. Thus, while both workers A and B accumulated human capital in the field of organizational psychology and in general abilities, Worker A accumulated more than did Worker B, a human capital surplus. This surplus is not detectable from the college transcripts, however, or letters of recommendations, or work experience, which are the same for both A and B. The surplus is detectable only through testing.

I have diagrammed a (very) simple labor market for these two workers and two employers, X and Y, in Figure 1. The diagram specifies various hiring scenarios: under poor or strong economic conditions; with one or both jobs being in or not in the field of the workers' training; and with both, one, or neither employer testing the workers.

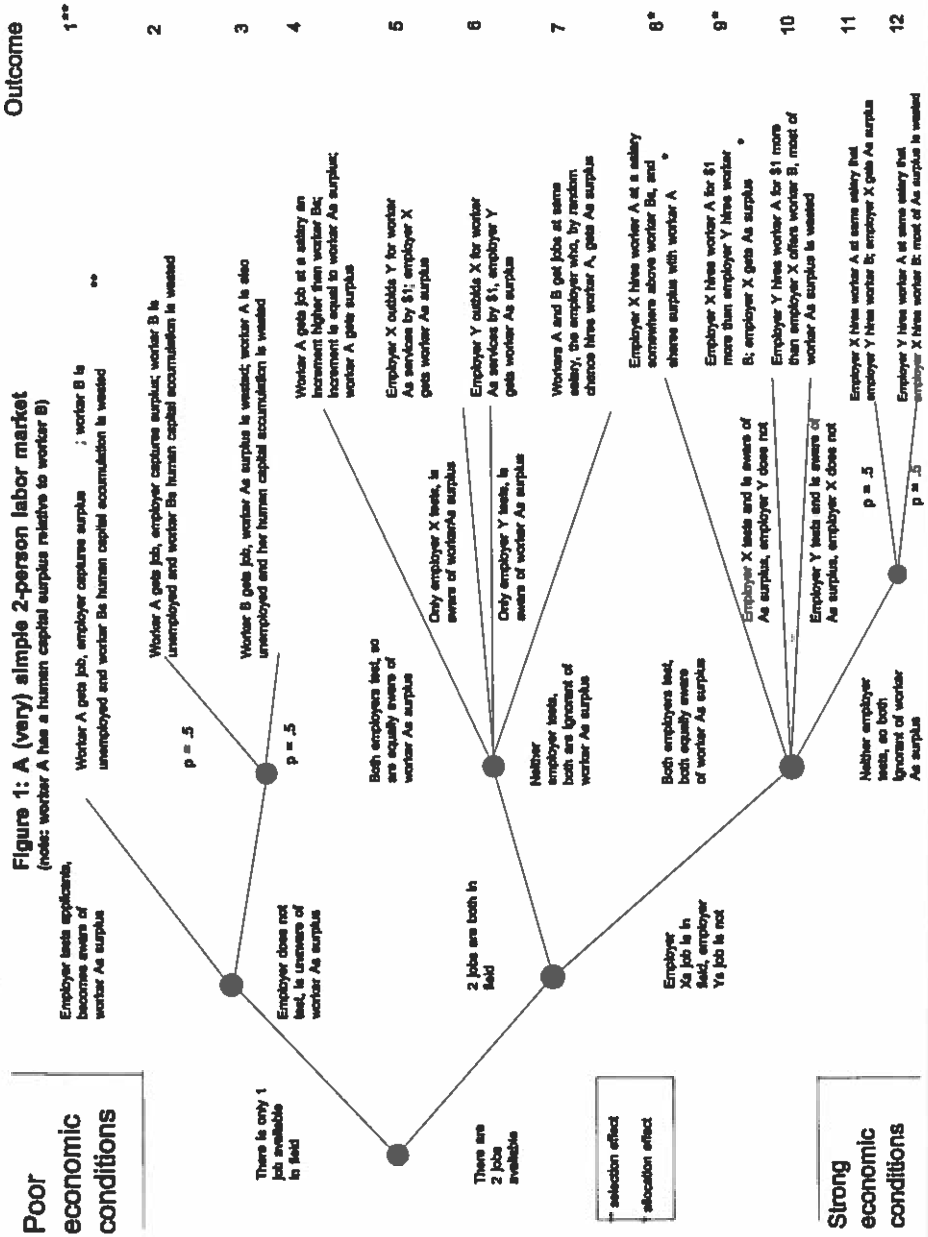

Figure 1: A (very) simple 2-person labor market
(note: worker A has a human capital surplus relative to worker B)

In strong economic conditions, both employers have jobs available; in poor economic conditions, only one employer has a job available.

If only one employer tests, that employer will become aware of Worker A's human capital surplus and will want to hire A but will only have to offer a slightly higher salary than the other employer offers Worker B. This is because the other employer is ignorant of Worker A's surplus and so sees workers A and B as equally qualified. The employer knowledgeable of Worker A's surplus will, thus, capture Worker A's surplus in the form of higher quality work, without having to pay more than a nominal amount for it. If both employers test, and both are aware of Worker A's surplus, then Worker A can bid them against each other up to the point where the anticipated benefit of her surplus is fully incorporated in her salary offer. With full information, Worker A is compensated for her surplus. If an employer's job is in the graduates' field of study, they should be more willing to pay for Worker A's surplus because she has more need of it.

The 12 possible outcomes of these various permutations are explicit in Figure 1. I propose that 3 of these outcomes contain benefits that can be ascribed to job selection and allocation effects. Outcome 1 contains the job selection benefits and outcomes 8 and 9 contain the job allocation benefits.

For outcome 1: Employer X is the only one with a job available in a poor economy; she tests the two job applicants; and Worker A is hired after scoring higher on the test. Because Worker A must take whatever salary is offered, the employer gets to pocket Worker A's human capital surplus. Without the test, however, employer would have hired Worker A with only a .5 probability and, thus, only a .5 probability of capturing the surplus. The test increases Employer X's probability of putting Worker A's surplus to use from .5 to 1.0.

For outcome 8, employers X and Y both have jobs available, but Employer X's job is in the same field so she needs Worker A's surplus more than Employer Y does. In this case, both employers test, and Employer X hires Worker A at a salary somewhere above Worker B's, and shares Worker A's surplus with Worker A. If Employer X did not test, her probability of capturing part of Worker A's surplus would be only .5, while the probability that some of Worker A's surplus would be wasted (if Worker A worked at the job outside her field) would also be .5. Thus, by testing, employer A increases the probability of putting the human capital surplus to use from .5 to 1.0.

For outcome 9, only Employer X tests and becomes aware of Worker A's surplus. She hires Worker A for only a slightly higher salary than was offered Worker B. By testing, Employer X increases the probability of hiring Worker A (and putting her surplus to use) from .5 to 1.0.

Outcomes 1, 8, and 9 have much in common. Each increases the probability, through testing, of putting Worker A's human capital surplus to use rather than letting it be wasted. Productive assets are employed, rather than left unused. How, then, is outcome 1 an example of a "job selection" benefit, while outcomes 8 and 9 are examples of "job allocation" benefits?

Perhaps the best way to understand the difference between the two lies with considering Worker B, the one who gets less when the test reveals Worker A's surplus. In "job selection" outcome 1, Worker B cannot get a job, so her human capital accumulation is wasted. In the case of the "job allocation"-affected outcomes 8 and 9, Worker B ends up with a job, but it is not in the field for which she trained. Worker B spent years at a university majoring in organizational psychology and now waits tables; the human capital accumulation from her college years is wasted. She didn't need to go to college to learn the job of a server. Indeed, she could have spent those years as a server and would have been better off financially. The National Research Council would say that one employer's loss is the other employer's gain. But, what does the restaurant gain from Worker B's college training? It doesn't.

The NRC Committee also attempted to diminish the purported economic benefits of allocative efficiency, or job-matching. They chopped down a Hunter and Schmidt estimate of the benefits of 1.6 to 4% of GNP to just 1%, under the assumption that not all employers would use tests like the GATB to select employees nor use the tests optimally. Yet, 1% of the GDP is still over $80 billion. (Hartigan & Wigdor, 1989; pp.243–246)

Capturing even just the per-worker proportion of that 1% of the GDP worth of potential benefits would be large, far larger than the meager cost of administering a test. In an economy of $8 trillion GDP and 125 million people in the labor force, 1% equals $640 per worker of potential benefits. That's not nothing.

Logical Contradiction of Homogenous Jobs and Unique Tests

The NRC Committee claimed no selection benefits to employment testing:

> Employment Service use of the VG-GATB will not improve the quality of the labor force as a whole. If employers using the Employment Service get better workers, employers not using the Employment Service will necessarily have a less competent labor force. One firm's gain is another firm's loss... The economy as a whole is very much like a single employer who must accept all workers. All workers must be employed (Hartigan & Wigdor, 1989, pp. 241–2).

Essentially, the NRC argued that skills measured by employment tests are equally useful in all jobs. That, of course, assumes that general intellectual aptitudes or abilities are equally valuable in all lines of work, and covary equally with all other relevant skills, say those used in brain surgery or street sweeping.

At the same time, in its chapter 8, "GATB Validities," the NRC Committee asserted that "Validities vary between jobs... GATB validities have a wide range of values over different jobs." In order for preemployment tests to be beneficial, they must be uniquely tailored to unique jobs (Hartigan & Wigdor, 1989, pp. 170–171).

The two assertions from chapters 8 and 12 are contradictory. The NRC Committee tries to have it both ways: Declaring the GATB to be invalid in predicting job performance because every job is unique and, at the same time, declaring selection effects moot because any worker not getting one job will get another and provide equal value to society.

Conclusion and Discussion

I have spoken with three persons intimately familiar with the activity of the National Research Council's Committee on the General Aptitude Test Battery. After considerable deliberation of the available evidence, I reach the following judgments.

One person claims that the Committee was deliberately set up to be a hostile committee. I think the odds are strong that that claim is correct.

Another person claims that the Committee considered only one personnel testing study from among hundreds in existence, yet made claims that implied they had considered all of them. I believe this assertion is also true.

The third claims that the Committee refused to consider some of the most basic and relevant evidence pertaining to personnel testing issues, such as: the ways in which the Hunter and Schmidt estimates of utility *underestimated* the benefits of testing; the true magnitude of the effect of range restriction on the utility estimates (for which the Committee refused to correct); the true value of average interrater reliability of ratings of .50 (they assumed .80, thus undercorrecting for criterion unreliability); and (pertaining to the NRC assertion that Hunter and Schmidt did not adjust their estimates for the time value of money, incremental validity, or what have you) the substantial research in personnel psychology that has explicitly considered all those issues (and found little difference in the direction or magnitude of the resulting utility estimates).

This is a serious charge, that those at the National Research Council responsible for the evaluation of testing issues were (and remain) biased. Yet, I believe it to be true, and I believe that any fair-minded person who looked at the evidence would agree.

The National Research Council is supposed to represent the pinnacle of objectivity, the "court of last resort" on controversial research issues. Alas, I believe, it represents neither on testing issues. It seems biased—biased in conformity with an "education establishment" perspective.

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31, 35, and unpublished tabulations.

Biography

Richard P. Phelps is an education economist based in Paris who writes on issues of testing and international indicators. The author would like to thank **Frank Schmidt**, Scott Oppler, **Deb Whetzel, Chris Sager**, and **John Hunter** for their help and advice. The author retains all responsibility for errors.

End Notes

1. For a deeper analysis on the net benefits of the SAT, see Phelps, R. P. (1999).

2. John Bishop has written much about how good high school students only get paid what they're worth after several years of having to prove themselves all over again in the workplace because there exits no good means of signaling their competence to employers at the outset. See Bishop (1994a)

3. See Phelps, 1996 for an explanation of several other errors in Shepard's analysis.

4. Only two members of the committee had any background in personnel psychology: one worked as an executive in a large corporation; the other worked in an administrative position at a university. Neither of them, however, was intimately familiar with the research on test utility, the studies of the GATB, and employee hiring. Several very well known personnel test utility researchers were included in the "Liason Group," but that group was little consulted and kept wholly unfamiliar with the secret deliberations of the committee.

5. Do education professors, in general, have policy preferences similar to the general public's, qualifying them to make policy decisions for the rest of us? Not on testing issues. See Phelps, 1999, pp. 1–2 and Conclusion, for a discussion of the Testing items in a 1997 Public Agenda poll of education professors.

6. At first thought, one might think that I am calculating the number of persons who are unemployed at some time during the year. While the estimate probably brings us close to that number, the estimate probably also subsumes a small number of spells that are shared by individuals. In other words, some persons may have more than one spell of unemployment in a year.

7. There is no average duration figure with which to calculate the number of persons who go through "economic part time" spells during the year. We have to settle for this lower-bound number for the number of workers who are at some time during the year forced to accept part-time employment when they would prefer full-time employment.

Work-Family Comes to the World of Sports

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The drastic economic and societal changes that have taken place over the past few decades have made conflict between work and family roles a major source of stress for many employees. In keeping with its standing as a pressing social issue, the study of work-family conflict has gathered great momentum in the past few years.

Much of the organizational research into work-family issues has indicated that employers can play a vital role in helping their employees balance the often-competing demands of work and family. In particular, evidence is beginning to accumulate that family friendly human resource policies, such as flextime, telecommuting, day-care services, parental leave, and job-sharing, can provide considerable benefit to both the employee and the organization. Employees can gain greater discretion over the use of their time and financial resources, and the organization can gain in terms of decreased voluntary absenteeism, decreased turnover, improved employee satisfaction, improved public relations, and an improved ability to attract and retain qualified workers in a tight labor market, especially for highly skilled employees (e.g., Galinsky & Stein, 1990).

Now that many businesses are recognizing that family friendly policies can be important for the bottom line, we are beginning to see examples of successful programs being instituted in a wide variety of industries, ranging from human services, manufacturing, and electronics (e.g., *Fortune* magazine's annual survey of the "Top 100 Companies to Work For"). If you look closely enough, some of these practices have even begun to emerge within the ultra-competitive industry of professional sports.

If the connection between work-family issues and professional sports does not seem obvious to you, you are not alone. There are two reasons why I began to think of these issues together. First, I am conducting my dissertation research on how employees use informal work arrangements to balance their work and their family lives, and I have been doing a considerable amount of reading into how fathers, in particular, manage the work-family pressures they face. Second, I am a complete sports fanatic. While avidly following major pro sports over the past year, three sports-and-family related events stuck out in my mind. These events have led me to the realization that even millionaire athletes struggle with work and family issues, and that they and their employers make minor, and sometimes major, accommodations in order to balance both work and family.

On-Site Day Care with Mark McGwire

Mark McGwire's achievements during the 1998 baseball season are nothing short of awe-inspiring. His 70 home runs obliterated the late Roger Maris's seemingly unbreakable single season record of 61 set back in 1961. Accordingly, McGwire, the first baseman of the St. Louis Cardinals, has been named both Baseball Player of the Year and Male Athlete of the Year by the Associated Press, and was named Co-Sportsman of the Year by *Sports Illustrated*. The magnitude of McGwire's personal achievements, combined with his personable and gregarious demeanor, allowed the sports fans of America to learn a lot about Mr. McGwire's life beyond baseball.

Mr. McGwire is a single, divorced dad, who shares custody of his 10-year old son, Matthew. McGwire has stated in several interviews that his favorite aspect of his historic home run chase was sharing the experience with his son, who accompanied McGwire in the dugout for most of the games leading up to his record-breaking 62nd homer.

There are several enduring images from the night that McGwire broke Maris's record: his swing, the roar of the crowd, his excited trot around the bases, the congratulations offered to him by the opposing team, his embrace of Sammy Sosa of the Chicago Cubs (who also pursued and surpassed Maris's record), the respect McGwire showed to Roger Maris's family, and the enthusiastic greeting his teammates gave him as he reached home plate. However, the defining moment of that night was when McGwire hugged and lifted his son, sharing and savoring the moment with him.

McGwire's son, however, would not have been able to stay in the St. Louis dugout for all those evenings if the Cardinals did not have an informal on-site day care policy, at least for the older children of its employees. If McGwire could not have taken his son with him to work, he would have had to arrange some sort of child care since McGwire's ex-wife lives in another city.

It would be a stretch to say that McGwire's performance would have suffered if Matthew was not by his side. However, it is possible to state that this team day-care policy, as informal as it was, did reduce a major stressor in his life, allowing him to focus on the task at hand. Further, McGwire has gone on record as saying that he wishes to remain a Cardinal for the remainder of his career, and he even took less money to play for this team because of how well the organization treated him.

Allowing the children of players to accompany their dads to work is apparently a common practice among many major league ballclubs. Interviews with second generation baseball players, such as Brett Boone, Ken Griffey Jr., and Todd Hundley, reveal that the time that they spent in their dads' workplace was instrumental in their ability to handle life in the major leagues later on.

It is refreshing to see, that in an industry as competitive as major league baseball, team ownership and management have informally arranged for their players to spend part of their time at work with their families. While the connection between this informal on-site day care policy and performance is tenuous, it has, at least, allowed for baseball players and their children to share some incredible baseball moments and spend some quality time together.

Parental Leave with John Olerud

John Olerud is the first baseman for the New York Mets. While he is not a superstar, he is widely respected as a solid player. His career highlights include winning two World Series championships with the Toronto Blue Jays and winning a batting title in 1993. Mr. Olerud was an important part of the 1998 New York Mets team which contended for the last National League playoff spot until the final game of the season.

While the Mets were embroiled in their race against the Chicago Cubs and the San Francisco Giants for the last playoff spot, Mr. Olerud's wife, Kelly, went into labor with the couple's first child, Garrett. The Mets management allowed Mr. Olerud and his impressive .343 batting average to leave the team to participate in Garrett's birth and to spend as much time away from the team as he felt he needed. In all, Olerud missed three games (5 days) for the Mets during this most critical time of the season. "The practice across baseball is that you miss three games... It's one of those understood things," said Mets General Manager, Steve Phillips. The Mets' manager, Bobby Valentine, did not (publicly, at least) put any pressure on Olerud to curtail his paternity leave. He was quoted in the *New York Times* as supportive of Olerud, "When it's proper, he will be here. John makes good decisions."

Although the Mets are clearly a better team with Olerud in the middle of their batting order, the team fared well during Olerud's absence. From the time he left the team until he returned, the Mets stayed even with the Chicago Cubs for the last playoff spot. In addition, Olerud's performance did not suffer as a result of his absence. In fact, he subsequently raised his batting average to .354 and ended the season with the second-highest batting average in the National League. It wasn't until the final week of the season, well after Olerud returned, that the Mets played poorly, and ended the season without making the playoffs. The Cubs eventually earned the final playoff spot.

It appears to be informal league policy that baseball players can miss up to three games as a sort of makeshift paternity leave at the birth of a child. This is comparable to Pleck's (1993) description of how fathers informally manage the boundaries between work and family, and how organizations provide certain avenues for these informal accommodations.

The Mets allowed Mr. Olerud the discretion to spend time with his wife and newborn child during the most crucial part of the season, where one small mistake could cost the team millions of dollars in playoff revenues. Even though the team failed to reach the playoffs, the informal paternity leave policy did not appear to hurt either Olerud's or his team's performance. It remains to be seen, however, whether the Mets will realize a long-term benefit to their consideration of Olerud's needs through reduced turnover, a better reputation among potential free-agents, and reciprocated loyalty when Olerud's next contract is negotiated.

Job-Sharing with Jimmy Johnson

Jimmy Johnson has earned a reputation as being a brilliant, intense, and very dedicated football coach who works as hard as anyone to prepare his team for battle each Sunday. He won a National Collegiate Championship with the University of Miami in 1987 and two Super Bowl rings with the Dallas Cowboys in 1992 and 1993. Currently, he is the coach of the Miami Dolphins, whom he has guided to the playoffs each of the past 2 years.

Coach Johnson has admitted in several televised and printed interviews that he often logs 16-hour days when preparing for his weekly opponents. He is a self-admitted workaholic, and has acknowledged that his family life has suffered for it. In fact, in one radio interview a few years ago, he admitted that he didn't celebrate his sons' birthdays, and that it seemed like he only saw his wife while attending social events and making public appearances.

However, towards the end of this season, Coach Johnson's mother died, and this seemed to shift his priorities. Johnson is engaged to be married for the second time, and he has now resolved to spend more time with his fiancée, and with his sons. Johnson was on the field coaching the Dolphins the day after his mother died, but now that his father is battling prostate cancer, he does not want to miss out on spending time with his father.

On January 12, 1999, ESPN reported that Coach Johnson had resigned as head coach of the Miami Dolphins, citing the desire to spend more time with family. "When Mother passed away, it opened up my eyes and made me realize I had to spend more time with people I cared about." However, the next day, after a meeting with Dolphins' owner Wayne Huizenga, president Eddie Jones, star quarterback Dan Marino, and other Dolphin officials, Coach Johnson announced that he, in fact, is not resigning. As part of the arrangement to help him stay on as head coach, Dave Wannestedt, the former head coach of the Chicago Bears and former Dallas Cowboys Defensive Coordinator under Johnson, was hired to fully share the head coaching duties with Johnson, under the somewhat paradoxical title of "Assistant Head Coach."

The rationale for such a unique personnel decision was that both Johnson and Wannestedt would share the position of Head Football Coach, with Johnson as the primary of the two head coaches. In his televised press conference on January 13, 1999, Johnson wept while talking about attending his mother's funeral but missing her wake because of work. Johnson also explained that, because of his desire to spend more time on his family and personal life, he needed to make an arrangement to create more free time for himself. "There's a time when you pull back and you say, 'Be with people you care about. Don't shortchange them.' That's what I plan on doing."

It remains to be seen how this unprecedented decision to have two men share the duties of head football coach in the NFL will work out. One theory states that two heads are better than one; while another line of thought contends that the players need to have clear lines of authority with one man who is both

fully in charge and ultimately accountable for team performance. In any case, Mr. Huizenga and the Miami Dolphins organization have exhibited flexible thinking and individualized consideration, or what Hall (1990) would refer to as a "less rigid form of flexibility." Such an approach seems to be the best solution to alleviating workers' work-family conflicts.

It would have been much easier for the Dolphins to tell Johnson either that they need him to work full time (typically 70–80 hours per week) or that they would find someone else who would. However, by being creative and working for a solution that satisfied this star employee's personal needs, the Dolphins were able to retain Johnson's commanding presence and coaching genius. Other potential benefits of this decision for the Dolphins include: (a) avoiding the expense associated with hiring a new Head Coach in a very competitive labor market (there were five other coaching vacancies at the time), (b) reducing turnover among the current Assistant Coaches who would probably be replaced by a new Head Coach, (c) planning for executive succession as Wannestedt will be groomed for the Head Coach position when Johnson eventually does retire, and (d) avoiding a possible drop-off in performance while the players adjusted to new leadership.

Conclusions

Male professional athletes often get a bad reputation for being careless, absentee, or deadbeat fathers who are constantly on the road, leaving their wives and children to get by as best they can without them. While this perception may be true for some athletes, these three stories opened my eyes to a different side of professional athletics. Many athletes are very dedicated parents who, just like the rest of us, make decisions to alter their work lives in order to accommodate their family responsibilities.

All three of these examples illustrate the widespread importance of work-family issues, and each story contains lessons for I-O research and practice. In the Mark McGwire story, the St. Louis Cardinals probably did not even realize that they were being "family friendly." However, the climate of the team was conducive to work-family balance (Allen, Parker & Kourpounadis, *in press*; Thompson, Beauvais & Lyness, *in press*), and allowed for the emergence of informal work-family arrangements by their employees. The John Olerud story demonstrates that, while fathers tend to take much less formal parental leave than their female counterparts (Hall, 1990), many are creative in utilizing available time off and other pre-existing sources of workplace flexibility in order to create makeshift paternity leaves for themselves (Pleck, 1993). Finally, the Jimmy Johnson story shows that formal workplace accommodations, such as job-sharing, which are traditionally seen as appropriate only for lower-level jobs, can be applied to managerial positions. If this arrangement is successful, it may provide justification for businesses in other industries to consider pushing work-family accommodations up the corporate ladder.

In conclusion, these stories provide anecdotal evidence that flexible thinking and informal arrangements can be the key to alleviating some of the stress associated with work and family issues. McGwire, Olerud, and Johnson show that even millionaire superstar athletes struggle with work and family pressures, and can use assistance from their employers in alleviating this source of stress. If the All-Time Home-Run King, a batting champion, and a Super Bowl coach need assistance from their employers to help them balance work and family, it makes a strong case for the near-universal importance of work-family balance in today's business environment.

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President Clinton Proposes Government "Solution" for "Gender Pay Gap"

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In his January 30 Saturday radio address, President Clinton targeted what has been termed the "gender pay gap"—the percentage difference between female and male median annual earnings which in 1997 stood at 74% (up from 60% in 1979). His remarks followed Senator Tom Daschle's introduction of S.74, the Paycheck Fairness Act, on January 19th. In his State of the Union Address, Clinton dedicated $14m in the FY 2000 budget for this "Equal Pay Initiative" to get the federal government into "gender pay gap" enforcement. Clinton's rationale for the Initiative was that "Too many employers still undervalue and under-pay work done by women."

In Section 2 of the Act, Congress finds that "women earn significantly lower pay than men for work on jobs that require equal skill, effort, and responsibility and that are performed under similar working conditions.... Which may deprive workers of equal protection on the basis of sex in violation of the 5th and 14th Amendments" ...in apparent violation of the Fair Labor Standards Act of 1938, the Equal Pay Act of 1964, and the Civil Rights Act of 1964. The Act authorizes class actions to be brought with plaintiffs to receive not just "make whole" back-pay awards, but *punitive* and *compensatory* damages as well.

Section 5 of the Act authorizes the Secretary of Labor to "promulgate such rules and regulations necessary to carry out"... "guidelines to enable employers to evaluate job categories based on objective criteria such as educational requirements, skill requirements, independence, working conditions, and responsibility, including decision-making responsibility and de facto supervisory responsibility." "The guidelines... shall be designed to enable employers voluntarily to compare wages paid *for different jobs* to determine if the pay scales involved adequately and fairly reflect the educational requirements, skill requirements, independence, working conditions, and responsibility for each such job with the goal of eliminating unfair pay disparities between occupations traditionally dominated by men or women" (emphasis added).

As the Washington based Employment Policy Foundation notes (1 Feb. 99):

> The measured gender pay gap does not account for relevant economic factors influencing earnings such as experience and tenure, years and type of education, hours of work, and industry and occupation–factors which can differ significantly between men and women. For example, the 74% estimate compares 'full-time' men and women (those working over 35 hours a week), but full-time women actually work fewer hours on average than full-time men. Simply correcting for hours differences increases the female/male pay ratio to 81%.

> Numerous studies show that when other relevant economic factors are accounted for, the measured gender pay gap shrinks considerably–by some estimates to zero. Remaining differences between the wages of men and women could be attributable to statistical mismeasurement, unaccounted characteristics, discrimination, or some combination of these. But it is clearly wrong to attribute the measured gender pay gap solely, or even primarily, to workplace discrimination.

As pointed out by a fellow of the American Enterprise Institute in a *Wall Street Journal* editorial (4 Feb. 99, A-22):

> It's payoff time for the feminists who have supported President Clinton... Never mind that it is already illegal to pay unequal wages to equally qualified men and women who do the same job. When that occurs, women sue and invariably win. But such discrimination is rare. The only way to get rid of the average wage gap is to mandate equal pay for *different* jobs, a practice known as 'comparable worth.' Since comparable worth has been rejected in courts all over the country, Mr. Clinton now proposes to enforce it through the bureaucracy. Under the President's plan, government bureaucrats will 'objectively' determine a job's worth by considering the working conditions and the knowledge or skill required to perform a task. Neither experience nor risk, two factors that increase men's average wages relative to those of women, are included as relevant job-related criteria. Thus these criteria favor traditionally female occupations over male ones (secretaries over truck drivers), and white-collar jobs requiring education over blue-collar work...
>
> These guidelines are described as 'voluntary,' but there is nothing to prevent Mr. Clinton from issuing an executive order forbidding the federal government from doing business with companies that do not adopt the standards.
>
> While the stated intention of these proposals is equality, they rest on an assumption that women cannot make it on their own. Women are allegedly funneled into certain occupations by a sexist society–a view that flies in the fact of feminist arguments that women can do any job. Comparable worth works against women's interests. If employers had to pay women higher-than-market wages, fewer women would get hired in the first place.
>
> Unemployment for both men and women is near a 30-year low; wages and labor force participation rates for women are

> at an all-time high; and the economy is expanding robustly.
>
> The best way to help women succeed economically is to keep the economy strong–something Washington won't accomplish by giving bureaucrats more power over the market.

Just how rare "comparable worth" arguments are is revealed by the EEOC's own report to Congress which revealed that in FY '97, only 1.4% of the total of all charges brought to the Commission were brought under the Equal Pay Act. As former OFCCP Director under the Ford Administration, Larry Lorber in the Washington office of Sonnenschein, Nath and Rosenthal notes (personal communication):

> In our increasingly sophisticated and dynamic economy, a static, litigation-driven model which artificially measures or restructures compensation makes no sense. The extensive litigation under both the Equal Pay Act and Title VII makes it exceedingly clear that the courts do not want to be dragged into the wage setting business. The proposed Paycheck Fairness Act is a thinly veiled effort to revive the "comparable worth" theory which was first raised in the 1980's. The Act will fundamentally change the enforcement scheme of our discrimination laws. First, it will establish an unlimited punitive damages regime which will place employers in the position of facing massive class action litigation if there is any statistical difference on the basis of gender in average pay rates. This flies in the fact of the 1991 Civil Rights Act where the Congress carefully fashioned a capped level of damages based upon workforce size. The Act will also require the Labor Department to create a 'voluntary' model to measure differences in pay levels between different occupations. The law books and cases are full of examples of such 'voluntary' guidelines being adopted to decide cases. Indeed, in light of the lessened standard for expert testimony, such guidelines could welcome the basis for a new spate of 'creative' pay equity litigation. Finally and most importantly, the Paycheck Fairness Act and the new emphasis on 'pay equity' simply ignores the main issue involving gender integration of the workforce. Our laws are clear that prohibition to *access* to jobs on the basis of gender is against the law. Full and vigorous enforcement of Title VII as well as the Equal Pay Act will address that problem. The Pay Equity movement and the Paycheck Fairness Act avoid the real problem by simply creating a litigation, damages, and government guideline regime which will serve to homogenize the workplace and restructure our compensation setting methodologies.

Guidelines for MultiSource Feedback When Used for Decision Making

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These Guidelines are a product primarily of the MultiSource Feedback Forum membership, about half of which are SIOP members. Additional contributions were made by the following individuals: **Allan Church**, **John Fleenor**, **Rod Freudenberg**, **Bob Jako**, John Kasley, **Vicki Pollman**, **Lynn Summers**, and **Alan Walker**.

We now have a draft document which we would like to make available for further review and feedback. It is our intent to collect feedback via e-mail prior to the SIOP conference and to convene an informal meeting sometime during the conference for those who wish to further discuss this document. After we have collected this input, we plan to publish the document in some format (e.g., a pamphlet) for distribution later in the year. We wish to make it clear that this effort is not sponsored by SIOP nor are we seeking endorsement by SIOP.

Please send your comments to David Bracken at DWBRACKEN@aol.com by April 27 and at the same time indicate whether you would like to be notified of specifics of the ad hoc meeting during SIOP.

Introduction

Definition: For the purposes of these Guidelines, MultiSource Feedback (MSF) is questionnaire-based feedback to an individual regarding work-related behavior from coworkers (e.g., supervisor(s), subordinates, peers, team members, internal customers) and other individuals (e.g., external customers) who have had an opportunity to observe that behavior. Supervisor feedback is typically not anonymous since it is collected from one person, but feedback from other sources typically is. Participants (ratees) typically receive feedback results in the form of aggregated scores (e.g., mean scores), usually reported for each feedback source (peers, subordinates, etc.) and often including write-in comments.

Successful MSF Process Defined: For the purposes of these Guidelines, a "successful" MSF process is one which:

> Creates and/or reinforces focused, sustained behavior change and/or skill development in a sufficient number of individuals so as to result in increased organizational effectiveness.

Note that "behavior change" and "skill development" can be in areas valued by the organization but not necessarily measured directly by the MSF instrument.

Purpose

These Guidelines are provided as recommended practices for implementing MSF for decision-making purposes in human resource systems (e.g., performance management, staffing, succession planning, compensation) which in turn will optimize the likelihood of success (as defined above). These Guidelines should be applied to MSF processes which are designed in anticipation of use for decision making even though initial administrations may not include that purpose. Application of these Guidelines to "development-only" MSF processes will also typically improve the likelihood of success.

MSF used for decision making typically has design considerations which are not found in many "development-only" processes. For example, MSF used for decision-making processes such as performance appraisal (and resulting outcomes) are conducted for **whole segments** of an employee population (e.g., supervisors, all exempt employees) on a schedule determined by organizational needs (e.g., annually). Such practices place significant demands on the system which most development-only processes do not.

A second point of differentiation of MSF used for decision making regards the issue of **sustainability**. (While MSF is occasionally used on a one-time basis for purposes such as downsizing, that practice is outside the scope of these Guidelines and may be harmful to other MSF processes.) Many decision making applications of MSF are repeated events such as those conducted annually. These processes are dynamic as participants (raters, ratees, management) have experiences which shape their behavior over time.

These Guidelines in total ***should not*** be used as "standards." For example, it would be inappropriate to use the Guidelines to determine whether an MSF process is legally defensible. It is unlikely that any MSF process can simultaneously satisfy all of the objectives listed below. The Guidelines reflect practices and recommendations that have been shown to optimize the likelihood of achieving "success" (as defined above). The Guidelines should be used to guide decisions in the design of MSF processes with an acknowledgment of the ramifications of each decision.

In cases where a Guideline is of sufficient criticality as to be required, it is noted as [*Essential*]. Used at the beginning of a paragraph, it indicates criticality for all points that follow in that paragraph. When indicated after a sentence, it applies to only that point.

Guidelines

Objectives: These Guidelines are designed to support the following objectives. Objectives will be referenced in support of recommendations in the sections that follow.

Acceptance: The feedback should have characteristics that enhance acceptance by the ratees and their managers. Acceptance is a precursor to behavior change for ratees and to decision making for their managers.

Accuracy: The process should ensure that data are collected, processed and reported with no errors.

Actionability: The feedback (including write-ins) should be behaviorally based and within the ability of the ratee to address through behavior change and/ or skill development.

Alignment: The content of the feedback and the process itself should be consistent with the organization's strategies, goals, values, competencies and desired culture.

Anonymity: Guaranteeing and delivering real and perceived anonymity for the feedback providers (raters) is recommended as a means of maximizing honesty and candor. (Note that there are some legal opinions regarding the ability to guarantee anonymity in all circumstances.)

Census: The data collected should represent a census (vs. sample) of those persons who have the best opportunity to provide reliable feedback, consistent with rater selection policies (e.g., all direct reports, × number of peers, etc.).

Clarity: Participants (raters and ratees) must fully understand their roles and how to correctly fulfill those expectations.

Communication: Communications regarding the purpose, methods and expected outcomes of the process form a "contract" with participants on behalf of the organization to fulfill the commitments made.

Confidentiality: A clear policy which states who may access and use feedback data is necessary. It is understood by all participants that data must be accessible to the data processor (internal or external) with clear requirements for data integrity and security. (A confidentiality policy which allows the ratee to keep the results to him/herself is not considered to be a requisite for MSF when used for decision making, and, in fact, may be a barrier to success.)

Consistency: All processes should be administered consistently for all participants (raters, ratees, management). Where procedures must differ, administrators must demonstrate that the inconsistencies do not have a systematic effect on the feedback results.

Cooperation: The task of providing feedback by raters should not be so onerous as to affect the quality (e.g., honesty) or quantity (e.g., response rates) of the observations.

Insight: The ratee should be provided with information of sufficient quality and specificity to ensure that resulting actions are aligned with and responsive to the observations of the feedback providers.

Ratee Accountability: Methods are used that maximize the likelihood that ratees will understand, accept and use their feedback in the manner intended by the organization.

Rater Accountability: Methods are used that maximize the likelihood that raters will fulfill the role of accurate, honest reporters of observed ratee be-

haviors, including providing assistance to the ratee in understanding the feedback, guiding action plans, and reinforcing desired behavior.

Relevance: The feedback should address behaviors/skills which occur within the work setting and are observable by others.

Reliability: The feedback instrument (questionnaire) should be designed to generate reliable, quantifiable data based on content design principles and supporting statistical documentation.

Timeliness: Methods should minimize problems caused by delays between observation and reporting, and between action and feedback by the ratee.

I. Preconditions

A. Commitment: A successful MSF process should gain the full support of the organization in the form of coordinators (e.g., training, workshops, administrators) and endorsement. This support includes participation by all levels of management, including the most senior executives. *(Acceptance, Alignment)*

B. Clarity of Purpose: [*Essential*] The purpose of the MSF process must be clearly and explicitly understood and communicated. For the purposes of these Guidelines, purpose must include a statement as to how the feedback is distributed, documented, and used. MSF processes used for decision-making purposes should clearly communicate and support methods to assist ratees in their development as well. *(Communication, Consistency, Clarity)*

C. Behavioral Model: [*Essential*] The content of the feedback instrument must be derived from a model (e.g., competencies, values, strategies). This model should be translated into behavioral terms. Models may differ based on level and/or job. There must be full management endorsement and acceptance at all levels as to the relevance and importance of the model(s). A model not developed specifically for the organization (i.e., "off-the-shelf") must be reviewed for relevance and accompanied by a technical report documenting its measurement characteristics and (if relevant) the characteristics of any normative data provided. *(Alignment, Reliability, Relevance, Acceptance, Actionability).*

II. Instrument Development

A. Item construction: Items should be behaviorally based. [*Essential*] The feedback instrument should be designed (or reviewed) by survey professionals. *(Reliability, Actionability, Relevance)*

B. Content and forms: Items must be examined for opportunity to observe for various rater groups. [*Essential*] Where items are appropriate for one group but not another (e.g., external customers), separate forms containing only relevant content are recommended. *(Reliability, Relevance)*

C. Rating Scales: Rating scales should be designed to be consistent with the purpose of the feedback. When the purpose is decision making, the anchors and related training should encourage between-person (normative) comparisons (e.g., "In the top 5%"). The number of choices should allow for meaningful differentiation in performance either between ratees and/or within ratees over time, usually 5 to 9 points. Scales should include an option for raters to indicate insufficient information to respond. [*Essential*] The use of multiple scales (e.g., importance, desired vs. observed behavior) should be carefully evaluated for their added value in light of rater overload, quality of information, and reporting complexity. *(Reliability, Insight, Clarity, Cooperation)*

D. Write-in Comments: Raters should be given the opportunity to provide additional feedback to ratees using write-in comments consistent with the purpose of the process. The process should not require write-in comments (e.g., to support extreme ratings). Raters should have a clear understanding as to how their comments are reported (e.g., verbatim vs. paraphrased) and receive training on how to write good comments consistent with the purpose of MSF. *(Insight, Clarity, Cooperation, Actionability, Relevance, Alignment)*

E. Pretesting: Prior to initial administration, the tools, policies, procedures, and communications should be pretested with representatives of the anticipated audience (i.e., raters, ratees, managers, administrators). While many methods are available to the practitioner for doing pretests (e.g., pilots, focus groups, interviews), the process(es) should allow for the collection of reactions, suggestions, and possible barriers to successful implementation. Pretest may also be used to collect initial normative data. The pretest should solicit input on:

- Purpose
- Policies and procedures
- Perceptions of anonymity
- Perceptions of confidentiality
- Rater nomination
- Rater honesty
- Instructions
- Instrument characteristics (e.g., clarity, observability, length)
- Report format
- Resources required for ratees (e.g., training, courses, coaching)
- Appropriateness for use in decision making
- Process communications *(Supports all objectives)*

F. Reliability: Data collected from a pilot and/or initial administration of the instrument must be analyzed to determine reliability. [*Essential*]

- *Rater*: Indices of rater agreement should be analyzed both within and between rater perspective groups (e.g., subordinates, peers, customers). Insufficient within-group agreement may indicate the need to increase group sizes and/or use alternative groupings (e.g., peers vs. team members vs. internal customers). Where feasible, a test-retest reliability check is also desirable.

- *Interitem*: When category (dimension) scores are used, the instrument should be analyzed to determine the cohesiveness of categories to justify the calculation of category scores. Appropriate analyses can include factor analysis and coefficient alpha. (*Reliability*)

G. Validation: Validity must be demonstrated. [*Essential*] The process of demonstrating validity will typically be an iterative process of collecting evidence over time.

- *Content Validity*: Most instruments will be initially constructed to satisfy requirements for relevance and alignment, reflecting the organization's strategies, goals, values, and/or competencies. Content should be reviewed repeatedly for relevance over time.
- *Criterion-Related Validity*: As data are collected, the correlation of MSF results with other indicators of individual, group, and organization success should be examined (e.g., formal appraisals, sales, customer satisfaction/retention, promotions, turnover, organizational surveys). *(Alignment, Acceptance, Reliability, Relevance)*

III. Administration

A. Rater Nomination: The selection of raters is a key factor in the reliability, validity, and acceptance of the feedback results. Policies and procedures for selecting raters must be clearly communicated and applied consistently across the organization (see the following guidelines). [*Essential*]

- Opportunity to observe is a key factor in deciding rater groups and the raters to be selected within a perspective group.
- Rater groups that cannot be trained or monitored or have an insufficient opportunity to observe (e.g., external customers) may not be appropriate feedback providers.
- Opportunity to observe will consider not only working relationships but also length of time; a requirement for minimum time for the work relationship (considering both time and amount of contact during that time) should be specified to ensure sufficient opportunity to observe behavior.
- All direct administrative reports (where applicable) should be included as raters.
- For other rater groups, enough raters should be selected to enhance the reliability of the feedback. This will typically suggest nominating at least the 4 to 6 raters per category who have had the best opportunity to observe ratee performance.
- For nominations not determined by policy (e.g., all direct reports), the ratee will be the primary source in selecting raters. The nominations must have the concurrence of the ratee's supervisor. [*Essential*]
- The nomination process will include a method to identify cases where a rater is nominated an excessive number of times, potentially impacting the quality of the feedback. A policy should specify ways to handle

these situations. (Reliability, Acceptance, Clarity, Cooperation, Census, Consistency)

B. Rater Training: Once nominated to provide feedback, raters should be trained as to how to perform their role. Training is necessary primarily for first time participants. Possible topics can include:

- Purpose of the MSF process
- How the feedback will be used
- How raters were selected
- How to complete the rating form
- How to be a good observer/rater
- How missing data will be defined and reported
- How to write a good comment
- How to avoid typical rating errors
- How the feedback data will be processed
- How the feedback will be reported to the ratees
- How write-in comments will be reported
- How to avoid invalid rating patterns
- How to properly fulfill the role of rater
- Expectations for the ratees
- Timeline and next steps

While rater training can be delivered effectively through various media, methods which use face-to-face delivery are preferred. Providing written instructions alone does not suffice as rater training. *(Clarity, Reliability, Consistency, Anonymity, Rater Accountability, Acceptance, Confidentiality, Communication, Actionability, Relevance)*

C. Technology: Many technologies exist for the administration and data collection of MSF degree feedback. The best technology will be partially dictated by the nature of the feedback instrument (i.e., length, branching, open-ended questions and comments) and organizational culture. Other issues to consider include:

- Perceptions of anonymity for the raters can affect the honesty of feedback. In certain climates, technologies that are not perceived to guarantee anonymity (e.g., internally processed) may result in feedback with low reliability due to reduced honesty/candor and lower response rates. *(Anonymity, Reliability, Cooperation)*
- Logistics, geographies and resources may require the use of multiple technologies. If this is necessary, the feedback should be systematically examined to detect any possible biases introduced by a technology (e.g., lower/higher scores, lower response rates, incomplete questionnaires, errors in responding). Some climates may show resistance to the use of certain technologies. *(Consistency, Cooperation, Accuracy, Reliability, Timeliness)*
- Any technology must protect the data from access by unauthorized parties. [*Essential*] *(Accuracy, Anonymity, Confidentiality)*

D. Timing: The timing and frequency of administration may be dictated by the systems that require MSF data (e.g., performance appraisal, succession planning).

- Annual administrations that are integrated with other HR systems help establish accountability for the use of MSF results in ways that are aligned with organization objectives and therefore are recommended. *(Alignment, Timeliness, Ratee Accountability, Acceptance)*
- Long time intervals (e.g., 18 months, 2 years) between administrations can lead to problems of timeliness in regard to a) the time lapse between rater observation and reporting, b) the delay between behavior and feedback for the ratee, and c) the delay in receiving feedback (and reinforcement) for actual behavior change on the part of the ratee. *(Timeliness, Reliability, Actionability)*
- Annual census (one time) administrations can place significant strain on the organization with possible negative effects on some objectives. Creative solutions should be explored (e.g., technologies, formats displaying multiple ratees). *(Cooperation, Census, Clarity)*
- Staggering administrations throughout the year may create both real and perceived inconsistencies, affecting acceptance by ratees and perceptions of fairness for all participants. *(Consistency, Acceptance)*

IV. Data Processing

A. The role of the data processor is primarily to ensure total accuracy along with maintaining anonymity and confidentiality consistent with policy and communications. Other important considerations will be timeliness, cost effectiveness, and customer service. Data processing must be carefully tested and monitored to ensure 100% accuracy. [*Essential*] *(Accuracy)*

B. [*Essential*] The data (questionnaires and reports) must be totally secure from access by unauthorized personnel. In addition, policies and procedures must clearly state who may see the reported results and under what circumstances. Such policies and procedures should be clearly communicated and agreed to by management to prevent possible abuses. *(Confidentiality, Anonymity, Consistency, Communication)*

C. Data should be maintained according to policy and legal requirements consistent with those applied to other employee performance data (e.g., performance appraisals) *(Consistency, Communication, Alignment)*

D. Note that there are some legal opinions regarding the ability to "guarantee" anonymity in all circumstances. Communications regarding legal anonymity should incorporate local legal guidance. *(Consistency, Communications)*

V. Reporting

A. Report Generation:

- [*Essential*] Reliability and anonymity both require the specification of minimum group size to report a score (item and category). This is never less than three (3) (except for self-scores, supervisor scores, and any other agreed-upon one-on-one relationship) and can be greater. *(Reliability, Anonymity)*

- At minimum, reports should provide for each category and item an aggregate (e.g., mean) score, the number responding, and some indication of rater agreement (if score distributions are not provided). When available, trend scores (i.e., prior results) should also be included in the report. *(Insight, Acceptance)*
- Internal normative comparisons (e.g., percentiles, comparison group scores) should be provided in the report, with care taken to ensure that the normative data are relevant, accurate, and up-to-date. If off-the-shelf instruments are used, internal norms should be generated. *(Insight, Acceptance, Accuracy)*
- Write-in comments should be reported verbatim by rater group. *(Insight, Acceptance, Alignment)*

B. Rater Reliability Checks:

- Any data "cleansing" performed after processing should be clearly communicated to participants prior to administration. Possible useful methods can include identification of invalid rating patterns suggesting that a rater is not fulfilling his/her role as a quality feedback provider. Processes that arbitrarily remove data (e.g., "Olympic scoring"), resulting in reduced group sizes, are not appropriate. *(Reliability, Census, Consistency, Communication, Rater Accountability, Acceptance)*
- In cases where a rater is found to be a provider of invalid feedback (e.g., ratings all of the same score), a policy should be followed for ways to handle these circumstances. Options can include automatic discarding of questionnaires with invalid ratings, or providing raters with the opportunity to modify their responses. *(Reliability, Consistency, Clarity, Communication, Rater Accountability)*
- Online administration can be used to provide "real time" feedback to raters regarding their response patterns. *(Reliability, Rater Accountability)*

C. Feedback reports are typically provided for each ratee. Copies may be provided to other sources (e.g., manager, HR) depending on policy, with clear communication of this policy to ratees. *(Insight, Ratee Accountability, Communication, Consistency)*

VI. Follow Through

A. Ratee Training: Ratees should be trained on how to read, interpret, and use their feedback. Best done in a workshop setting, ratee training could include:

- How feedback can be used for behavior change
- How to read a feedback report

- How to identify priority behaviors for improvement
- How to create an action plan
- How to identify and access development resources
- How to conduct a meeting with raters
- How to conduct a meeting between ratee and manager
- How the data will/should be used
- Expectations for ratees

Other resources can be used to support ratee training, such as written guides, coaches, counselors, mentors, and help centers (online, telephone). *(Ratee Accountability, Acceptance, Communication, Clarity, Alignment, Consistency, Actionability)*

B. Using the results: The way the feedback is used will ultimately determine the success and sustainability of the MSF process. Two events are key to successful implementation and sustained engagement of feedback providers:

- In a decision-making context, the ratee is **required to share results with his/her manager**. (Note that other individuals in the company may be given access to individual results by policy.) This sharing process will provide the manager with information necessary to fulfill his/her role as a representative of the company. A meeting to discuss results will facilitate the implementation of an action plan for the ratee. [*Essential*] *(Ratee Accountability, Alignment, Acceptance, Insight, Consistency, Confidentiality)*
- Decision-making contexts typically include repeated administrations (e.g., yearly). Raters will continue to participate and provide honest feedback only to the extent that they see their effort rewarded through the resulting actions of the ratees. A key event to support this engagement is for the ratee to **share results and action plans with the raters**, particularly direct reports. Sharing results has an additional benefits: allowing the ratee to gain further insight into the meaning of the feedback, facilitating rater conversation that enhances their understanding and workgroup alignment, and creating an ongoing dialogue with the raters throughout the year. Sharing results with raters, particularly direct reports, should be a clear expectation for ratees, with significant flexibility as to how results are presented. *(Ratee Accountability, Rater Accountability, Insight, Alignment, Consistency, Acceptance)*

Additional considerations:

- Ratees must be provided with resources which will enable them to address the gaps (between desired behavior and actual behavior) identified in their feedback. [*Essential*] Resources might include internal and external training, job experiences, special assignments, community activities, and various media sources. Coaches can be very effective in aiding both data interpretation and action planning. It is important that such resources are not only available but easily accessible to those who desire them. *(Acceptance, Actionability, Ratee Accountability)*

- The MSF process should integrate ongoing support between administrations, such as interim progress reviews, mini-feedback tools, communications, ongoing training, and mentor relationships. *(Timeliness, Alignment, Communication)*

VII. Integrating Results into Decision Making

Once steps have been taken to ensure that the feedback data are reliable and valid, it becomes equally critical to ensure that the data are used appropriately, accurately, and consistently.

- Managers given access to MSF feedback for use in decision making should be trained on how to read, interpret, and use it.
- Formulaic approaches that use mathematical calculations based on MSF scores as the sole determinants of decisions are not appropriate.
- Policies and practices should be clearly defined and communicated regarding the use (and misuse) of MSF. [*Essential*] Violations of these policies should be monitored and remedied.
- Processes that use MSF results must be scrutinized to ensure that results are not disclosed in a way that violates confidentiality policies. [*Essential*] *(Consistency, Alignment, Clarity, Communication, Acceptance, Confidentiality)*

VIII. Evaluation

Methods should be used to determine whether the MSF process is being implemented as prescribed and is having the desired results. Methods available to the user include:

- Focus groups
- Interviews
- Audits
- Surveys
- Utilization of organization resources to address individual development
- Process data (e.g., response rates, score trends)
- Statistical analyses (e.g., rating patterns, adverse impact)
- Related organization outcomes *(Supports all objectives)*

Ideals of Science: Persons Behind the SIOP Awards

Laura L. Koppes
Tri-State University

The Society for Industrial and Organizational Psychology (SIOP), Inc., APA-Division 14, currently administers seven awards named in honor of specific individuals who made significant contributions to the discipline of Industrial and Organizational (I-O) Psychology. The awards (as listed in the SIOP Administrative Manual) include:

Ernest J. McCormick Award for Distinguished Early Career Contributions
William A. Owens Scholarly Achievement Award
M. Scott Myers Award for Applied Research in the Workplace
Edwin E. Ghiselli Award for Research Design
S. Rains Wallace Dissertation Research Award
John C. Flanagan Award for Best Student Contribution at the SIOP Conference
Robert J. Wherry Award for Best Paper at the IO-OB Graduate Student Conference

With the passage of time and the evolution of new generations of I-O psychologists, the memories of these men may become extinct. The purpose of this article is to renew our memory of these seven scholars of I-O psychology by providing brief backgrounds and highlighting a few contributions so that we may continue to recognize their accomplishments and to appreciate the efforts of past and current award recipients. I first contacted SIOP past-president and I-O history advocate, **Paul Thayer**, to begin data collection on these individuals. I think you will agree with Thayer's comments:

> As I review these names I am struck by the fact that all these men were very special people. Every one of them had a very strong impact on people and were loved—literally—by those around them. They were/are men of integrity who were on the leading edges of the field at one time or another, and who fought for high standards and fair treatment. First class people! (P. W. Thayer, personal communication, October 12, 1998).

Ernest J. McCormick Award for Distinguished Early Career Contributions

The Ernest J. McCormick Award for Distinguished Early Career Contributions was established "to recognize an individual who had made the most distinguished contributions to the science and/or practice of industrial and organi-

Ernest J. McCormick

zational psychology within 7 years of receiving the Ph.D. degree" (SIOP Administrative Manual).

Ernest J. McCormick (1911–1990) was born in Indiana and grew up in Ohio where he received a B.A. from Ohio Wesleyan University in 1933. After working for 2 years with the Cotton Garment Code Authority in New York City, McCormick went to Washington, DC as Chief of the Planning Unit, Job Analysis and Information Section, U.S. Employment Service. A primary responsibility was to develop a nationwide job analysis program and create a job classification and coding system for federal agencies. This system evolved into the first edition of the *Dictionary of Occupational Titles*. In 1939, McCormick went to the Bureau of the Census and then to the Occupational Statistics Section of the Selective Service System in 1941. He was commissioned by the Navy in 1943 and was assigned as Chief of the Classification Analysis Unit, Enlisted Classification Section, Bureau of Naval Personnel. McCormick was stricken with polio in August, 1945, and subsequently, was given convalescent leave in 1946 (Naylor, 1991). He then pursued graduate work in industrial psychology at Purdue University. He received an M.S. degree in 1947. When he completed his Ph.D. in 1948, McCormick was offered a position at Purdue as an assistant professor where he pursued a distinguished academic career until his retirement in 1977. McCormick also cofounded and served as President of PAQ Services, Inc. (Jeanneret, 1990).

McCormick wrote more than 200 major articles and book chapters on the topics of job analysis, evaluation, and classification. Two major books included *Industrial Psychology* and *Job Analysis: Methods and Applications*. A notable contribution was the codevelopment and copublication of the *Position Analysis Questionnaire* in 1969. According to **Neal Schmitt** and **Frank Landy** (1993), "the PAQ has proved to be applicable to a wide variety of different jobs, and the availability of the PAQ database has proved to be a rich source of data about the world of work" (p. 290). McCormick also pursued an interest in human factors. He taught Purdue's first engineering psychology course, which led to the publication of *Human Engineering* in 1957. The sixth edition of this book is currently entitled *Human Factors in Engineering and Design* and is available in three additional languages (Naylor, 1991). McCormick received numerous accolades for his achievements such as the 1986 Distinguished Scientific Contributions Award from SIOP.

McCormick was respected as a mentor and teacher. He advised over 119 graduate students. Some advisees include **Angelo DeNisi**, **Robert Dipboye**, **John Hinrichs**, and **Richard Jeanneret**. According to Jeanneret, "[McCormick] gave both his time and ideas to his students so they would experience enjoyment and success in the field of I-O psychology. He was an extremely dedicated and thorough researcher, and his insights regarding the conduct of job analysis from a behavioral perspective will continue to have a major impact on how we study the world of work well into the next millenium" (P. R. Jeanneret, personal communication, December 1, 1998).

The William A. Owens Scholarly Achievement Award

The William A. Owens Scholarly Achievement Award was established "in recognition of the best publication (appearing in a refereed journal) in the field of I-O Psychology during the past full year" (SIOP Administrative Manual).

William A. Owens (1914–) was born and raised in Minnesota. He completed a B.A. degree with a major in mathematics and a minor in biological sciences from Winona State University. He earned a M.S.-equivalent degree in experimental psychology from the University of Chicago in 1936, and a Ph.D. in psychology from the University of Minnesota in 1940. Owens began a long and successful academic career at Iowa State University in 1940 where he became Head of the Department of Psychology in 1946. (From 1942–1946, he served in the United States Naval Reserves). He moved to Purdue University in 1959 as a professor in the psychology department. In 1968, he joined the University of Georgia as the Director of the Psychometrics Laboratory, and became the Director of the Institute for Behavioral Research at Georgia in 1970. He retired in 1984.

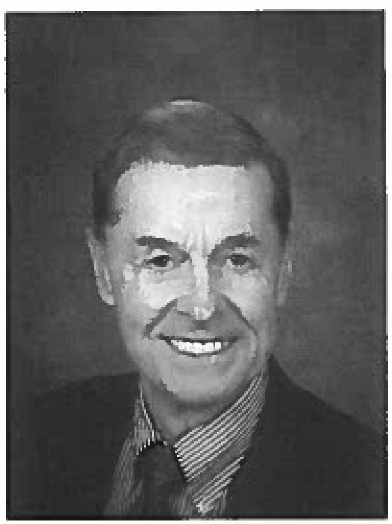
Owens published over 88 articles, book chapters, and books. An early unknown accomplishment was the completion of the first longitudinal study on intelligence (M. D. Mumford, personal communication, December 3, 1998). Owens conducted the basic research on background data, which he examined from a development perspective. He also completed initial work on typological models and explored life history patterns. As a result of this research, Owens coauthored with **Michael Mumford** and **Garnett Stokes** a major book, *Patterns of Life Adaptation: The Ecology of Human Individuality*. He served as a coeditor

William A. Owens

for the *Biodata Handbook: Theory, Research and Use of Biographical Information in Selection and Performance Prediction* (1994) and coauthored with **Mary Tenopyr** the second edition of the *Principles for the Validation and Use of Personnel Selection Procedures* in 1980. Owens also developed and published several tests or inventories such as the "Personal Inventory" and the "Veterinary Aptitude Test." Owens' I-O colleagues acknowledged his accomplishments by awarding him the APA-Division 14 (now known as SIOP) Distinguished Scientific Contributions Award in 1983.

"Owens was terribly gifted in the development and teaching of research scientists" (M. D. Mumford, personal communication, December 3, 1998). According to Mumford, "Doc" effectively communicated why research should be conducted and the value of becoming a research scientist. Owens could convince his students to pursue the career of a research scientist while simultaneously describing the realities and difficulties of the profession. Stokes commented "...Doc was [also] gifted in the application of psychology....He mentored many graduate students in their first organizational consulting experiences. He was an exemplar of the scientist-practitioner" (G. S. Stokes, personal communication, February 5, 1999). Some of his students include **Richard Klimoski, Paul Muchinsky**, Michael Mumford, Garnett Stokes, and **Lyle Schoenfeldt**. The University of Georgia Applied Psychology Program named its program library in honor of William A. Owens for his contribution to the program and to the psychology department. Owens was the 25th president of APA–Division 14 (1969–1970).

M. Scott Myers Award for Applied Research in the Workplace



M. Scott Myers

The M. Scott Myers Award for Applied Research in the Workplace was established "in recognition of a project or product representing an outstanding example of the practice of Industrial and Organizational Psychology in the workplace" (SIOP Administrative Manual).

M. Scott Myers (1922–1996) was born and raised on Orcas Island, a remote island in the state of Washington's Puget Sound. He received a B.S. degree in psychology from Purdue University in 1948. He continued at Purdue to complete a M.S. degree in industrial psychology in 1949 and a Ph.D. in industrial psychology in 1951. Myers held many diverse positions throughout his successful career. He began his profession as supervisor of personnel planning for Hughes Aircraft in Culver City, California, and taught courses in personnel management at Los Angeles State College. He accepted a 3 year assignment from the University of Southern California to work in Iran as a visiting professor at the University of Tehran, where he taught classes and directed the Personnel Management and Research Center (PMRC). He extended his stay in Iran as a training advisor for the Government Affairs Institute in Washington, DC. Myers then obtained a position as a management research consultant for Texas Instruments, Inc. He also held the position of visiting professor of organizational psychology and management at MIT's Sloan School of Management from 1969–1971. In 1973, along with his wife, Susan, Myers established an international consulting practice.

Primarily a practitioner, Myers was probably better known by managers and executives than by I-O psychologists. According to **Lance Seberhagen** (1996), "Myers pioneered major advances in cross-cultural testing, organization development, job enrichment, employee empowerment, self-directed work teams, job posting, attitude surveys, total quality management, the human side of just-in-time manufacturing, employee profit-sharing, collaborative union-management relations, and many other areas" (p. 98). P. E. Haggerty, then President of Texas Instruments, wrote in his book *Management Philosophies and Practices of Texas Instruments Incorporated* (1965):

> Written or not, if the attitudes which have made TI are allowed to deteriorate, TI can quickly regress to the status of just another average company.... I would be derelict not to comment on Scott Myers' outstanding work to help us improve motivation and TI climate. I urge every TI manager to collaborate with him to measure, identify, and apply ways to motivate ourselves as managers and, more importantly, those with whom we work (p. 37).

During his time at PMRC in Iran, Myers collaborated with a local I-O psychologist "to train staff in psychometrics, develop psychological tests for the Persian culture, conduct validation studies, provide employment testing services, and publish papers on personnel management in the Persian language" (p. 99, Seberhagen, 1996). As a result of this work, Myers was awarded, by the Shah of Iran, the Gold Medal of Cooperation for developing education in Iran.

"Ahead of his time in believing in the untapped talents of all members of the workforce and a defier of conventional thinking" (**Susan Myers**, personal communication, January 12, 1999), Myers bridged the scientist-practitioner gap by publishing in various sources that were read by practitioners. For example, he described innovative applications of psychology implemented at Texas Instruments in his first *Harvard Business Review* best seller, "Who are your Motivated Workers." He wrote numerous articles and books for managers and executives about I-O applications including *Every Employee a Manager, Manag-*

ing with Unions, and *Managing Without Unions*. According to Seberhagen "Scott provides a wonderful role-model for all I-O psychologists. His work was innovative, scholarly, and practical; his style reflected great modesty, integrity, and belief in the goodness of humanity." (L. W. Seberhagen, personal communication, December 15, 1998).

Edwin E. Ghiselli Award for Research Design

The Edwin E. Ghiselli Award for Research Design is given "in recognition of the research proposal that best shows the use of scientific methods in the study of a phenomenon that is relevant to the field of industrial and organizational psychology" (SIOP Administrative Manual). This award was originally established by APA–Division 14 in 1964 as the James McKeen Cattell Award for Research Design.

Edwin E. Ghiselli

Edwin E. Ghiselli (1907–1980) was born and raised in San Francisco. He earned an A.B. degree with a major in Italian from the University of California–Berkeley. After working briefly in the banking industry, Ghiselli returned to Berkeley where he earned his doctorate in psychology in 1936. Ghiselli began a prolific academic career as a National Research Council Fellow at Harvard University. He then was a teaching fellow at Cornell University. He moved to the University of Maryland as an instructor so he could continue to work with applied psychologist Jack Jenkins. Jenkins, Ghiselli, and Roger Bellows collaborated to develop a comprehensive program in applied psychology at Maryland (Beach, 1981). In 1939, Ghiselli returned to Berkeley as an assistant professor to establish a program of teaching and research in applied psychology, which eventually gained international recognition. His innovative program included both a quality curriculum and a plan for giving students applied research experience in business and industry (S. Zedeck, personal communication, December 8, 1998). Ghiselli left in 1942 to serve in the U.S. Air Force and then returned to Berkeley until his retirement in 1973.

Ghiselli was first and foremost a research scientist, authoring 8 books and over 100 research articles. An early book published in 1948 was a basic text in personnel psychology coauthored with C. W. Brown. According to Paul Thayer, "[Ed] wrote a classic industrial psych book with Brown that most of us old-timers cut our teeth on." (P. W. Thayer, personal communication, October 12,

1998). He published the *Theory of Psychological Measurement* (later revised by Campbell and Zedeck) in 1964. Ghiselli conducted a series of studies on personnel selection and managerial skills. According to Frank Landy, "He clearly understood the importance of aggregation of single studies. In collecting and publishing the *Validity of Occupational Tests* he anticipated meta-analysis and provided his colleagues with generalizability data that is still being referenced today" (F. J. Landy, personal communication, November 30, 1998). Ghiselli also conducted pioneering research on managerial styles or patterns in several different countries with Mason Haire and **Lyman Porter**. The resulting publication was *Managerial Thinking: An International Study* in 1966.

Ghiselli's research was highly regarded by contemporaries. **Sheldon Zedeck** recalled, "...**Bob Guion** told all of us grad students in the BGSU program at the time (1965–1969) that there are two people whose works we must read (everything they published): 1) Ed Ghiselli and 2) **Pat Smith**" (S. Zedeck, personal communication, December 7, 1998). Ghiselli was awarded on several occasions for his scientific achievements including the APA Distinguished Scientific Contributions Award in 1972. He was also a gifted teacher and a mentor who was respected and admired by his students. Some of his students include Mike Gordon, Dan Kahneman, and **Karlene Roberts**. Ghiselli served as the 10th President of APA–Division 14 (1954–1955).

S. Rains Wallace Dissertation Research Award

The S. Rains Wallace Dissertation Research Award was established to recognize "the best doctoral dissertation research in the field of industrial and organizational psychology. The winning dissertation research should demonstrate the use of research methods that are both rigorous and creative" (SIOP Administrative Manual).

S. Rains Wallace

S. Rains Wallace (1913–1973) earned an undergraduate degree with a major in English from the University of Virginia and later completed his Ph.D. in psychology there in 1937. After completing his doctorate, Wallace went to Tulane University until 1942 when he joined the Army Air Force and conducted research on the selection and training of air crews. He returned to Tulane University in 1946 as chair of the psychology department. Shortly thereafter, in 1947, Wallace became vice-president of research at the Life Agency Insurance Management Association (LIAMA) in Hartford, Connecticut. He left LIAMA on a 2-year leave to serve as chief of the behavioral and social sciences section, Department of Defense. In 1967, Wallace became president and CEO of the American Institute of Research. He returned to academia in 1970 by accepting a position as professor and chair of the psychology department at The Ohio State University (OSU).

Wallace made innumerable contributions to I-O psychology. When he worked for LIAMA, Wallace planned and organized studies in selection, evaluation, and training of life insurance agents and managers. Paul Thayer stated:

> [Wallace's] ability to communicate research findings and their implications to marketing executives in the over-500 member companies created a relationship with them leading to enhanced cooperative efforts to support and participate in research. Executives came to understand the need for large samples, control groups, rigorous data collection procedures, and statistical analyses. He was in constant demand as a speaker, and usually spoke on research and the importance of it. In addition, he broadened the research program to include other disciplines and many aspects of psychology: consumer research, training research, personnel growth and attrition studies, interview research, management development, and so forth (P. W. Thayer, personal communication, January 12, 1999).

According to Bill McGehee as quoted in Joe Weitz' article (1974), "[Wallace's] major contribution to psychology was keeping his colleagues honest in the science and practice of psychology. Many research reports and books are better because he asked penetrating questions. Rains as a psychologist was first a scientist. His tolerance for practice without scientific basis was nil" (p. 395). Thayer commented, "His 'Criteria for What' paper is probably a citation classic, and his Annual Review chapter with Joe Weitz is also widely cited" (P. W. Thayer, personal communication, October, 12, 1998). Furthermore, **Milt Hakel** noted "Rains created excitement and energy wherever he went. When he returned to OSU in 1970, he provided the right amounts of structure and consideration for the I-O program to grow. His brief editorship of *Personnel Psychology* proved to be the turning point in its development" (M. D. Hakel, personal communication, November 30, 1998). Wallace served as the 19th president of APA–Division 14 (1963–1964).

The John C. Flanagan Award for Best Student Presentation at the SIOP Conference

The John C. Flanagan Award was established to recognize the best student contribution at the SIOP Conference (Yammarino, 1998).

John C. Flanagan

John C. Flanagan (1906–1996) was born in South Dakota and raised in Washington. After obtaining his B.S. in physics in 1929 at the University of Washington, Flanagan coached football and taught high school mathematics for 3 years. In 1932, he received a M.A. degree in education from the University of Washington. During this period, Flanagan attended a summer seminar at Yale University where several leaders in education (Truman L. Kelley of Harvard, Edward L. Thorndike of Columbia Teacher's College, Boyd H. Bode of OSU) made presentations. Soon after the seminar, Truman Kelly offered Flanagan a fellowship to study at Harvard. In 1934, he was granted a Ph.D. in mental measurement at Harvard University after only 2 years in residence (Clemans, 1997). Flanagan began a flourishing career in 1935 at the Cooperative Test Service, which was linked to the American Council on Education. In 1941, he joined the Army Air Corps where he established the Aviation Psychology Program of the U.S. Army Air Corps. Shortly after leaving the Air Corps in 1946, Flanagan created the American Institute of Research (AIR, now known as American Institutes for Research) as a not-for-profit organization to "contribute to the science of human behavior and the fuller development and utilization of mankind's capacities and potential" (p. 1375, Clemans, 1997). He retired in 1988.

Flanagan facilitated the development of applied psychology through several innovative and ambitious programs. For example, the Aviation Psychology Program has been considered a milestone in the history of psychology because it was one of the most successful applied psychology programs (Clemans, 1997). Flanagan developed a two-step selection procedure to identify enlisted servicemen who could become successful pilots, copilots, navigators, and bombardiers. The first step was a screening based on a general qualifying test. Over 1.25 million cadets were tested in this first step. The second step involved assessing cadets with 20 tests of aptitude, proficiency and temperament. Using multiple regression, candidates for each position were categorized into nine groups, which was the birth of stanine scores (Clemans, 1997).

When Flanagan created AIR, he established a 20-year research program to focus on several areas. One such area was the identification of critical requirements for key jobs and activities. According to **Irv Goldstein**, "Flanagan is a famous person—he was the inventor/creator of the critical incident technique"

(I. L. Goldstein, personal communication, December 5, 1998), which was presented in his 1954 publication. While at AIR, Flanagan directed a plethora of research studies that eventually contributed to reforming education. He also developed the "Flanagan Aptitude Classification Test" and the "Flanagan Industrial Tests." Flanagan's publication list includes 339 entries on "significant methodological contributions, including his definitive discussion of units, scores, and norms in the American Council on Education's classic book *Educational Measurement* in 1951" (p. 1376, Clemans, 1997). Flanagan received numerous awards including the APA Distinguished Professional Contribution Award in 1976 and the 1982 Professional Practice Award of APA–Division 14.

Robert J. Wherry Award for Best Paper at the IO-OB Graduate Student Conference

Robert J. Wherry

The Robert J. Wherry Award was established to recognize the best paper at the IO-OB Graduate Student Conference (Yammarino, 1998).

Robert J. Wherry (1904-1981) was born and raised in Ohio. He received his B.A. in Education at The Ohio State University in 1925 and taught high school history and economics before returning in 1926 to get his M.A. By then, Herbert A. Toops had developed his OSPE (intelligence) test and required all incoming students to sit for the exam. Toops was so impressed with Wherry's exceedingly high scores that he offered Wherry a graduate assistantship. Wherry accepted, found he loved statistics, changed his major to psychology, received his M.A. in 1927, and became Toops' first (or second) Ph.D. in 1929 (R. J. Wherry, Jr., personal communication, February 1, 1999). Wherry began a distinguished academic career at Cumberland University in 1929 and in 1937, joined the University of North Carolina at Chapel Hill (UNC). Wherry had several leaves of absence from UNC during World War II for various positions of high responsibility for research administration and development of personnel research methods and performance test batteries for the Navy, Army, and the War Department (R. J. Wherry, Jr., personal communication, February 1, 1999). In 1948, Wherry left UNC and returned to OSU; he served as department chair from 1960 until 1970. He retired in 1974.

Wherry's contributions to I-O psychology were primarily quantitative in nature. He published numerous articles on quantitative methods and statistics

such as the Wherry-Doolittle method and the Wherry-Winer method in factor analysis. According to **James Austin** (1992):

> [Wherry's] statistical contributions included shrinkage and multiple regression formulas, item and hierarchical factor analysis algorithms, generation of multivariate distributions, and clustering of rater decision weights (c.f. Wherry, 1984). Concerning the latter, Wherry helped develop the forced choice rating method during WWII and willingly provided critical commentary on criterion measurement over the years. More importantly, he proposed a theory of ratings that merged cognitive and psychometric insights in a series of Army Technical Reports (Wherry & Bartlett, 1982) (p. 56).

Wherry authored over 100 journal articles and professional papers. After his retirement from OSU, he wrote the book *Contributions to Correlational Analysis*, which discusses many techniques he and his students developed during his career (R. J. Wherry, Jr., personal communication, February 1, 1999).

Wherry was considered to be an effective teacher and was highly regarded by students and colleagues. According to Richard Klimoski:

> [Wherry] was recognized as a very competent quantitative psychologist [and] as a good one-on-one teacher. He once sat with me and did a factor rotation 'by hand' to see if we could capture more variance (R. J. Klimoski, personal communication, December 2, 1998).

Ray Katzell noted:

> [Wherry's] graduate classes in statistics were always packed and other faculty came to them. He was the type of unselfish faculty that had students lined up at his door, down the hall, outside his office. Everyone wanted him on his or her committee. He was a master at cutting through some vague conceptualization of a problem to operationalizing it in terms that could be dealt with by the appropriate (or an innovative) experimental design and statistical analysis (R. Katzell, personal communication, January 26, 1999).

Paul Thayer recalled "If [Wherry] served on your dissertation committee, he was most helpful in the statistical analyses. And his presence at the oral guaranteed that none of the other faculty would ask statistical questions of the candidate. He was the EXPERT." (P. W. Thayer, personal communication, January 12, 1999). Throughout his academic career, Wherry trained 81 Ph.D.s. Some students include Richard Gaylord, B. J. Winer, **Donald Grant**, Dugan, Jack Bartlett, and Robert Wherry, Jr.

Conclusion

I hope you enjoyed recalling or learning about these I-O luminaries. It seems appropriate that the SIOP awards are named in honor of individuals whose lives and careers depict the scientist-practitioner paradigm that characterizes the I-O psychology profession. These men contributed immensely to the discipline by maintaining a science–practice interface without compromising integrity and quality. As I talked with colleagues, it became apparent that these eminent scholars were/are well-liked and revered by many for their warmth, sincerity, and intellect.

A challenge in conducting historical research is locating pertinent information. I thank the following individuals for providing information and/or reviewing earlier drafts: Jim Austin, Kim Bryan, David Devonis, Irv Goldstein, Bob Guion, Lee Hakel, Milt Hakel, Dick Jeanneret, Ray Katzell, Rich Klimoski, Frank Landy, Wynne Lewis (daughter of Ernest J. McCormick), Susan Myers, Mike Mumford, Lance Seberhagen, Garnett Stokes, Paul Thayer, Keith Tidman of AIR, Robert Wherry, Jr., Fran Yammarino, and Shelly Zedeck.

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Practice Network: I-O Psychology.Com—The Internet and I-O Psychology

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Imagine it is A.D. 5759. As you wake up, you reach for your freshly brewed cup of espresso and move over to your work station. "Greetings," calls out your assistant I.O.Syke. "Greetings to you," you reply. Your assistant continues: "You have a busy day scheduled today. Among today's items are interviews with finalists for the Global Webmaster position, an initial meeting of the Global Competencies Leadership Training Forum, and a meeting of the Global Business Strategy Force. In terms of the interviews, all three finalists have completed the tests and I have scored and analyzed the responses. Oh, by the way, as you probably know, the candidates completed three personality tests, two work samples, two cognitive ability tests, and two automated interviews. I have also compiled a list of contradictory statements (there were very few) and scored the interviews on various speech patterns. If there is any other measure you want, let me know."

Before I.O.Syke can continue, you say "Stop. The Training Forum, what role am I playing on that?" I.O.Syke smiles on the screen J and says "I was just about to get to that. Remember, I am not a human, so I have developed an objective system for predicting your preference order for information. Your role in the Training Forum is that of a 'live presenter,' and so you will need to be on your Webcaster at 15:15 Global Standard Time. By the way, if you are traveling at this time, your new 'Webframe' glasses are available for use now and they will enable you to drive your carplane while you interact with others."

Does the scenario above sound far-fetched? Thinking that it is as likely as the Cubs winning the World Series? Not really. Believe it or not, there are already products like the "Webframe" that are used by mechanics, for example, which enables them to examine blueprints over the Web while repairing equipment. And, various algorithms already in existence could probably do many of the things referred to above. In fact, I will go out on a limb and predict that 3,000 years from now, there will be new Internet technological innovations beyond our wildest dreams. So feel free to check back with me then!

This column is about the role and effect of the Internet (I include Intranet applications here, although for simplicity, I will only use the work "Internet") on I-O psychology. As everyone knows, the "experts" indicate that the Internet has the opportunity to change many aspects of the workplace, including how businesses operate, how information is shared, and other things. It seemed appropriate, then, to explore how the Internet might affect I-O psychology. Towards that end, I talked with five I-O psychologists. Their comments and my reactions follow next. The three primary questions I asked the I-O psychologists I talked with were:

1. How are you using the Internet currently?
2. How do you think you will be using the Internet in the future?
3. What effect do you think the Internet will have on I-O psychology?

How Are You Using the Internet Now?

I-O psychologists are using the Internet for a variety of purposes, ranging from basic communication with colleagues (e.g., via e-mail) to psychological assessments. Two other popular uses are finding information about vendors (via their web sites) and obtaining copies of papers and reports. As an example, I have found that EEOC's web site (www.eeoc.gov) is a very useful source of information on recent guidelines, number of cases filed with the EEOC, and other items of use. The University of Missouri-St. Louis, my employer, has done an excellent job of making library resources available on-line. For example, students and faculty have access to Lexus-Nexus, which has valuable information about legal decisions, legal news, and legal articles.

Another popular application that respondents discussed was the on-line administration of employee surveys. Among the advantages cited for Internet-based administration of employee surveys is the speed with which the information can be gathered and analyzed. A second major advantage cited for Internet-based employee surveys is greater acceptance and higher response rate by respondents, apparently because of the novelty and ease of responding. As was acknowledged, however, as this technique becomes more widely used, the response rate may drop and approach levels typical of the paper-and-pencil approach. The Internet-based employee survey was not without disadvantages, however. One respondent indicated that there were no cost savings yet and pointed to high infrastructure and maintenance costs. Other parties either have found or merely take it for granted that the costs will be lower. One result may be that customers will try to negotiate lower rates based on this assumption. Other possible disadvantages of Internet-based employee surveys include concern over the security of the information and limited employee access to computers. And, an interesting question that appears to be as yet unanswered is whether responses will differ for an Internet-based compared with a paper-and-pencil-based administration. Yes, there appears to be some potential for interesting research here as well! Finally, one respondent noted that it was easy to get *too much* data from an Internet-based survey and an important decision was what *not* to include on such a survey.

Somewhat surprisingly, it appeared that Internet-based psychological assessment was somewhat less frequently used. One respondent attributed that to concerns regarding controlling the environment in which the test was taken. Perhaps, given concerns about who the test-taker is, the Internet provides little advantage over a PC-administered test. In any case, my respondents spent far less time talking about psychological assessments than they did about employee surveys.

Most of the applications described above concern *gathering* information. There was also some discussion as to the use of the Internet as a means of *disseminating* information. One respondent described some developments in Internet-based training and development in his organization. At present, his organization was only providing a web site with some "tips" for managerial functions and tasks. The Internet component was viewed only as supplemental and live classes were considered essential for experiential learning. Incidentally, I will note that the University of Missouri-St. Louis has developed an on-line MBA program, but a critical component is the "live classroom" experience. There is at least some anecdotal evidence that the brick-and-mortar university/training classroom will persist for some time into the future!

One respondent discussed the role of the Internet as a way of disseminating results of a survey or other relevant HR indices (e.g., turnover data) and inducing people to act on this information. An interesting question, according to this respondent, was how can we use the Internet to get people to attend to key information? Does this take I-O psychologists back to consumer behavior theory? I think the answer is possibly yes, which takes us to other interesting questions, such as how the Internet might be used for organizational development and change. As an example, does the proliferation of information over the Internet and the availability of e-mail change organizational structures and processes? Again, I think the answer is probably "yes." Another respondent described an interesting application of the Internet to obtain a variety of documents, including governmental, financial, and industry reports on an organization and using this information to examine how the organization changes in terms of strategy, structure, and processes. As he observed, use of the Internet for this purpose may provide a longitudinal perspective on the organization.

In sum, the Internet is being used in a number of different, interesting ways by I-O psychologists. At the same time, the application of the Internet appears to be moving more slowly than I would have anticipated.

How Do You Think You Will be Using the Internet in the Future?

I received fewer and briefer answers to this question than I expected. I don't know if this was because I had already bored respondents too much by this point in the phone conversation, or more likely, because it seems pretty tough to predict just what Internet applications will be like in the future. In any case, I received two basic, interesting comments in reaction to this question:

The Internet will be used to enhance interpretability of information. For example, say an employee takes a battery of tests for career development purposes. An algorithm might be developed to lead the employee to relevant documents that explain what those scores mean, provide developmental advice, and then offer a menu of appropriate training modules.

The Internet will be used to integrate between different levels and different processes. One respondent described the use of the Internet for linking between the micro and macro levels of analysis. For example, psychological assessments, including 360-degree feedback, test information, and so forth, might be used to make individual decisions (e.g., promotions) and then combined across employees to make organizational level decisions (e.g., HRM planning). This seems to be a novel application of potentially great interest. In terms of different processes, information used in assessments made for hiring might then be used to develop developmental plans, training programs, and other I-O processes. Other examples abound, such as linking employee strengths and experiences to customer preferences and styles.

In sum, I think there are a number of interesting possible uses of the Internet to I-O psychology that as yet have been relatively unexplored.

What Effect Do You Think the Internet Will Have on I-O Psychology?

The answers ranged considerably regarding this question. One respondent indicated that he felt the Internet would have little impact because I-O psychologists are not intermediaries, rather we are direct providers of products and services. Unlike, for example, car dealers, our customers cannot simply bypass us and go directly to the car manufacturers. Others felt that the Internet would serve as a useful tool in the I-O psychologist's toolkit, but that the Internet was not going to fundamentally change I-O psychology. One concern raised was that some technology-oriented businesses might invade our turf by offering "user-friendly," high-tech products, such as tests, that would fail to meet our professional standards (e.g., validity). In other words, our reputation might become tarnished by I-O-like products created by other organizations.

One of my respondents felt quite differently about the potential impact of the Internet on I-O psychology. First, he felt that I-O psychologists need to have a much greater understanding of these new media forms and to incorporate them into the practice of I-O psychology. In support of this notion, a different respondent indicated that 2 years ago, his clients didn't seem to care whether an employee survey was administered in a paper-and-pencil form or Internet-based; today, this same client might require that it be administered over the Internet. It may be the case, then, that our customers will make increasing demands for the greater integration of the Internet with our services and products. This has implications for the training of I-O psychologists, a question that there is simply no space to cover in this column.

Second, this respondent made another, and I think very valuable, insight about the fundamental paradigm of I-O psychology. I-O Psychology has typically focused on people (e.g., SIOP's goal "is to promote human welfare through the various applications of psychology to all types of organizations providing goods and services"). But what if we view the paradigm of I-O psychology as "creating value" for organizations (which, I would guess, is the actual mission for most I-O practitioners)? If we say that "creating value" is the appropriate paradigm, then the Internet may become a far more important development

(e.g., there may be circumstances where the Internet could replace people and I-O psychologists should be capable of understanding and using the Internet). Perhaps rather than a tool, then, the Internet serves as an important technology in its own right. Based on this perspective, we may need to learn a lot more about the Internet to enable us to recommend it where and when appropriate.

Conclusions

Based on my review of some I-O psychology sites as well as these discussions, I-O psychologists may want to give more thought to the implications of the Internet for the field. Those individuals interested in learning more about the Internet and I-O psychology should examine previous issues of *TIP* for articles on this topic. **Jack Jones** has written two books on the Internet, including one entitled *Virtual HR: Human Resources Management in the Information Age*. My guess is that there is a lot more to say about this topic. In light of the fact that I only talked with five I-O psychologists for this column, I would really like to hear more from my readers about how you are using the Internet and your thoughts for the future.

As always, please, continue to contact me with reactions to this column and topics you would like to see covered in the future. Please e-mail me at mharris@umsl.edu, call (314) 516-6280, fax (314) 516-6420, or snail mail me, Michael Harris, School of Business Administration, University of Missouri-St. Louis, St. Louis, MO 63121. I look forward to hearing from you!

I would like to thank the following individuals for their help in preparing this column: **Thomas Jeswald**, PNC Bank; Jack Jones, NCS; **Bill Macey**, Personnel Research Associates; **Jeff McHenry**, Microsoft Corporation; **Michael Olson**, State Farm Insurance.

TIP-TOPics for Students

Dawn Riddle and Lori Foster
University of South Florida

As you may have heard, April 1999 marks the end of our reign as TIP-TOPics' student editors. Of course we couldn't resist a little walk down memory lane, in honor of our final issue.

During the past 2 years, our mission has been to report on issues of TOP priority to our *TIP* readers. We've aimed our **Spotlight** on tools and training strategies that could potentially be incorporated into your current I-O program, your personal development plan, or your future workplace. With the help of a lot of folks, we've looked at innovative uses of role plays in I-O training, technology in the classroom, and mentoring programs targeting professional growth. In addition, we've identified unique opportunities for developing publishing skills, creating teaching portfolios, and broadening professional knowledge through doctoral consortia.

The **"You Know, I've Been Wondering..."** segment has certainly covered a lot of ground as well. This segment has shed light on a wide variety of questions that befuddled I-O students were afraid to ask, were unsure if it was appropriate to ask, or just plain didn't know *who* to ask! Many topics were demystified in this segment, including internships, the future of our field, the differences between theses and dissertations, the ins-and-outs of publishing, finding a job, and the workings of the annual SIOP conference. With the help of our TIP-TOPics student representatives, we've certainly learned a lot.

Finally, the gist of our **TIPs for Balancing Life and Graduate School** segment has been to collect and disseminate TIPs for maintaining that delicate balance among the many hats we all wear—student, employee, spouse, friend, volunteer, and so forth. We've received a wide variety of suggestions from our sources, and shared many of them with our readers. Advice has emphasized the importance of identifying and utilizing support groups, involving family in school-related activities, developing, obtaining, and maintaining long-term vision and perspective, finding family-friendly places to work, and utilizing online listserves. After receiving and following these TIPs during the last 2 years, we feel a lot better!

The success of our entire column (yes, we like to think of the column as a success!) was largely due to input, advice, and pointers imparted from the likes of **Elaine Pulakos, Fritz Drasgow, Kevin Murphy, John Hollenbeck, Ken Smith**, and Kenneth Blanchard—not to mention our many TIP-TOPics student representatives and guest writers! Thanks also go to **Allan Church**, who has been there to provide guidance and support. In short, many thanks to all who helped make the column enjoyable to create, write, and hopefully, read.

Now that we're through with our tearful remembrances and sincere thank you's, here's something to brighten your day...the July 1999 issue of *TIP* will

introduce a new column! And guess who will be writing/editing that column? If you guessed *us*, you're right. Since we're nearing the end of our student days, we thought it might be time to graduate to a new column, one more in tune with our new interests—Early Career interests, that is! That's all we're saying for now. You'll have to catch us in the July issue to find out more—we don't want to spoil the surprise!

Okay, it's about time we got on with this issue's TIP-TOPics column! Our line up for this edition involves **Spotlight**ing a seminar designed to arm students with the insight needed to successfully leap from textbooks and classrooms to the practical pragmatics of professional practice in I-O psychology. **"You Know, I've Been Wondering..."** covers questions I-O students often ask prior to that leap. Special thanks to **Stephanie Payne** and **Sheila Simsarian Webber** for providing answers to these questions based on their experience in the seminar described in the **Spotlight** segment. Lastly, our final **TIP for Balancing Life and Graduate School** offers a place to go to add some extra fun and relaxation to this year's SIOP conference.

In the Spotlight: Career Survival Training in the Classroom

If you are like most students, a few semesters of grad school under your belt has you feeling pretty comfortable with your role as Graduate Student. "I can handle this," you cautiously decide. Before long, you begin to master the core I-O competencies. Heck, you even start using words like "competencies" in everyday language! "I have arrived," you decidedly assert. But wait—hold it right there! A successful career in I-O depends on more than mere subject matter expertise, or so they tell us. According to **Dianne Brown Maranto** from the APA Science Directorate, "There are a lot of career survival skills that you don't learn in the course of the regular graduate curriculum in I-O, but that are just as crucial to your success in the field. Providing this kind of information to students in the form of a professional practice seminar is definitely going to give them an edge as they enter the field."

This segment describes a graduate seminar designed to equip students with a variety of career survival skills before they enter the job market. Entitled "Professional Issues in Psychology," this segment is conducted biannually at George Mason University (GMU). Its formal objective is to address issues that face psychologists as they function as professionals in various work settings. "It's like mentoring students, but on a larger scale," says **Rich Klimoski**,[1] who has taught the course in the past.

Overview

The Professional Issues seminar meets weekly, and each week emphasizes a separate skill area. Most skill areas span academic and applied careers, making

[1]Many thanks to Dr. Klimoski, who provided lots of valuable information for this column.

the seminar appropriate for students headed in either direction. During the course of the semester, the following skills are targeted: career planning, locating funding sources and writing proposals, project management, developing staffing plans and budgets, networking and participating in conferences and societies, mastering the criteria for publishable work, academic interviewing skills, making ethical judgment calls, balancing constituencies, developing professional partnerships, working by legal precedent, and handling political sensitivities.

Doesn't sound like your typical textbook, does it? So, how is this information conveyed to the students? It is presented through a variety of methods, including guest speakers, individual assignments, and team projects. The following subsections provide specific examples highlighting how these methods are used to bridge the gap between the textbook and the real world. Prepare to be impressed.

Guest speakers. Yes, throughout the semester, students receive words of wisdom from experienced career survivalists themselves! For example, **Deborah Whetzel** from the U.S. Postal Service once gave a talk entitled "Doing Professional Work in Agency settings." This talk was designed to help students learn about balancing constituencies (and related issues). "It's often a balancing act between doing work according to the textbook and getting the job done in a real, practical environment," Dr. Whetzel says. "Students should have exposure to both the optimal way of doing research and development as well as alternative approaches so that when confronted with practical limitations, they will not make compromises that lead to legal or ethical consequences later."

Bev Dugan's talk focused on client management skills—a topic she noted she'd learned nothing about in graduate school. According to Dr. Dugan, an I-O psychologist from HUMRRO, "Many of the managers who seek the assistance of I-O psychologists are working in an environment that is dynamic and they are dealing with problems that are difficult to define and resolve. Tackling problems effectively requires a level of interpersonal skill and an ability to analyze situations and relationships that is not acquired in graduate school."

Marilyn Gowing, Director of the Personnel Resources and Development Center in the U.S. Office of Personnel Management, has also served as a guest speaker for the GMU Professional Issues seminar. Her objective was to raise issues related to working in the public sector and the political sensitivities therein. When asked what "real world" information students learned from her talk, Dr. Gowing replied, "The students learned the importance of translating their research into terms that reflect the objectives of their new managers. As an example, when President Clinton and Vice President Gore came into office, they expressed an interest in 'Reinventing Government.' Our Office of Personnel Management research center had been studying high performance organizations for years using an Organizational Assessment Survey. With a little repackaging, we were able to use our previous work and survey items in a Reinventing Government Survey to meet the needs of the new administration."

In short, knowledgeable guest speakers add considerable value to the seminar by painting vivid pictures of specific I-O careers, describing relevant issues and dilemmas, passing along advice, and simply allowing students to learn vicariously from others' professional experiences.

Individual assignments. Individual course assignments allow students to personalize their professional development during the semester. One example, designed to enhance students' career planning skills, includes marketing to a specific job. This assignment requires each student to prepare materials that are designed to make a strong case for his or her candidacy for a particular position. More specifically, this activity involves the following steps: (a) identifying a post-graduate job or position of interest; (b) identifying a mentor who can provide advice regarding the position's worker requirements and how one can best present him or herself in an application for the position; (c) creating, updating, or modifying one's current vita to target the position; and (d) preparing a persuasive cover letter. Students are required to bring these materials for class discussion. A subsequent assignment has students refer back to the list of worker requirements generated during this process, rank order the listed requirements relative to a self-assessed need for improvement, and create a 6-month action plan to remedy or strengthen identified personal weaknesses.

Another individual assignment requires students to develop a list of local, regional, and national professional/scientific societies relevant to their careers, and solicit membership information from those societies. Students must also examine societies to which they already belong and identify activities that they are eligible to participate in. Finally, students are required to join a new society and/or increase participation in a society to which they currently belong. In general, this assignment is designed to help students develop their networking skills and appreciate the role that societies can play in their professional lives. As Dianne Brown Maranto, former guest speaker for the seminar points out, "I-O is a heavy networking community and we rely on our professional societies to find each other. If a seminar can provide suggestions on how to maneuver through the various societies, students stand a better chance of establishing key contacts."

Team projects. Team projects also play a role in the development of career survival skills. One example assignment requires 2- to 3-person teams of students to respond to a military SBIR "call" for project proposals.[2] Teams prepare project proposals that are appropriate for the problem outlined in the SBIR. The team proposals are required to be technically strong, well-informed by the literature, practical, and persuasive. In other words, they should be realistic. This project is designed to enhance proposal and grant-related expertise—a skill requirement common to a variety of work settings.

[2] For those of you who are unfamiliar with this term, SBIR (Small Business Innovation Research) funding consists of money set aside, by the government, in order to (a) address government agencies' research needs, and (b) help small businesses conduct research and develop new products. Small businesses may bid on SBIR projects by submitting proposals that outline potential research solutions and their associated costs.

What's the Use?

A seminar teaching career survival skills can benefit students in a number of ways. But don't take our word for it—ask Elaine Pulakos, President of SIOP and former speaker at the GMU Professional Issues seminar. "Professional Practice seminars, like the one offered at George Mason, are useful to students because there is a gap between what one learns in typical theory and research-based graduate school courses and doing applied work in our field," says Dr. Pulakos. "A course that focuses on practice issues helps students to better understand the nature of applied work and the unique skills that are critical to performing this type of work (e.g., excellent consulting skills, communication skills, flexibility, etc.). The primary benefit of learning about applied work in graduate school is that this ought to help students make decisions about the career options they wish to pursue."

Stanley Gully from the School of Management and Labor Relations at Rutgers agrees on the importance of a Professional Issues course. "Textbooks rarely focus on the underlying occupational socialization processes that are crucial to effective adjustment as professionals in our field. For example, it is helpful to understand the impact of the informal professional network on job search activities and research endeavors. Similarly, balancing our personal lives with work demands is difficult, and it is often useful to hear about strategies others have developed to cope with these demands. These seminars provide opportunities to explore such issues." Dr. Gully notes that the Department of HRM at Rutgers offers a course called the Professional Seminar (ProSem), which is similar to GMU's Professional Issues program.

What Does This Have to do With Me?

Okay, so GMU and Rutgers offer really cool professional seminars, but what does this have to do with everyone else? Glad you asked! If you are a graduate student or faculty member who likes this idea, consider initiating some change and incorporating this strategy into your current program! Depending on the specifics of your program, this may or may not have to take the shape of a formal seminar. Dr. Klimoski points out that this type of course could be modified and adapted to a brown-bag format. (In fact, rumor has it that Michigan State is currently conducting survival skills training in a less formalized noncredit series of brown bags held every Friday.) So, take the ball and run with it!

"You Know, I've Been Wondering..."

...what *exactly* do students learn in those professional development seminars? We recently got in touch with two students, Stephanie Payne and Sheila Simsarian Webber, who experienced the GMU Professional Issues seminar first-hand. According to Stephanie and Sheila, this course answered several nagging questions that they previously pondered. Since TIP-TOPics readers probably share some of the same questions regarding the pragmatics involved in the practice of our profession, Stephanie and Sheila agreed to give us the low-down on a few key issues. The following Q & A integrates responses from both students and represents their lessons learned from the seminar.

What is a "professional persona," and why should I want one?

A professional persona is "something you are known for"—something that differentiates you from others because you are the expert in that arena. It also reflects who you are—a scientist, who develops new knowledge and insights, a practitioner, who applies knowledge to an existing problem, or the ever famous scientist-practitioner, who tries to balance both roles. Your professional persona can be instrumental in establishing your reputation and marketing your knowledge and skills.

You really should start building your professional persona as soon as your I-O training begins. It is recommended that you choose a focal topic that (a) you know well, (b) is practical to study and of interest to the field, (c) will hold your interest for 5–10 years, and (d) permits interrelated studies. It is also helpful to choose a mentor to model that exemplifies the persona you want to portray.

How should I market myself for a specific job?

For starters, you may want to do a little "market research" so to speak. Find out as much as you can about the organization and the position. For instance, it is helpful to know, understand, and use the jargon adopted by members of the organization. It is important to gather background information because you will want to tailor your vita and cover letter to the specific organization. Your cover letter should make a strong case for your candidacy for a particular position, suggesting that you have what the organization needs and they have what you need.

When applying for academic positions, find out whether any faculty from the institution of interest have vitas posted on the web. If so, format yours similarly. In addition, if you don't have one already, be sure to include a section of "works in progress" on your vita. This section should focus on your individual research projects and interests, and it should specify where these topics fit within the broader field of I-O. Furthermore, you might want to become familiar with preferred teaching styles at the university or college of interest. Look at the university catalog and, in your cover letter, describe what classes they offer that you would be willing to teach.

In terms of marketing yourself in general, remember to keep your colleagues informed of your activities. Also, make others aware of your work by sending copies of your manuscripts to key people in the area and encouraging them to provide you with comments. One more idea—you might want to work with your advisor or mentor to organize and contribute to symposia at conferences.

How do I go about seeking funds for research?

A good place to start is your own backyard. Find out whether your university has an "Office of Sponsored Programs" or some similar office. These programs typically have access to the variety of sources for research funding. After that, consider checking the net. The following organizations routinely offer funds for research and are accessible on the Internet: National Council of University Research Administrators; Federal Information Exchange, Inc.; Federal Acquisition and Procurement Opportunities; Army Research Office; Defense Advanced Research Projects Agency; DefenseLINK; National Science Foundation; and National Institutes of Health. Even the most modest research is funded. It's never too soon to start pursuing financial support for your research.

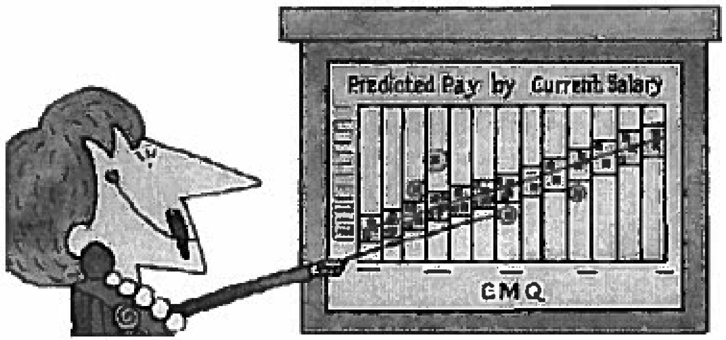
And don't forget, just like marketing yourself for a job, you must market yourself for funding opportunities. When a request exists, represent your credentials in a manner designed to make you look like an attractive candidate. Similarly, revise your vita according to the proposal, and write a cover letter with the purpose of acquiring an interview.

TIPs for Balancing Life and Graduate School

SIOP is just around the corner, and this year's conference presents a brand new opportunity for you to hone your work/leisure balancing skills. If the "leisure" side of the equation starts looking a little thin, consider attending "Graduate Students' Night Out" for some fun and relaxation. This event will take place on the rooftop deck of Lulu's Bait Shack, Saturday, May 1, beginning around 9:00 PM. Lulu's is located at 3057 Peachtree Road in Atlanta's Buckhead district. Their signature item is a 94-ounce "Fishbowl" drink with a little bit of everything in it. (You'd better bring a friend, otherwise "balance" will no longer be an option!)

"This will be very informal," says **Mike Fetzer**, a graduate student at the University of Southern Mississippi. "I've set this up as a meeting place for us to get away from the 'ambiance' of the conference."

Directions to Lulu's will be posted on the bulletin board at SIOP; or, you can visit their website at http://www.lulusbaitshack.com. For further information on Graduate Students' Night Out, contact Mike Fetzer at the University of Southern Mississippi (fetzer@netdoor.com).



The Real World: Verbicide, Do You Remember When Paradigm Used to be a Very Cool Word?

Janine Waclawski
W. Warner Burke Associates, Inc.

Verbicide *noun* 1: deliberate distortion of the sense of a word (as in punning), 2: one who distorts the sense of a word.

Adams on Business Jargon

During a recent interview with the *Harvard Communications Update*, Scott Adams (of *Dilbert* fame) was asked if "business jargon is now the greatest threat to the English Language." He responded as follows:

> People don't bring that language home too much. You know, you come home and you're not really facilitating the diapers. For some reason people can turn it on and off...I think it's a surrogate for actually being confident. It probably took me 10 years of working in the corporate world before I realized that it wasn't just because I was inexperienced that I was confused, but it was because everybody's full of [it]. Soon I realized that I was bluffing, too. Everybody's bluffing. If you can say, 'Well, we are going to do a paradigm here. We're looking at different models. We'll run a few simulations and put this together to see if we can get a consensus.' That sounds much better than, 'I don't know'.

Of course, I beg to differ.

My Old School

This is a true story. When I was an undergraduate psychology major at SUNY Stony Brook I had my first exposure to the word paradigm. It was in my Psychology 101 textbook. In this case the term paradigm was being used to differentiate different families of theories in psychology (e.g., psychodynamic, developmental, cognitive, experimental, social and behavioral). At the time I thought it was a very cool and sufficiently psychological-sounding word. It made me feel good about the first semester's tuition that my parents had just shelled out. It also made me feel good about psychology as a field. Hey, I was only 16 years old and obviously easily impressed. Yes, for a kid from the middle class suburbs of good old Long Island the word paradigm just oozed erudition and had instant credibility. Little did I know that one day the very word I so adored as an excited and impressionable young freshman would make me entertain thoughts of committing acts of physical violence against its purveyor as an adult. Yes, too much of a good thing really can be harmful.

At this point, you may be asking yourself, what happened here? How can one go from loving a word to hating it? The answer my friends is verbicide, pure and simple. The overuse and flagrant misuse of the word paradigm by every would-be consultant, armchair psychologist, self-help guru, and a host of others has bastardized it and killed it dead.

You can call me a purist or an anachronistic stick-in-the-mud, but I have finally had my fill of trendy buzzwords and jargon. Specifically, I really detest the "Newspeak" that has crept into our language and in particular our profession with such elan. For example, can anyone tell me why we had to invent the term "value-added" when good old "contribution" has been around since the 14th century? Personally, I just find terms like "thought leadership" and "buy-in" repulsive. There—I said it. I refuse to beat around the bush on this topic. I really don't care who gets annoyed. If someone out there wants to defend the excessive use of non-words in our field, be my guest. I will do battle to the death!

I'm Just a Bill

Whew, I feel much better now that I have gotten that off my chest! But seriously, recent political events (i.e., Bill Clinton's impeachment by the Congress) have brought the issue of verbicide to the fore. In this case, the president was accused of parsing words and concepts to such an extent that it was unclear if one could agree on what is "is." In my opinion, parsing is just one way to commit verbicide. The excessive use of a word when applied out of context or in an inappropriate context as jargon or as a buzzword is another.

Perhaps it is because my mother was a high school English teacher who incessantly corrected my grammar and syntax (not that it did any good). Or perhaps it's because I just get easily irked. In any event, I really have a problem with buzzwords and jargon. I feel that our language is sufficiently complex to express what most mortals intend. Anyway, if it was good enough for Shakespeare it's good enough for me. However, I know that I am as guilty as (if not more so than) most people when it comes to using jargon. I have probably used more trendy catch phrases and coined more insipid acronyms in my short professional career as a consultant than most normal people ever even hear in a lifetime. But it doesn't mean I have to like it.

Given my admittedly dubious past in this area, you might be wondering why of all things I have decided to focus on jargon in this column. Well, recently I was working with a client at an off-site meeting who told me that she liked the training program we were conducting but there was "too much jargon" in it, which made the speakers and presentations difficult to follow at times. This gave me pause because I thought I was jargon-free. I guess I was under the impression that using jargon and psychobabble were bad habits that other people had, not me. Wrong. Despite all my moralizing and soapbox preaching to others about the evils of jargoning, I was doing the same thing. I

was a hypocritical, sanctimonious, and holier-than-thou jargonnaut. Woe is me. Well, no more my friends—from this point forward I do solemnly swear to strike jargon and anything remotely resembling it from my vocabulary, so help me! However, before I do, I feel I must purge myself of these sinful and hateful words once and for all. Therefore this column represents my farewell to faux phrases and goodbye to business babble.

Brother, Can You Paradigm?

So, aside from my client's complaint about my overuse of jargon, why should professionals in this field care about this topic? What is the problem? As I see it, if the overuse of jargon and buzzwords eventually serves to erode and undermine the credibility of those who use it (and I believe it will), then we are in trouble. While occasionally peppering your sentences with a new phrase or two can demonstrate that your are in touch with the current theories, tools and techniques being used in your field, excessive jargon slinging produces the opposite effect. You sound ridiculous. Words like psychobabble, corpspeak, and managementese come to mind.

Further, I know I am not alone in thinking this. Books such as *The Witch Doctors, Fad Surfing in the Board Room, Business Babble,* and anything written by Scott Adams, all demonstrate that using jargon to excess has a deleterious effect on the credibility of consultants and psychologists alike. This brings me full circle to my paradigm parable: A little bit of jargon goes a long way. So, while paradigm used in its proper context (e.g., my Psychology 101 textbook) can enhance one's understanding of a concept and add subtleties of comprehension to a particular idea, its improper application in every conceivable context can produce the opposite effect.

For example, these days it's almost impossible to talk about innovation or creativity without someone using the term "paradigm shift" or even worse "thinking outside of the box." In fact, the word paradigm is so over applied that there have been several *Dilbert* cartoons dedicated solely to slamming it.

Similarly, have you ever heard something like the following uttered by one of your colleagues and wondered if they were serious?

> In today's hyper competitive business environment, the ability to mine and leverage knowledge effectively will become a major source of competitive advantage in many businesses.

This roughly translates to thinking is good for business. So, for all of these reasons, I am concerned. However, before I get to the usual e-mail Q&A, I want to present you with the following thoughts about the perils of jargon.

> By 2050—earlier, probably—all real knowledge of Oldspeak will have disappeared. The whole literature of the past will have been destroyed. Chaucer, Shakespeare, Milton, Byron—they'll exist only in Newspeak versions, not merely changed into something different, but actually changed into something contradictory of what they used to be. The climate of thought will be different. In fact there will be no thought, as we understand it now (Orwell, *1984*, p. 47).

Was Orwell talking about Cliff's Notes? I think not.

Like most people, I first came across *1984* when I was in high school and to this day it still remains one of my favorites. Among other things the concept of Newspeak really fascinated me. The idea that one day soon we would be monitored by Big Brother and the Thought Police, who would watch our every move and dictate what we thought and how we expressed ourselves, intrigued and horrified me. I was horrified for the most part because I thought the book was already somewhat close to reality or at least had the potential to be. Call me a paranoid freak but the book rang true for me and obviously for many others.

> In the ramifications of Party doctrine she had not the faintest interest. Whenever he began to talk of the principles of Ingsoc, double think, the mutability of the past and the denial of objective reality, and to use Newspeak words, she became bored and confused and said that she never paid any attention to that kind of thing. One knew that it was all rubbish, so why let oneself be worried by it? (Orwel, *1984*, p. 129)

So, while many may dismiss the use of jargon as an unimportant issue, it may be wise to consider its potentially insidious effects on our language and our field. Perhaps we should be concerned. After all, what you don't know can hurt you. Therefore with all these potentially pernicious effects of jargon firmly in mind, I asked several I-O practitioners the following questions:

(1) Do you think we use too much jargon in our field? Please explain.
(2) Do you think the use of jargon has any effect on the credibility of the person using it (either positive or negative) and/or on our field as a whole? If so, how?
(3) What are some of the buzzwords or jargon that you have heard lately that you either like or dislike, and why?
(4) What if anything should we do about the use of jargon in the field?

***

Subj: Re: Comments for TIP
Date: 1/20/99 4:40:53 PM EST
From: jmichela@watarts.uwaterloo.ca (**John Michela**)
To: J9151@aol.com

I don't know if this is what you were looking for, but anyway...your use of "paradigm" as potential jargon in your inquiry reminded me of this experience. I was speaking with a client about the possibility that employees in his organization might perform more effectively if they looked at things in a different way. I said, tentatively and trying to signal that I realized I was in the danger zone for jargon, that we could refer to a way of looking at things as a paradigm. Whereupon he reached his hand to the middle of the conference table at which we were sitting, and he slid a pair of dimes lying there in my direction. To this day I'm not sure whether I did myself more good by signaling jargon-awareness, or more harm by using the term at all. He did, however, agree to the consultation that we were then considering.

John L. Michela
Department of Psychology
University of Waterloo

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Subj: Re: Comments for TIP
Date: 1/22/99 200 PM EST
From: DeanStam@aol.com
To: J9151@aol.com

Hi Janine,

I shared your questions with my office colleagues and we took a group approach to the task.

(1) As a general rule, our firm (Sperduto & Associates, Inc.) makes a practice of avoiding management jargon. There are two reasons we frown on the use of catch phrases/buzzwords. First, we believe there are enduring fundamentals and processes in areas like leadership and that these fundamentals do not change every couple of years the way catch phrases/buzzwords do. Second, we feel that it makes communication between people less effective. In particular, often people ascribe different meanings to terms like paradigm. Sometimes these differences in meaning are subtle and hard to distinguish but at other times they can be quite divergent. This lack of shared meaning can lead to miscommunication. As an aside, regarding the word paradigm I have heard people

pronounce it "paradine" with an "n" at the end. This really makes me wonder if they think it means the same thing I do.

(2) Jargon can definitely have a negative impact on the credibility of the person using it. This is especially true when you are dealing with "people who count." This would mean with colleagues and clients who are knowledgeable about the field and may have an aversion to trendy terms. For example, one of the most effective and intelligent leaders with whom I have worked hated "big words." This was not because he had a limited vocabulary—quite the contrary—but because he felt that people often hid behind ostentatious words. He believed that they used "big words" to mask the fact that they weren't as knowledgeable as they pretended to be. His philosophy was that simple, clear language was best. Again, his objection was that lofty phrases got in the way of clear communication between people.

(3) In our group discussion, we remarked on several trends that may explain why certain terms or phrases may become buzzwords. The first is what we call turning nouns into verbs. Examples of this would be coining new terms like "teaming," "incenting," and "visioning." These seem to be somewhat common. Another trend is the use of euphemisms in place of direct and sometimes negative terms. For example, terms like "rightsizing" and "areas for development" are used in place of layoffs and weaknesses. We also agreed that certain types of people might be more likely to use or hide behind jargon—for example, "people pleasers" sometimes use this type of language to gain influence over or control of a situation.

(4) I think we need to be careful here. First, we should make a distinction between jargon and catch phrases and buzzwords. In many fields (e.g., medicine, chemistry, physics, and even psychology) jargon is really just technical language and as such is completely appropriate. As one of my graduate school buddies once said to me "All graduate school is, is learning another language." Of course this is an oversimplification but in part it is true. It is probably useful to make a distinction between *jargon* (which can be described as the lexicon of a particular field) and *catch phrases* and *buzzwords* which are more generic and less technical terms. Second, we need to be careful in how we apply jargon. For example, I'm sure we have all heard people misuse clinical terms like "psychotic" and "assertive" which have very specific meanings. Using these terms inappropriately can eventually lead to a distortion of their meaning. All in all, we need to be careful about the words we choose and how we apply them.

Dean Stamoulis
and the Management Consultants at
Sperduto & Associates, Inc.

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In sum, it seems that there is some potential for jargon to be harmful to those who use it. First, it can jeopardize one's credibility with others. Second, and more importantly, it can hinder clear communication between people. Third, it can pose an even more serious danger in the long term. Specifically, one of Orwell's concerns was that eventually the use of "Newspeak" would lead to the inability of people to think critically about the world around them. Obviously, this would be a bad thing. Probably the best strategy is to avoid it altogether. Of course, this is easier said than done.

If I Didn't Loathe You I'd Hate You

By now you probably have at least a general idea about the kind of jargon am I talking about. However, since I am short on subtlety and can't control my mischievous impulses I have put together a brief list of some of the buzzwords and catch phrases that I find to be the most problematic and overused. These are my personal favorites that I love to hate.

Anything + capital	Intellectual capital, knowledge capital
Leverage + *anything*	Leverage knowledge capital
Anything + leadership	Thought leadership, loyalty-based leadership
Anything + points	Talking points, texture points
Energy around + *anything*	Create some energy around thought leadership
Grow + *anything*	Grow the business, grow our employees
Anything + services	Professional services, portfolio of services
Process + *anything*	Process check, process map,
Paradigm + *anything*	Paradigm shift
Value + *anything*	Value added, value based, value equity
Anything + driven	Market driven, customer driven
Anything + solutions	Business solutions, real estate solutions

To my way of thinking, these phrases are unnecessary. There are many suitable alternatives that are less trendy and therefore less likely eventually to become outmoded.

Real stuff from *Fortune* magazine:

I also want to share a few more of my recent findings with you. While poking through a recent issue of *Fortune* magazine, I began to notice a disturbing trend among their corporate sponsors. It seemed to me that many of the advertisements used an overabundance of vaunted phrases designed to make their company and its products and services sound a lot loftier and more impressive than normal. As Dean and colleagues said in their response, part of today's jargon is the use of euphemisms. Some of the more amusing ones I have seen lately are listed below. My question is, do these advertisements really make the organization they represent sound more or less appealing? You be the judge.

What the ad said	What it means
We...	*We...*
"offer advanced calling services"	are a phone company
"are a leader in container transportation and logistics services"	organize and move stuff
"manage your network resources for competitive advantage"	help you with computer stuff
"are a global, real-time, event-driven enterprise"	do stuff around the world
"offer expertise in loss mitigation and avoidance"	keep you from going broke
"offer comprehensive data warehouse strategies"	tell you how to file stuff
"offer mailing systems"	mail stuff
"have global multi-modal capabilities"	do stuff around the world
"offer global delivery services"	mail stuff around the world
"are a fully integrated beverage company"	make beer and soda
"offer global leadership in capital raising, asset-based lending, cash management, risk management and foreign exchange"	are a bank

Surf's Up!

Recently, a colleague of mine handed me a copy of *Fad Surfing in the Boardroom* by Eileen Shapiro, a former McKinsey consultant and Harvard MBA. Basically, Shapiro devotes most of the book to talking about our society's quest for instant answers to complex organizational dilemmas. Further, she argues that many companies engage in "fad surfing—the practice of riding the crest of the latest management panacea and the paddling out again just in time to ride the next one; always absorbing for managers and lucrative for consultants; frequently disastrous for organizations." The latter portion of the book contains a dictionary for would-be fad surfers to use to get up to speed on the latest business lingo. I have excerpted some of the more humorous examples for your reading pleasure from *The Expanded Fad Surfer's Dictionary of Business Basics*:

Accountability: A characteristic of which everyone else in the organization needs far more. Not to be confused with authority, which is what I need more of.

Benchmarking: The basis for great jobs in which the incumbents have no substantive responsibilities other than to gallivant around the world, meet all sorts of interesting people, make occasional proclamations about all the neat things other companies do, and submit appropriately lavish expense reports.

Continuous improvement: A label that provides dignity to the repeated efforts of an organization to get it right.

Groupware decision processes: A system that enables 20 or more people who don't have a clue about what's going on to respond electronically to situations in the belief that this collective lack of knowledge, when aggregated and presented in multicolor graphs, will represent wisdom.

Horizontal career path: New name for the occupational breakdown lane.

Process check: Politically correct way of saying "shut up" and otherwise retaining the power to control the agenda of a working group; related to a hockey check.

Statistically significant sample: Four people in a focus group, especially when three of the four express the point of view espoused by the CEO.

Trust-Based leadership: How I can get you to believe in me long enough for me to build trust funds for my children and grandchildren.

Babble On

Another interesting book I came across in my research (if you can call it that) was *Business Babble: A Cynic's Dictionary of Corporate Jargon* by David Olive (1990). This book provides many serious and some tongue-in- cheek definitions of popular business jargon. Although the author does not wax philosophic on the cause and effect of jargon in our culture, he does nevertheless provide some pretty clever interpretations.

Bottom line: The figure representing hope minus reality.

Census reduction: Mass layoffs, an effort to fire as many people as possible.

Compusavant: A person of prodigious mathematical ability, whose talents and personality invite comparison to a pocket calculator.

Environmental audit: How many trees did we kill today?
Leverage: The act of borrowing five cents to purchase control of something worth one dollar in the expectation of locating someone with five dollars to unload it upon.
Opportunity for learning: The bright side of a mistake.
Paradigm shift: Term used by the CEO to tell his entire army that it is out of step, now that he hears a different drummer.
Restructuring: An attempt at self-redemption, in which everyone and everything is moved up, down or sideways, and then given a new name to see if the firm works better that way.
Safety-Related occurrence: An accident in the workplace.
Strategic planning: Planning undertaken with care and deliberation, as opposed to normal planning.
Vision: An idea in black tie.

SIOPisms

Before I go I have a bit of house cleaning to take care of. For some time now I have been working on some jargon of my own that is used to describe some of the behaviors and situations one may find themselves in at the annual SIOP conference. These were developed with a little help from some friends and colleagues at last year's SIOP social hour. If you find yourself experiencing any of the following phenomena in Atlanta, give me a holler!

Session obsession: The obsessive and often compulsive act of asking everyone with whom you come in contact, "What sessions are you going to?" and the subsequent need to justify any selections you have made that are different from those of others. Similar to the "What's your major" phenomenon that one experiences at all college parties.

Poster sprinting: The frenzied act of madly rushing into the beginning of a poster session to grab up all the available papers in which you are interested before they disappear. Not to be confused with the SIOP 5K Road Race.

Card dropping: The frenzied act of dropping business cards at every poster station where papers were unavailable in the hope that you will receive a copy of the paper in the mail before next year's conference.

Craning: A behavioral tic that occurs during conversations at the annual conference. Characterized by excessive 180–degree head turning and room scanning; usually to see if there is anyone more important to whom you need talk than the person with whom you're currently talking.

SIOP neck: A sore neck that results from craning.

SIOParanoia: A state of anxiety created by the excessive interpersonal stimuli that one is bombarded with at the annual conference. Characterized by feelings of dread regarding perceived interpersonal blunders (e.g., no one likes

me, no one knows me, my career is ruined, why did I drink so much at the social hour?).

SIOP funk: The fugue like state one experiences after spending 2 or 3 days at the annual SIOP conference. This is heightened at venues with limited access to the outside world (e.g., Opryland Hotel, Disney World), and is often a side effect of SIOParanoia.

SIOP truancy: The act of skipping out on the Saturday afternoon sessions to do some shopping and/or sightseeing. Considered a minor felony. Can lead to SIOParanoia and SIOPerjury—that is, the act of lying to others about what you did on Saturday afternoon.

SIOP nostalgia: The annual occurrence of reminiscing about and sentimentally glorifying the "good times" one has had at past conferences while simultaneously ignoring all the SIOParanoia and other mishaps that occurred.

SIOPost traumatic stress syndrome: The state of complete emotional, mental and physical exhaustion one experiences directly following the annual conference. Symptoms include impeded verbal ability, extreme fatigue, and, in its most severe cases, a comatose or semi-vegetative state.

I hope this edition of *The Real World* has done more good than harm by raising awareness of an issue I feel is important. If not, then please excuse my presumption and accept my (and Shakespeare's) humble apologies.

If we shadows have offended,
Think but this, and all is mended,
That you have but slumber'd here
While these visions did appear.
And this weak and idle theme,
No more yielding but a dream

As ever, I would like to thank my contributors John Michela, and Dean Stamoulis and friends. Thanks to **Allan Church** for his feedback and to **Seth Berr** for lending me his copy of *Fad Surfers*. Please feel free to contact me either by e-mail at J9151@aol.com or at W. Warner Burke Associates, Inc., 201 Wolfs Lane, Pelham, NY 10803 (914) 738–0080 (tel.), (914) 738–1059 (fax).

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International Forum

Dirk D. Steiner
Université de Nice–Sophia Antipolis

There are lots of international activities to report with this issue of *TIP*. First, **Deanne Heinisch** of Citibank and **Katherine Holt** of PDI Japan report on a country liaison project of the International Affairs Committee. Then, we visit two countries to the south to learn of I-O activities there, both reported by SIOP members. First, **Beryl Hesketh** gives us a glimpse of Australian I-O and introduces us to a number of activities involving our Australian colleagues. Then, **Alvaro Tamayo** informs us of the I-O scene in Brazil, and describes some research activities in which he is quite involved (such as training evaluation and the relation of value priorities and organizational behaviour). So, happy travelling until next issue.

For your comments and suggestions concerning this column, contact me at: Dirk Steiner; Département de Psychologie; Pôle Universitaire St. Jean d'Angely; 24, Avenue des Diables Bleus; 06357 Nice Cedex 4; France. E-mail: steiner@unice.fr. Phone: (33) 492–00–11–91. Fax: (33) 492–00–12–97.

International Affairs Sub-Committee Proposes to Establish Country Liaisons

The International Affairs Task Force, which is part of the Professional Practice Committee chaired by **Jeff Schippmann**, focuses on establishing and facilitating interaction between SIOP members and I-O organizations and individuals around the world. The International Affairs Task Force's charter seeks to develop and maintain relationships with international organizations comprised of I-O professionals and to foster the exchange of knowledge and practice between Society members and other I-O organizations or individuals in other nations. The International Affairs Task Force is chaired by **José Luis (Joe) Garcia**.

A special team within the International Affairs Task Force is focusing on establishing Country Liaisons responsible for fostering a two-way exchange between SIOP members and I-O professionals in the U.S. and abroad. The Country Liaison program is expected to serve as an interface between SIOP and other professional organizations or individuals in each country represented, communicate about SIOP activities in the local country, provide opportunities for mentoring, and share research ideas in the international I-O arena.

An organizing meeting is targeted to take place at SIOP in Atlanta. If you are interested in learning more about the role of a Country Liaison, are interested in participating as a Country Liaison, or simply would like an opportunity to network with colleagues interested in international I-O issues please join us at SIOP. Details regarding meeting time and location will be announced soon, and additional information will be available at the conference.

For more information about the International Affairs Task Force, or the Country Liaison program, please contact the following:

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Other than the Aboriginal people, Australia has been populated by waves of immigrants, initially from the United Kingdom, but more recently from Southern Europe, the Middle East, and the Asia-Pacific regions. Although Australia portrays a rural and remote image abroad, it is in fact one of the most urbanized countries in the world, with 60% of the population living in the capital cities (Sydney, Melbourne, Brisbane, Adelaide, and Perth). New technologies tend to penetrate the Australian population quickly. As a country it is perhaps one of the world's best kept secrets. Unfortunately, the Year 2000 Olympics may well change that.

Centrally regulated wage-fixing agreements between the Australian Government, the Industrial Relations Commission and the Union Movement in the 1980s and early 1990s distinguish the employment conditions in Australia from other countries. As elsewhere there is a strong push to reduce union influence, but this remains stronger than in most other OECD countries. This is an important contextual factor influencing many areas of I-O psychology and HRM practice.

Although I-O Psychology has had a presence in Australia since the 1930s, there has been a marked increase in the qualification levels and professionalism in the past 10 years. Although I-O research is undertaken in management schools, a surprising number of staff employed in psychology departments have strong interests in organizational psychology or related areas, with most of the I-O training being undertaken through departments of psychology. This has tended to give I-O in Australia a distinctive flavor, with strong links to cognitive, measurement and social psychology, while also emphasizing traditional I-O content areas. There is somewhat less specialization in Australia compared with the U.S. This has meant that areas such as career development and human factors are seen as an integral part of organizational psychology.

The influence of social psychology is seen in the research undertaken in the areas of unemployment, attitudes, group influences and supervisory issues, predominantly at Flinders University and the University of Adelaide. Research on occupational stress is also common, with the distinctive contribution arising from the application of clinical and social models and the use of hierarchical linear modeling of the data. The social psychology strengths in identity theory in Australia have also filtered through to influence organizational psychology, while the influence of cognitive psychology emerges in research on decision-making and training.

Recently the University of Queensland was awarded an Australian Research Council-funded Key Center for Teaching and Research in Human Factors and Applied Cognitive Psychology. The Center will be directed by Mike Humphreys, a top cognitive psychologist whom we have recruited into the organizational camp. Andrew Neal from psychology and **Charmine Härtel**, from the School of Management, are also involved, while there are nodes for the Center at the University of New South Wales (Anne Williamson), Macquarie University (**Beryl Hesketh**), Swinbourne (Penelope Sanderson), and the University of South Australia (Drew Dawson). This center was the culmination of a co-ordinated effort on the part of all psychologists in Australia to persuade the Australian Research Council of the need for more training in human factors. As no single university in Australia has sufficient expertise for a full scale Ph.D. program in such a specialized area, the Center will offer a distributed web-based Ph.D. program in Human Factors and Applied Cognitive Psychology that will complement the growing number of professional organizational psychology courses across the country.

As further recognition of the value of applied cognitive research, the Australian Research Council provided funding to the University of Sydney, UNSW and Macquarie University to purchase driving simulators. We now have an active collaborative research program across these three major universities in the Sydney area addressing issues such as skill acquisition and transfer, the impact of drugs on driving, and the role of fatigue.

Australia's third Industrial and Organizational Psychology Conference will be held in Brisbane on the 26th and 27th June, this year, chaired jointly by Boris Kabanoff and **Mark Griffin** of the Queensland University of Technology. This conference, largely modeled on SIOP, and assisted by the generous attendance of U.S. I-O psychologists, is now one of Australia's top psychology conferences, attracting more international participants than other gatherings. This year's workshop program will feature **Wally Borman**, **Deniz Ones**, Phil Ackerman, **Ruth Kanfer**, **Michael West**, **Benjamin Schneider**, and **Joyce**

and Robin Hogan. Many other overseas speakers will be participating. Details can be obtained by e-mailing iop99@eventcorp.com.au or from the web address at: http://www.ozemail.com.au/~evc/iop.

The most exciting development in Australia in the past 10 years relates to the growth in professionalism among practitioners. As so little formal I-O psychology was taught from 1950–1985, many practitioners have had to learn 'on the job or through experience in the armed services. Now, most young psychologists complete a 4-year honors degree in psychology (more psychology is covered in these 4 years than is typical of the U.S. curriculum). This is followed by a 5th and 6th year masters program involving coursework, a research thesis, and 1,000 hours of supervised practice in organizational psychology. Increasingly, universities are offering combined Ph.D./Masters programs in I-O psychology, while some have gone down the route of professional doctorates in organizational psychology. Post-graduate I-O programs are offered through a growing number of Universities (e.g., Queensland, Griffith, Macquarie, University of New South Wales, Melbourne, Monash, University of Western Australia, Curtin, Murdoch, etc.). More established practitioners who were unable to benefit from formal training in earlier years have been supportive in integrating younger I-O psychologists into professional roles, while also updating their own skills.

Most Australian practitioners have become particularly well informed of developments within the field of I-O in Australia, Europe and the U.S.. We are also well placed to take advantage of a growing interest in I-O psychology emerging from the Asia Pacific area, and to forge a distinctive flavor to I-O psychology. This will be necessary if we are to avoid the growing globalization of I-O psychology in association with multinational consulting companies. This trend is resulting in the application of uniform HRM and I-O processes and procedures all over the world. Many of these procedures are highly valuable, but survival relies on diversity, and I-O psychology is no exception.

Industrial-Organizational Psychology in Brazil

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In the last few years, industrial-organizational psychology has developed remarkably in Brazil, in the research field as well as in its applications. The country has been through economic, social, and technological changes which have had a great impact on the workforce, workers' competencies, management models, organizational structures, occupational patterns, and expectations concerning the quality of services and products. These changes have created new challenges for industrial-organizational psychology studies, on the practice level as well as for research and psychologists' training.

Psychologists' Training

Undergraduate studies in Brazil last for 5 years. There is a great emphasis on both scientific and professional training. In the past, students tended to choose the clinical field; nowadays there is a significant migration to the industrial-organizational psychology field. This change could be explained by the high-quality courses in this field offered by some universities as well as by a greater demand for organizational psychologists. Industrial-organizational psychology students are required to follow a 6- or 12-month practice training in companies under direct supervision of a psychologist from the firm involved and accredited by the university. Students must also take part in the supervision program at the university. On the graduate level, few Brazilian universities offer master's and Ph.D. degrees in organizational psychology. The vast majority of teachers who lecture at the master's or doctorate level received their diplomas in renowned American or European universities.

Practice

In Brazil, psychology is a profession protected by law. It is necessary to be registered under the Regional Psychology Council if one wants to work as a psychologist. About 25% of Brazilian psychologists work in the industrial-organizational field. They work mainly at the micro level, but many also work at the macro level. Their most usual working duties comprise personnel selection and placement, performance measurement and evaluation, training and development, total quality management (TQM) programs, quality of work-life, ergonomics, organizational development and change, conflict management, institutional analysis, and organizational climate. Careful analysis of the practice of industrial-organizational psychology in Brazil reveals an evolution towards a major strategic and political integration in the organization. Professional practice, initially based on an approach which was not linked to an organizational perspective but centered in the task/individual relationship (i.e., oriented towards the measurement of abilities), has progressively evolved to an approach which considers the organization as an important determinant of the individual's adjustment and performance. As a consequence, there has been an expansion of the psychology working field through activities such as work safety programs, quality of life at work and programs at the motivational level. Recently, psychologists are involved with social-behavior processes as part of an interdisciplinary perspective.

Research

In Brazil, the aims of research in industrial-organizational psychology are to develop knowledge and technology that can contribute to the productivity and welfare of the individual in the organization. The research in this field is not abundant but of a good quality. The main research nucleus is concentrated at the Department of Social and Work Psychology of the University of Brasilia. This university offers one of the best undergraduate and graduate programs in Brazil and has a productive and highly qualified team of teachers. Former students, who are now professors at other universities, continue to interact with the University of Brasília teachers. They are also working to create research teams in their own institutions. Besides this group, there are other researchers in the area but not necessarily linked to a research team.

There is a remarkable concern in Brazil about the application of research results to organizations, thus attempting to improve the workers' welfare and productivity. This concern has led researchers to publish their research results primarily in national journals so that they could more easily reach a Brazilian public interested in this field of study. Nowadays, research can be divided into four main lines: the study of social-organizational values and their impact on behavior in the workplace, the use of new technologies and their implications for productive process structuring, mental health at work, and the study of the relation between organizational behavior and internal/external organizational factors.

The relation between value priorities and organizational behavior is being studied in two levels: individual values and organizational values. The Brazilian version of the Schwartz Value Inventory has been used to study the impact of employees' value priorities on job satisfaction, organizational citizenship behavior patterns, absenteeism, and organizational commitment. Organizational values are being studied from the employee's point of view. This seems to be a new approach in the literature since I have found no studies following this pattern. In order to make the studies in this field viable, an instrument for organizational value evaluation has been created, based on basic organizational needs. Organizations, as well as individuals and groups, come upon universal requirements that need to be satisfied in order to warrant the organization's survival. These requirements are: (a) the relationship between the individual and the organization, which is always antagonistic since it is difficult to reconcile individual and organizational goals and interests; (b) some organizational structure: organizations have to define duties, rules, organizational sub-systems and the relations among them, working strategies, and so forth; and (c) the interaction between the organization and the natural and social environments. As a survival tactic, the organization has to interact on a continuous basis with the natural environment (e.g., prime matter extraction), the society and other organizations. The answers given by the organization to these three requirements can be expressed in three bipolar dimensions: (a) autonomy vs. conservatism,

(b) hierarchy versus equality structure, and (c) harmony versus mastery. These dimensions constituted the base for the construction of the measurement instrument. The impact of organizational values on organizational citizenship and on feelings of pleasure/suffering at work has already been studied.

Organizational power is the subject of many research projects. Based on Mintzberg's theory, the organizational power configuration scale was constructed and validated. This scale has been used in many research studies.

Research in the training field is characterized by the use of the systemic paradigm as a theoretical support. According to a literature review of the publications in this field, from 1980 on, the national production is basically formed by structured information gathering, performed in public organizations and analyzed through multivariate statistical procedures. There is also a small number of experimental and quasi-experimental studies. A current project, which is meant to have a 4-year duration, has as its main objective to study the impact of training on work.

The majority of research in the industrial-organizational field has been done in the context of partnerships between the University of Brasilia and a variety of public and private organizations. This university-company bond has been greatly beneficial for both sides and is in wide expansion. Moreover, the Social and Work Psychology Department at the University of Brasilia has a consulting center to provide services to public and private organizations. Consultations frequently provide the opportunity to conduct scientific studies in organizations that are later published.

Informed Decisions: Research-Based Practice Notes

Steven G. Rogelberg
Bowling Green State University

Given the incredible amount of time and money that are allocated to training activities each year, it is not surprising that a pervasive interest in training evaluation exists. To that end, I have asked **Tanya Andrews** and Brian Crewe to author this quarter's Informed Decisions column. Tanya and Brian effectively discuss the current state of training evaluation. Their interviews with practitioners across a number of organizations provide nice insights into how the challenges of training evaluation are being met. If you have any comments/questions concerning this particular column you can contact Tanya (tcastig@bgnet.bgsu.edu). If you have any ideas for future columns or would like to propose authoring a column, please contact me at rogelbe@bgnet.bgsu.edu.

Examining Training Evaluation: Reactions, Lessons Learned, Current Practices, and Results

Tanya L. Andrews and Brian D. Crewe
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Despite its rich history, the area of training and development has recently been the subject of relatively few empirical publications. We found this especially to be true in the research on training evaluation. Kirkpatrick's (1959, 1960) four levels of evaluation criteria (i.e., reactions, learning, behavior, and results) have dominated the training literature. No other model hasemerged as a stronger contender for evaluating training programs. Kirkpatrick's (1959, 1960) model of training evaluation has been the most popular, most pervasive, and most cited evaluation criteria since its inception. It is probably cited in every I-O, OD, and OB introductory textbook. We asked ourselves whether this was due to the perception of the impossibility of designing a single evaluation procedure for the great diversity of training programs (in terms of content, process, purpose, and generalizability). But despite this concern, the Kirkpatrick criteria can be applied to a variety of training programs. So, is Kirkpatrick's model *the* model for training evaluation? In search of an answer, we consulted the literature and practitioners in the field to determine the current state of training evaluation. We will present critiques and empirical evidence concerning Kirkpatrick's model, results of a small-scale practitioner survey, and future research directions for training evaluation.

Kirkpatrick's (In)Fallible Model of Training Evaluation

Notwithstanding the popularity of Kirkpatrick's model, several authors have commented on the lack of completeness of the model. For example, based on a demonstrated negative relationship between perceptions of training difficulty and subsequent measures of training effectiveness, Warr and Bunce (1995) asserted that perceptions of training difficulty should be a sub-level of Kirkpatrick's reactions criterion. Alliger, Tannenbaum, Bennett, Traver, and Shotland (1997) went further and proposed an augmented model. Specifically, they suggested that (a) reactions should be assessed as to both affect and utility/usefulness, (b) learning should be subdivided into learning that occurs immediately following training and learning that occurs a period of time after training, and (c) behavior should be classified as transfer of training.

Phillips (1996) suggested the addition of a fifth potential criterion to the model: return on investment (ROI). ROI has been used extensively in other organizational functions and has made its way into training and development. ROI, the number of dollars returned to the organization per dollar of training investment, is calculated as (program benefits – program costs) / program costs (Phillips, 1996). The primary purpose of this type of evaluation is to determine whether the value of a training program exceeds its monetary costs. Researchers and practitioners are concerned about using ROI in the training field because (a) assigning a monetary value to subjective benefits data is difficult and (b) utility analysis/ROI should be used to decide between program alternatives, not to justify the use of a program after the fact (Alliger, Tannenbaum, & Bennett, 1996).

Empirical Evidence for Kirkpatrick?

The lack of completeness is not the only criticism of Kirkpatrick's model. The model also lacks empirical support for its hierarchical levels and causality. However, contemporary researchers have found some promising results. For example, Mathieu, Tannenbaum, and Salas (1992) concluded that reactions moderate the relationship between motivation and learning such that less motivated trainees may learn if they have positive reactions to the training and motivated trainees may not learn if they have negative reactions to the training. Alliger and Janak (1989) found that learning was moderately related to behavior and results, and that behavior and results were correlated. Therefore, reactions may impact learning, which affects (and theoretically precedes) behavior and results. It is essential to note, however, that these correlational results do not illustrate causality.

Of course, there is conflicting evidence. Alliger et al. (1997) demonstrated that the levels were not correlated. Furthermore, although participants had positive reactions to training and demonstrated learning, Campion and Campion (1987) reported no difference in behavior or results for the trained versus untrained group. Alliger et al. (1996) warned that Kirkpatrick's model should not be taken as the last word in training criteria. Furthermore, Kirkpatrick's assumption of causality was probably mistaken (Alliger & Janak, 1989).

Although more research is needed in training evaluation, researchers may be hindered by the limited evaluation criteria used by organizations. Ralphs and Stephan (1986) reported that 86% of organizations usually evaluate programs by using the reactions criterion. Only 15% of organizations regularly utilize pre- and post-test learning measures (Ralphs & Stephan, 1986). Furthermore, only 10% of evaluations measure behavioral change (Tannenbaum & Yukl, 1992). Of course, these data are likely to be 8 to 14 years old. This begged for a current survey on training evaluation practices.

The Practitioner Survey

We conducted semi-structured interviews via telephone/e-mail with non-randomly selected training representatives from three organizations and four consulting firms: Aeroquip-Vickers, Andersen Worldwide, Davis-Besse Nuclear Station, Developmental Dimensions International (DDI) Center for Applied Behavioral Research, Lucent Technologies Microelectronics University, Personnel Decisions International (PDI), and an unnamed manufacturing company. Special appreciation goes to our participants: **Paul Bernthal**, Steve Callender, Brian Crewe, Mike Fillian, **Scott Harkey**, Dave LaHote, and two participants who chose to remain anonymous.

The representatives were asked, *"What criteria/methods does your organization use to evaluate training programs?"* The results are organized below according to six categories based on Kirkpatrick's model: (a) reactions criterion, (b) learning criterion, (c) behavior criterion, (d) results criterion, and (e) ROI. Results are summarized in the table and explained at length in the text. Note that opinions of the participants do not necessarily reflect those of the organization.

Organization	Reactions	Learning	Behavior	Results	ROI
Aeroquip-Vickers	✓		✓		
Andersen Worldwide	✓				
Davis-Besse	✓	✓			
DDI		✓	✓		✓
Lucent Technologies	✓	✓			✓
PDI	✓		✓	✓	
Manufacturing Company	✓	✓	✓		

1. Reactions criteria

Written/e-mail/web-based surveys. Trainees rate the effectiveness of the program; the strengths/areas for improvement regarding the content, activities, instructors, and conditions; the clarity of the objectives; and the usefulness of the program. Surveys contain open-ended items. Assessment occurs immediately following the training program. The purpose of the reactions data is to increase the quality of the program. While the six companies report using paper/pencil surveys, Andersen and Lucent also report employing e-mail and web-based surveys, respectively. At Davis-Besse, the reactions of the trainers are also assessed.

Interviews and focus groups. In addition to surveys, Andersen evaluates reactions through interviews and focus groups, though on an infrequent basis.

2. Learning criteria

Written/web-based tests. Davis-Besse, DDI, Lucent, and the manufacturing company administer written tests at the end of each skill training or at the end of the training program to determine knowledge acquisition. Only the learning of hard/technical skills is typically assessed. Lucent reports using web-based tests also. Davis-Besse administers these knowledge tests at least three times per year to assess the maintenance of trained knowledge.

Work samples. Davis-Besse, DDI, and the manufacturing company use work samples to assess knowledge acquisition. The work sample is an observational assessment of either training performance or lab environment job performance.

Simulations. In an attempt to measure soft skills, Davis-Besse operates a plant simulator to determine the acquisition of hard/technical skills as well as interpersonal skills.

3. Behavior criteria

60- to 90- day follow-up reports. Aeroquip-Vickers, DDI, PDI, and the manufacturing company use 60- to 90- day follow-up reports to assess the application of training content to the job. Reports may include measures of knowledge/skill application, performance improvements, obstacles to transfer, and behavioral changes in job performance. Aeroquip-Vickers surveys a random 20% of trainees and their supervisors via the telephone with a structured interview format. DDI and the manufacturing company distribute written surveys to trainees and their supervisors. PDI conducts a follow-up session during which the trainees reconvene for discussion regarding the application of training. PDI has also had placed participants in small groups to use their trained skills on real issues faced by the trainees on the job.

4. Results criteria

60- to 90- day follow-up reports. During the 60- to 90- day follow-up session, PDI has trainees report the impact of the training in terms of organization results.

Objective data. PDI has also made multiple assessments of objective organization performance data such as revenue, profits, and production before and after the training.

5. ROI

Return on investment figures. DDI reports ROI figures. Lucent attempts to track ROI.

Our Findings in Sum

In summary, given our limited sample size of seven, our conclusions are as follows. Nearly all companies assess trainee *reactions* via a written survey immediately following the program. Most companies measure the *learning* of only hard/technical skills through written tests and, to a lesser extent, work samples immediately following the program. Most companies have 60- to 90-day follow-up reports to assess knowledge/skill application, performance improvements, obstacles to transfer, and *behavioral* changes in job performance. *Results* criteria tend not to be utilized. *ROI* is calculated by few companies. Despite our small sample size, we are hopeful that, relative to past reports (Ralphs & Stephan, 1986; Tannenbaum & Yukl, 1992), more organizations now use learning and behavior criteria in their training evaluations.

Regarding the methods for training evaluation, the organizations tend to report one group (sans random selection), post-test only measurement, with immediate and short-term follow-up evaluation via written surveys. As a general practice, companies are not involved in electronic technology for training evaluation.

Practitioner Comments

In addition to the structured interview questions, the representatives commented on training evaluation in general. Their comments are as follows:

> The definition of training effectiveness becomes the driver of the answer to whether training was effective. A positive change in pre- and post-test measures may look like training was effective, but if a person does not perform the changes on the job, the training was not effective.
>
> Attributing training as the single factor for a positive business performance result is overreaching, especially when other changes are occurring in the organization.
>
> [Training departments] recognize that they can only very rarely prove that training has a cause-effect relationship with specific outcomes. On top of that, most can only control reactions or learning. Although asked to measure training effectiveness, they are often not capable of directly influencing those outcomes.
>
> Some say [evaluation] is not worth trying especially with soft skills training because the time to develop the method and criteria is not value-added time. How can you quantify effectiveness and ensure that it's a reliable measure?
>
> Most clients see a need to both "prove" and "improve" the value of training. They need to demonstrate that their efforts

> make a difference for the organization's bottom line. This means collecting data for strictly marketing purposes. All organization's systems must demonstrate value if they hope to receive funding. On the other hand, most training departments really want to improve their training implementations and facilitate transfer.
>
> The main problem is that by adopting the [Kirkpatrick] approach, [clients] may be answering questions no one has asked and may be missing critical issues expressed by their internal customers. The best approach is to start with the customer of the evaluation.
>
> It's too difficult to apply lab methods/criteria in the real world with uncontrolled and changing conditions.
>
> We use a model to determine if training is necessary. If you show before training that it is appropriate and necessary, then you don't need ROI. Companies that believe in training seldom go through the ROI procedures. With ROI, you deal in monopoly money anyway—it's all subjective.
>
> It becomes a credibility factor when you try to assert ROI because there are more unknown than known variables.
>
> If there is a very strong emphasis on proving bottom line impact or ROI, the training department has not done a very good job of gaining buy-in from internal customers. If the training fits with the organizational strategy, is supported by management, and fits with the job needs, then why shouldn't it make a difference?

Where Do We Go From Here?

What is in store for the future of training evaluation? Based on past research and current practices, we assert that future training evaluation research will address two points: the impact of learning technologies and the evaluation of training effectiveness.

1. The impact of learning technologies. Learning technologies are best described as electronic technology used to deliver information and facilitate the development of knowledge and skills (Bassi, Cheney, & Van Buren, 1997). Advancements in presentational methods (e.g., virtual reality, multimedia, interactive TV, and computer-based training) and distributive methods (i.e., e-mail, world wide web, intranet, CD-ROMS, and satellite TV) offer promise for facilitating evaluation. Currently, in training programs, 50% of organizations use computer-based training via CD-ROM, 31% use the internet/world wide web, 21% use the intranet/organization's internal computer network, and 20%

use satellite/broadcast TV ("Industry Report," 1998). Although only 10% of training was delivered by learning technologies in 1997, that figure is expected to triple by the year 2000 (Bassi et al., 1997). The distributive advancements further organizational ability to offer training evaluation via personal computers, which allows trainees to retrieve and complete evaluation materials when and where they are ready. In addition, current intranet-based training programs allow for the administration, analysis, feedback, and storage of reactions and learning criteria during the training program (Bassi et al., 1997). Researchers should assess the effectiveness and utility/ROI of learning technologies in training and evaluation versus traditional instructor-led training and written evaluation.

2. The evaluation of training effectiveness. Trainers are not accountable for training effectiveness. In fact, although they may be able to influence reactions and learning criteria, they have virtually no control over the behavior and results criteria which determine the effectiveness of a program. A plethora of research places the burden of training effectiveness on an organization's transfer climate/continuous learning culture and the personality of the trainee (Baldwin & Ford, 1988; Noe, 1986; Tesluk, Farr, Mathieu, & Vance, 1995; Tracey, Tannenbaum, & Kavanagh, 1995). Researchers should determine, confirm, and model the personal and workplace factors that inhibit or facilitate training effectiveness. Longitudinal investigations may be especially helpful.

We began with a discussion of Kirkpatrick's pervasive training evaluation model, including criticisms and empirical evidence. Through a small-scale practitioner survey, we determined that most companies may now be using the first three levels of Kirkpatrick's criteria to evaluate training programs. Finally, we proposed two directions for training evaluation research. We hope that this article will spark interest in the area and spur further research and development in training evaluation.

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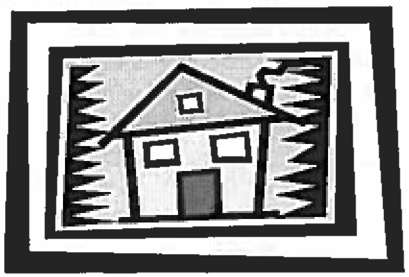

Global Vision: International Approaches to Incentives, Performance Evaluation, and Policy Implementation—Findings from England, Australia, and the U.S.A.

Charmine E. J. Härtel
University of Queensland, Australia

The aim of *Global Vision* is to provide a forum for discussing international developments in practice, research, and theory especially in relation to emerging views and characteristics of workforces and workplaces. Much of the research SIOP members read investigates organizational issues from a North American perspective using data collected in the U.S.A. Of course, theoretical perspectives and management perspectives of organizations are shaped by a range of factors, including cultural-specific factors. Recognizing the diversity in organizational science highlights the need for embracing a multicultural perspective in our discipline. The aim of this column is to facilitate our grasp and embrace of the multiculturalism of our discipline by presenting theory and data from around the world relating to organizational practices. The informative value of the column depends heavily upon the knowledge, experience, and intuition of organizational researchers and practitioners from around the world. You can personally help by sending me a note—be it a problem you are trying to solve, research you are conducting, a consulting tip, something you'd like to hear about, or the name of a person or organization you recommend that I contact. You can also send newspaper clippings, references to a great article or book you read, conference papers, or areas of emerging controversy (for your organization or for theory). Further, I am seeking organizations or academic departments to profile that provide examples of innovation in philosophy, research, development, application, or implementation aimed at addressing the need for multicultural appreciation in the research and practice of I-O psychology. I am eager to receive your ideas and submissions. You can reach me at any of the following: Graduate School of Management, The University of Queensland, Brisbane, Queensland 4072, Australia; Phone: +61 7 3365-6747; fax: +61 7 3365-6988; INTERNET: c.hartel@gsm.uq.edu.au

International Research on Implementing Work and Family Policies, Using Competency Models to Distinguish Outstanding Performers, and Profit-Sharing Preferences in Professional Firms

In this column, findings from three studies in three different regions of the world are showcased. These studies highlight different focus points for performance management efforts. The first study, from the U.S.A., looks at managing performance through evaluation where competencies are identified and used to identify outstanding performers. The second study, from England, looks at professional firms' management of performance through an emphasis on so-

cialization rather than performance evaluation. The third study, from Australia, looks at managing performance through the championing of HR policies, in this instance, policies related to work and family. Each study has implications for practice and provides a small window through which organizational practices in these countries can be viewed.

Managing performance in the U.S. government: Distinguishing performance through competency assessment.

Patel, Phil, and Rodriguez (1998) of the U. S. Office of Personnel Management, Washington DC, investigated the application of competency models in performance evaluation decisions. Their study of 2,927 secretaries and 1,106 accounting technicians in the government showed that differentiating competencies into basic job requirements (threshold competencies) versus performance-differentiating job characteristics (differentiating competencies) was unwarranted and potentially a threat to effective performance evaluation decisions.

Competencies were generated by reviewing occupational information in journals, job announcements, performance standards, quality standards, rating schedules and position descriptions. Threshold competencies were identified by having supervisors rate each competency on a 6-point scale ranging from not needed to extremely important. Differentiating competencies were identified by having supervisors rate each employee on each competency using a 5-point scale ranging from unsatisfactory to outstanding. Statistical analyses of the data showed that "the higher the ability level on a given competency, the higher the performance." In other words, higher performance on threshold competencies also predicted performance. Thus, they caution, "ignoring threshold competencies in competency models can reduce the effectiveness of personnel decisions."

Profit distribution in professional firms in England and Wales: The need for cooperation disfavors performance-based systems.

Most research examining patterns of profit distribution in professions deals with U.S. firms. Recently, Timothy Morris and Ashly Pinnington (1998) undertook an investigation of profit distribution strategies in 406 law firms in England and Wales. The study dealt with law firms with 10 or more partners and included follow-up interviews with the senior or managing partner in a subset sample of 40 firms. Survey results showed that most firms distributed profits on the basis of seniority rather than on performance. In cases where performance was used in profit distribution decisions, it effected only a small part of the partner's profit-share. Further, innovation in profit-share tended to occur only in small firms. Follow-up interviews identified the reasons for adhering to seniority-based systems as opposed to performance-based systems. First, seniority systems operated by promoting individuals on the basis of both tenure and performance. That is, poor performance problems were dealt with not by performance-based incentives but by dismissal. No seniority system had "wholly automatic" progression. All seniority systems allowed for freezing or reducing of a partner's share when senior partners' expectations of satisfactory performance were not met. Second, firms used seniority and equal-shares systems rather than performance-based systems because such systems were perceived to foster rather than diminish cooperative relationships, loyalty to the firm, and long-term client relationships. Firms that did adopt performance-based sharing did so based on (a) their focus on generating "new business and more transactional client relations," (b) consultants' recommendations, (c) management courses' recommendations, or (d) trade journals' recommendations of it as best practice. All firms basing profit-sharing on performance however believed that "no profit share system could influence individual performance on its own." The research found that firms managed "the risk of dissatisfaction from high performers believing they were relatively under-rewarded...through socialization into its standards and values...." Further, members of large firms saw the reinforcement of an "elite culture" as underpinning their policies regarding profit distribution, while members of small firms saw the need for "close collaboration and limited specialization" as underpinning their policies regarding profit distribution.

Performance management through HR policy development: Implementation strategies in Australia

Robin Kramar (1997), of Macquarie University in Sydney Australia, studied the development and implementation of work and family policies in five Australian organizations recognized for their efforts in these areas. Idea champions and external factors such as affirmative action and industrial relations legislation and more competitive labor markets preceded the recognition of work and family policies as an issue warranting management attention. Often internal promotion for years was necessary for management to move on the issue as was a business imperative such as legal requirements or employee turnover. Following issue recognition, options to address it were developed via consultation with organizational stakeholders, outside experts such as government and universities, and investigations of approaches used by other organizations. Next, senior managers championed the policy to other managers and employees to gain support and resources. Championing involved demonstrating the value-adding ability of the policy. For example, managers argued policy adoption would decrease turnover, increase return rates from maternity leave, increase organizational attractiveness to skilled employees, increase trust and increase quality. Once the policy was adopted, a communication strategy was developed. Methods used included newsletters, posters, information packets, policy inclusion in managerial HR handbooks, promotion in unions and the community. Employee satisfaction with the communication measures was formally monitored. All organizations experienced some resistance to the policies from some organizational

constituents. Policy implementation proceeded most smoothly when work and family issues were tied to business and people needs, and least smoothly where these issues were framed as concerns of women with children. Policy impact was evaluated by collecting data on maternity leavers, exiting employees, turnover, policy satisfaction and use, and requests for policy information.

Understanding the cultural underpinnings of I-O Practice in the countries of the world

With the crossing of business operations across national borders, it is apparent that an understanding of the cultural underpinnings of I-O practice in the countries of the world is required. Some of the ways that we can improve our understanding are to read journals published in other countries, to attend international conferences and conferences initiated in other countries, and to include more research from other cultures in American journals. As the studies reported on in this column indicate, I-O research and practice is necessarily affected by the cultural, legislative, work, life, and consumer values it is embedded in. This is reflected in such things as the philosophical preferences in research and management approaches, the pace and process of change, and the composition and role of organizational stakeholders.

Column Mission and Call for Contributions for Upcoming Columns

My goal for this column is to discuss within a global framework the future of practice and research related to work and the workplace. The effectiveness of I-O research and practice in different cultural settings requires an understanding, openness, and appreciation of the societies in which we operate. As such, it is imperative that you share your learnings from your international experiences and that those of you outside of North America share the perspectives of your home countries. To this end, I hope that, no matter where you are in the world, you will e-mail, call, write or fax me with your suggestions, views, requests, and contributions (such as, the name of an organization or academic department I can profile in a manner consistent with the goals of this column, newspaper clippings, company program pamphlets, news of research-in-progress, experience with OD and HR strategies/programs and any other information—nothing is too small). Please send me any information relevant to the points discussed in this column along with your ideas for future topics (see contact information above).

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SIOP'S Pro Bono Initiative

Ann Marie Ryan
Michigan State University

A few years back, in his presidential address, **Jim Farr** talked about the need for SIOP members to "give psychology away." At a SIOP Executive Committee strategic planning meeting held in January of 1998, a top priority that emerged was encouraging I-O psychologists to take on pro bono projects that can help society while enhancing the visibility of SIOP and its members. Since that meeting, members of SIOP's executive committee have spend time discussing and defining what SIOP's role in the encouragement of pro bono work might be. The outcome of those discussions led to the following framework for the initiative:

> The purposes of this initiative are to encourage members to do pro bono work. By pro bono work, we mean activities undertaken gratis by SIOP members that relate to the work of I-O psychology. By endorsing member pro bono activity, SIOP does not endorse any particular political, social, or religious group or agenda; rather the society recognizes the importance of giving psychology away to those organizations and individuals who may not have the resources to afford such work but would benefit from it.

Activities associated with the initiative are:

- A regular *TIP* column highlighting particular outlets and/or pro bono activities of members.
- Environmental scanning to identify potential opportunities of particular interest to SIOP members (e.g., requests from national not-for-profits; large scale volunteer efforts that have need of SIOP expertise) and alerting the membership of such opportunities.
- Website to serve as a clearinghouse for individuals and organizations that want to participate in pro bono activities that relate to the work of SIOP.
- Publicize the initiative in a limited way to not-for-profits with the goal of generating highly visible projects that might then be publicized to members.

In the weeks ahead, president-elect **Angelo DeNisi** will be appointing an individual to spearhead this initiative. If you have thoughts or ideas related to the initiative activities, please contact Angelo or the SIOP Administrative Office.

Some questions you may have are: *Why is SIOP pursuing this? Isn't this something for individuals to decide to pursue on their own?* And *Who has time for this?* (Or at least those were some of my initial questions).

In answer to the first, we can point to the many professions (including psychology in general) where some level of pro bono work is considered an appropriate professional contribution (e.g., lawyers, doctors). We recognize that organizations and individuals who cannot readily afford the services of an I-O psychologist might benefit greatly (and society itself benefit) from those services. Finally, one way to enhance the visibility and understanding of industrial/organizational psychology as a field is to increase access to what we do.

In answer to the second question, SIOP most definitely does see this as a matter of individual choice. However, the society also recognizes that it can take a role as a facilitator of individual efforts and help collectives of individuals tackle large-scale pro bono projects. Such projects can have long-lasting societal impact but can also help advance our research understanding. For example, a number of SIOP members were involved in pro bono work with the National Association of Secondary School Principals which led to the use of assessment center technology in evaluating principal candidates. This project led to a widespread adoption of I-O tools and techniques, to a number of research studies, and also to further paid work for some society members. One goal of the initiative is to facilitate individuals working together on larger efforts.

The third question was personally the most troubling for me. A few years ago I attempted to do some pro bono work in the area of job-seeking skills and employability skills training with individuals on probation. I learned a tremendous amount during the months I was involved with this effort, but I felt I could not continue to make the time commitment required. Thus, I thought it might be helpful to seek out some individuals who I know are extremely busy people but who have been able to be involved at some level in pro bono work and find out more about what they do and how they do it.

Laura Koppes, of Tri-State University School of Business and SIOP's historian, described her work on the board of directors for two organizations, the Steuben County Literacy Coalition, and the Elijah Haven Crisis Intervention Center which is an agency for domestic violence victims. How has Laura contributed her services as an I-O psychologist to these organizations? She has done job analyses for both paid and volunteer positions, assisted in recruitment and selection activities, and brought her knowledge of I-O to bear on the formulation of various policies for both organizations. Laura notes that besides the personal rewards of giving something to one's community and seeing improvements as a result of one's efforts, there are professional rewards from generalizing one's skills to new situations and problems. As a busy person herself, Laura says you must find a way to make the time to engage in pro bono activities.

I also contacted **Bill Balzer**, chair of the psychology department at Bowling Green State University, and a very busy mentor, researcher, and dad, and asked him to talk about work he has done and how he does it. Bill provides I-O

psychology consulting services pro bono to the Children's Resource Center, a mental health facility for children. In addition to general consultation to the executive team, Bill has assisted the organization in developing various personnel systems (e.g., a performance appraisal process for staff) and assessing employee attitudes. Bill finds that the work is very rewarding when you believe in the organization's mission and that organizations such as this are very appreciative of your expertise. He also notes that research has indicated that you may find a task more satisfying when it is not for payment. Bill indicates that BGSU's graduate program encourages pro bono work among students as well, as a way to enhance the community, develop the skills of students, and provide research opportunities. When I asked Bill how he finds the time for such activities, he noted that, like exercise, you have to establish this as a priority and somehow schedule it in. He also notes that non-paying recipients of your services are usually very willing to work around your schedule.

Both Laura and Bill are in academic settings, which typically afford an individual some control over his/her schedule. What about busy practitioners? I contacted Lisa Bordinat, **Kirk Rogg**, and **John Arnold** of Aon Consulting regarding their pro bono work. All three mentioned their involvement in pro bono work came from the suggestions or requests of current clients who had links to nonprofit groups. Like Laura, Lisa is involved with work with Haven, a local organization dedicated to the elimination of domestic violence, sexual assault, and child abuse. She is involved with providing compensation training to managers in a case where the organization has grown to need greater structure. Lisa feels that pro bono efforts allow you to use your skills to have an impact in an area you personally feel strongly about, and provide an organization with something that is truly needed but that would otherwise not be undertaken because of cost. One way Lisa suggests fitting pro bono work into a busy schedule is to treat it like any other project. At Aon, she is accountable for this project's cost, time, and deadlines as she would for any other project. Having her organization's commitment and acting on her own personal passion helps her to find the time and energy for this project. She suggests that SIOP members think of ways they can volunteer their skills in small ways to local organizations (e.g., helping a church or temple use a structured interview guide for screening childcare workers).

Kirk Rogg and John Arnold describe Aon's view on pro bono work as a win-win opportunity. They have worked with Focus Hope, a Detroit-based nonprofit agency that works to provide job and life skills to underprivileged minorities. Besides providing general information on the skills required for success in manufacturing jobs, they refined and evaluated a telephone-based, automated tool to pre-screen applicants into the assessment process for jobs with large automotive manufacturers. Their involvement in the project enabled those receiving the organization's high quality training to connect with those offering well-paying jobs. Kirk and John noted that the project took a fairly substantial amount of time, but felt it had both personal and professional payoff. Personally, it was exciting to see their work have a major life impact on individuals. Professionally, they were able to obtain information to refine a pre-screening product.

In summary, it's important to note that SIOP as an organization encourages pro bono work by members and that many of your fellow SIOP members are actively involved in such work (Thanks to Laura, Bill, Lisa, Kirk and John for being willing to share what they do). In the months ahead, SIOP hopes to do more to encourage member involvement in both local pro bono work as well as large-scale projects on a national and international level.

If You Have a Pro Bono Project to Suggest, Please Contact:

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Professional Practice Book Series: Translating Science into Practice

Eduardo Salas
Naval Air Warfare Center Training Systems Division

As the new millennium approaches and organizations adapt to on-going demands and changes, we must reflect on how, as scientist-practitioners in I-O Psychology, we contribute to organizational practices. There are, of course, many ways we contribute. Potentially, our theories, ideas, research findings and tools form the basis by which we influence practice. Unfortunately, we have not fully realized this potential because the mechanisms we use to translate our knowledge into useful guidelines are lacking. That is, translating what we hypothesize and empirically validate into useful, practical information that can be applied in organizations is insufficient (Salas, Cannon-Bowers, & Blickensderfer, 1997). Over the years, many of us have lamented about all the wonderful research we conduct and how our significant findings are seldom used and applied. While progress has been made, much needs to be done. We will seek to provide an outlet where we can *translate* our knowledge gained into information for practitioners (via principles, guidelines, lessons learned, etc.). Therefore, I intend to tighten the focus of the Professional Practice Series to serve as a forum where this translation begins. And to accomplish this we have a vision.

Our Vision

Our vision is to provide industrial and organizational psychologists, organizational scientists and practitioners, human resources professionals, managers, executives and those interested in organizational behavior and performance with volumes that are insightful, current, informative and relevant to organizational practice. The series will be guided by five tenets designed to enhance future organizational practice. First, we will focus on practice that is grounded in science. Second, the volumes will be oriented toward *translating* organizational science into practice. That is, we will seek to provide volumes that translate our best science into practical information. We hope that these translations, in the form of guidelines, principles and lessons learned can shape and guide practice. Third, the volumes will be designed to demonstrate the application of industrial and organizational psychology to solving organizational problems. Fourth, we will seek to document and disseminate our best practices. Finally, we hope our volumes will stimulate research needed to guide future organizational practice. Our vision is ambitious, but we are confident that the Professional Practice Series, with your help, will get there. We will do our part. But we need your help and support.

What We Need From You

We seek your input. Please provide us with your ideas, concerns and/or suggestions. For example, what topics do you think we should cover in future volumes? What could we do to ensure that these volumes represent (and help) the state-of-the-art in practice? Your constructive feedback is also welcome. What can we do to improve the series? What mechanisms can we use to "translate our science"? What innovative formats could be employed to document what we know? How can we document our "best practices?" To help shape the Professional Practice Series into our vision, we have a group of SIOP scientist-practitioners interested in applying science.

Who We Are

The Editorial Board is comprised of the following members (feel free to contact them with your ideas, comments or suggestions):

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James W. Smither, Ph.D., LaSalle University
Scott I. Tannenbaum, Ph.D., Executive Consulting Group and The University at Albany

Available Volumes in the Professional Practice Series

The following volumes comprise the Professional Practice Series and can be purchased from the SIOP Administrative Office or via the SIOP website at www.siop.org/Bookorder.htm.

R. Jeanneret, R. Silzer and Associates, *Individual Psychological Assessment: Predicting Behavior in Organizational Settings*. Jossey-Bass Publishers.
J. Smither and Associates, *Performance Appraisal: State of the Art in Practice*. Jossey-Bass Publishers.
A. Kraut and Associates, *Organizational Surveys: Tools for Assessment and Change*. Jossey-Bass Publishers.
M. London and Associates, *Employees, Careers, and Job Creation: Developing Growth-Oriented Human Resource Strategies and Programs*. Jossey-Bass Publishers.

A. Howard and Associates, *Diagnosis for Organizational Change: Methods and Models*. The Guilford Press.
A. Korman and Associates, *Human Dilemmas in Work Organizations: Strategies for Resolution*. The Guilford Press.
S. Jackson and Associates, *Diversity in the Workplace: Human Resources Initiatives*. The Guilford Press.
D. Bray and Associates, *Working with Organizations and Their People: A Guide to Human Resources*. The Guilford Press.

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Secretary's Report

Bill Macey

The Winter meeting of SIOP's Executive Committee and Committee Chairs was held January 23rd and 24th, 1999. Some highlights of that meeting and the corresponding discussions include:

- The Long Range Planning Committee will be evaluating the alignment between expenses and services provided by the Society to the membership with particular emphasis on the Society Conference, Workshops, book publications, and general membership services.
- **Irv Goldstein** reported on the SIOP Foundation's activities. Irv shared a new brochure that the Foundation Committee has prepared and noted the specific efforts that will be made to recognize those who have contributed to the Foundation.
- **David Hofmann** led a discussion of issues related to offering academically oriented workshops. The discussion focused on issues of goals, content and logistics.
- The Long Range Planning Committee will be working closely with individual Committee Chairs to develop and implement a planning process for committees.
- The Executive Committee approved a motion to prepare a recommended change in the Society Bylaws to discontinue the Committee on Committees.
- The I-O Psychology Instructor's Guide prepared by **Debbie Major** and the Education and Training Committee was approved by unanimous vote of the Executive Committee.
- **Linda Sawin** led a discussion of extending placement services beyond those currently offered at the society conference. The Executive Committee subsequently approved the extension of current placement services to include support for Internet job postings and searches.
- The Executive Committee approved funding of a membership survey to be conducted by the Professional Practice Committee. The survey will be used to collect member opinions regarding a broad range of SIOP activities.
- Discussion groups were formed to explore wide-ranging issues including Public Policy, Membership, Education and Training, Fellowship, and the future direction of the Frontiers and Practice Series.

As always, if you have a specific question or comment regarding these or any other topics, please don't hesitate to contact me or any other member of the Executive Committee. Your ideas and comments regarding how SIOP should serve its members would be particularly valued as would any suggestions you might have regarding what you believe should be our priorities.

Division 5 President's Message: Many Signs of New Life in Quantitative Methods

Leona S. Aiken
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(This article is adapted from an article entitled, "The President's Message: Many Signs of New Life in Quantitative Methods" printed in the *Score*, Division 5 Newsletter, Volume XXI, No. IV, October, 1998, with permission of Division 5).

Five Signs of New Life

There are currently very positive signs that suggest a resurgence of interest on the part of our nonquantitative colleagues in what quantitative psychology, including evaluation, measurement, statistics, and assessment, has to offer the broader field of psychology. There are additional signs that suggest that we may be at the outset of a period of growth in the ranks of quantitative psychology. Five concurrent trends lead me to this conclusion.

(1) Hearty Job Market

In the past few years the academic job market for quantitative psychologists has blossomed. Quantitative positions abound in a range of academic institutions from 4 year colleges through elite Ph.D. programs. This lively job market indicates broad support for quantitative training, and not just among the ranks of quantitative psychologists. I believe that two forces operate to occasion this trend: (a) a spate of retirements has left departments without teachers of the fundamental quantitative curriculum and without quantitative consultation; and (b) our new methodologies have become increasingly complex, leading our colleagues to realize the need for training, if not for themselves, then for their students.

(2) New Quantitative Ph.D. Programs

The current development of new Ph.D. programs in measurement, methods, and statistics reverses a previous trend of closing some classic quantitative programs housed in both psychology and educational psychology departments. Quantitative program development is in progress at a number of institutions. In my own department, we received broad support from our colleagues to develop our new program. I take new program development as a second sign that our nonquantitative colleagues value what we do and are willing to commit resources to training in quantitative methods.

(3) The Remarkable Success of *Psychological Methods*

Psychological Methods is the new APA journal devoted to the "development and dissemination of methods for collecting, analyzing, understanding, and interpreting psychological data" (inside cover, *Psychological Methods*, *1*(1), March, 1996). It is enjoying remarkable success, success that Susan Knapp, Director of APA Publications, characterized as "tremendous for the third year" of the journal (Personal Communication, September 4, 1998). As of August, 1998, there were 3,930 total subscriptions, with 3,427 APA member and associate subscriptions (up 11% from 1997) and 445 institutional subscriptions. In fact, *Psychological Methods* ranks 9th in APA member and associate subscriptions among the 26 APA journals. At the end of 1997, *Psychological Methods* stood slightly ahead of *Psychological Bulletin*, and substantially ahead of *Psychological Review*, the two other generalist journals in the APA portfolio, in APA member and associate subscriptions. The only journals with greater member and associate subscriptions include the *American Psychologist*, plus the major clinical, counseling, health, and professional practice journals. The ranks of Division 5 members and officers, including myself, who worked to gain APA approval for the journal are truly gratified.

(4) Lively New Student Memberships in Division 5

In the past 5 years Division 5 has experienced a steady stream of 100-150 new student memberships into the Division each year. This suggests to me that a base of both quantitative methodologists and other students with strong quantitative interests are in training in graduate schools across the country.

(5) Demand for Methodological Expertise in the Research Enterprise

There is increasing demand for methodologists to serve on study sections for many of the major funding agencies. Moreover, demand is increasing for appropriate methodologists as members of grant proposal teams. This increased demand again reflects the acknowledgement by our colleagues of the importance of our methodologies for the substantive research enterprise in psychology.

Division 5 Involvement in Training: The Survey of Quantitative and Measurement Curricula of Ph.D. Programs

Division 5 is now actively involved in broad curricular issues concerning the training of Ph.D.s in psychology and related fields in quantitative methods.

Quantitative Curriculum

Last spring, Steve West (former Division 5 Member-at-Large and Program Chair), Roger Millsap (Division 5 Membership Chair) and I undertook a survey of the content of the quantitative curriculum of all the Ph.D. programs in

psychology in the United States and Canada, a replication and extension of the earlier study reported in the 1990 *American Psychologist* (Aiken, West, Sechrest, & Reno, 1990). As of now, we have achieved over an 80% response rate from the 234 institutions in the study. The previous article was used by a number of institutions as a planning document, as well as to argue for increased curriculum and staffing in quantitative methods. We intend that the replication will serve this same purpose.

Focus on Measurement Curriculum

Past President Cecil Reynolds implemented a Task Force on Measurement Training as the core of his presidential initiative (see the *Score*, October, 1997); this task force is chaired by former Past President Ronald Hambleton. Ron Hambleton will implement a survey of the measurement training in Ph.D. programs later this year to form the basis of task force activities; this detailed survey of measurement training expands the broader survey of quantitative curriculum.

Division 5 Involvement in Committees on Test Standards and Test User Qualifications

The revision of the Standards for Educational and Psychological Testing and the creation of Guidelines for Test User Qualifications are ongoing activities at APA; the impact of these activities on the professional activities of Division 5 members cannot be over estimated. Fortunately, Division 5 members are centrally involved in both activities. Division 5 Member-at-Large **Paul Sackett** co-chairs the revision of the Standards. Former *Score* Editor **Marcia Andberg** serves on the committee on Test User Qualifications. Division 5 members have been active in review of draft documents from both committees; former Division 5 President Mark Davison organized the Division 5 response to the Standards revision.

Division 5 Membership: Great Diversity of Interests and Connections with Division 14

Division 5 membership reflects a mixture of individuals with a broad range of methodological interests from the mathematical development of new statistical and measurement methods, to test development, to the use of tests in assessment in applied settings. Our membership also has broad substantive interests spanning industrial-organizational, personality, health, clinical, and educational psychology at least. Like Division 14, our membership is heterogeneous in its professional employment, well balanced between industry and academic settings. Our leadership in Division 5 overlaps with that of Division 14; individuals simultaneously hold positions on the executive committees of both divisions. At present, both **Wayne Camara** and **Mary Tenopyr** serve on the two executive committees. The overlap in leadership reflects the substantial overlap in the membership of our two divisions.

Divisions 5 and 14 at the Joint APA Convention Cocktail Party

Division 5 members have been very pleased that our cocktail party at the annual APA convention has been a joint effort with Division 14. This year is no exception. We have enjoyed the collegiality of Division 14 members. We hope that this symbolizes our proximity as divisions, and presages further collaboration between the divisions.

Do not hesitate to contact me at the Department of Psychology, Arizona State University, Box 871104, Tempe, Arizona 85287-1104; email Leona.Aiken@asu.edu.

Taking Applied Police Psychology into the 21st Century Via the Web

James E. Kuthy
Center for Organizational and Personnel Police Psychology

The Center for Organizational and Personnel Police Psychology (also known as copp-psychology) is the only national organization primarily dedicated to law enforcement organizational and personnel issues. The Center was formed to share information and research for the benefit of all in the spirit of fellowship.

The Center for Organizational and Personnel Police Psychology is open to psychologists working with and for law enforcement agencies, and to law enforcement supervisors who work in the organizational or personnel areas. The Center also has associate and student memberships for those interested in law enforcement organizational and personnel psychology but who do not meet the minimum requirements for full membership.

There are many law enforcement-related organizational and personnel psychology challenges that the Center will be examining including: motivation, culture/climate, leadership, organizational change, turnover, decision making, groups/teams, intergroup conflict, participation, socialization/careers, work and family, gender/diversity, aging, ethics, stress, selection, testing, training, job analysis, job performance, performance appraisal, compensation, HR management and job attitudes. Unfortunately, prior general research in these areas has often failed to address the unique cultural demands of the law enforcement community. This frequently results in faulty action being taken with disastrous consequences. Organizational and personnel problems in law enforcement often requires specialized research and solutions.

The Center does this by encouraging, and eventually sponsoring, research and training related to law enforcement organizational and personnel issues. It should be noted that the Center does not intend to act as a test developer or to compete with consultants. Instead, it shares information and research with consultants so they can provide better services. The Center also shares information and research with law enforcement supervisors so they can become better educated about the unique solutions organizational and personnel psychology might provide for the problems they face. It is a win-win situation for all concerned.

In addition, the Center strives to advance the professional practice and scientific status of applied law enforcement organizational/personnel psychology by developing a certification process to recognize qualified psychologists who contribute to this field. The Center believes that qualified industrial-organizational and personnel psychologists deserve recognition for their continuing contributions toward enhancing law enforcement professionalism and that these certified professionals should be permitted to use the title of "police psychologist."

To help achieve these ends, the Center for Organizational and Personnel Police Psychology hosts a website at **www.copp-psychology.org** that serves as the communication focal point for law enforcement organizational and personnel professionals. This website:

- Provides a place for social scientists and practitioners in law enforcement organizational and personnel areas to network and share information in a spirit of fellowship.
- Offers a bibliography of published and unpublished articles relating to law enforcement organizational and personnel issues. These citations come from a wide variety of sources including, but not limited to: peer reviewed scientific psychology, sociology, law and business journals; law enforcement publications; and government sources. In addition to those articles that are related specifically to law enforcement organizational or personnel issues, the bibliography also includes research that features law enforcement personnel as participants.
- Highlights news stories relating to police organizational and personnel issues of interest including recent court decisions and research findings.
- Matches researchers who wish to conduct basic research on organizations that are willing to have research performed. This is an excellent tool for colleges and universities to find organizations where "real-life" research can be conducted. Many private consultants do not have the time available to conduct basic research which will be published for the benefit of all, so this is an important tool for the advancement of the science and practice of applied police psychology.
- Posts free job listings for organizational and personnel positions related to law enforcement. Unlike other job listing services that list a wide variety of public sector positions (e.g. city manager to garbage supervisor), this free resource is limited only to police organizational and personnel-related positions.
- Provides a calendar of events that highlights law enforcement organizational and personnel issues. For example, few people appear to know that The International Association of Chiefs of Police holds an annual training seminar on law enforcement assessment centers and other related selection issues which is open to non-IACP members.
- Features a "Hall of Fame" to recognize those who have made major contributions to the field of organizational and personnel police psychology.
- Links to other web sites relating to police personnel and organizational issues, such as: fraternal and professional organizations, government resources, and college/university databases.
- Expands with the needs of the community it serves. For example, the Center for Organizational and Personnel Police Psychology plans to

host an "on-line" journal which will peer-review and publish articles relating to organizational and personnel police psychology issues.

In addition to our web site, the Center is in the early stages of creating an archive of unpublished scientific papers featuring law enforcement organizational and personnel issues. Once catalogued, these articles will be made available to members. All too often important law enforcement related research is presented at conferences and never seen again. This will be an opportunity for this type of previously unpublished research to gain the exposure it deserves and to give those in the field a chance to tap into this long-neglected resource. Hopefully, this will also encourage additional research on issues that were initially raised in unpublished studies but never fully explored.

And finally, the Center is working towards sponsoring training seminars that focus on the needs of the law enforcement organizational and personnel community.

This paper has served to present the rationale for, and the activities of, the Center for Organizational and Personnel Police Psychology. As a newly formed organization, it is craving exposure to an audience that has no one place to turn for its law enforcement organizational and personnel issues. For those interested in obtaining more information, we invite you to visit our web site at **www.copp-psychology.org** or write to us at the address below.

James E. Kuthy
Executive Director
The Center for Organizational and Personnel Police Psychology
P.O. Box 9054
Akron, OH 44305
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A "Virtual" Roundtable

Michael Fetzer
University of Southern Mississippi

As with many graduate students, my first SIOP conference experience was extremely inspiring. The coming together of researchers, practitioners, and students from all over the globe to exchange ideas and develop new directions for the field of I-O psychology was exhilarating, to say the least. There were so many symposia, discussions, and presentations that it was difficult to absorb everything I wanted to absorb. Three days and only one body just wasn't enough to take in all that was available.

The annual conference is an unparalleled opportunity for networking and the dissemination of current information. I wondered if there wasn't any way to keep the momentum going throughout the year. It wasn't until I began exploring the opportunities the Internet afforded I-O psychology that a solution came to me. The Internet could provide a medium for hosting a "virtual" roundtable discussion, accessible from anywhere in the world at any hour of the day, 365 days a year. In addition, this virtual roundtable would not be limited by time constraints, as participants could offer input at their convenience. Thus, the I-O Psychology Online Forums were born.

These online forums are my attempt to facilitate the continual exchange of ideas in our field and to provide a resource for solving problems. The first forum I created, the I-O Psychology Forum, provides visitors with 16 discussion areas. Recent discussion areas include I-O International, Leadership, Training & Development, Personnel Selection, and The Future of I-O. Within each discussion area, visitors are able to enter a topic and post a message regarding that topic. Future visitors may view and/or respond to these messages, or post a message under their own topic. If your question is not easily answered in the published literature, the forum may a good resource. Since its inception in October of last year, the I-O Psychology Forum averages about 40 "hits" per day.

The second forum I created is modeled after the "TIP-TOPics for Students" column in this publication. The I-O Psychology Graduate Student Forum provides an opportunity for graduate students to post messages in discussion areas such as Surviving Graduate School, Theses/Dissertations, Comps, Current Research, Thinking Globally, and Jobs/Networking. This forum, like its parent, has also served to facilitate the exchange of ideas. In addition, it has served as a resource and a quasi-support group for those of us enduring the rigors of graduate school.

In both forums, visitors are also able to initiate and/or participate in chat rooms. The topics for the chat rooms are specified by the visitors, providing an ever-changing list of discussion areas. Large and small groups of collaborators, practitioners, and researchers (or just people interested in the same topic) can hold "virtual" meetings, free of charge. This will be particularly useful if hundreds or even thousands of miles separate group members. Perhaps, in the near future, people might be saying, "I'll meet you at the Forum."

At this point, both forums are housed on a commercial server, which provides space for such forums in return for attaching a small banner advertisement to the opening page. The advantage is that there is no charge for using the forums, and maintenance is rather simple. In the future, I hope to house the forums on a private server (if I can encourage the faculty to provide financial support for this in the budget). This will enable me to enhance the design and capabilities of the forums.

What began as a search for extending the SIOP conference experience has resulted in fulfilling a need for many others in the field. The "real time" exchange of ideas is no longer limited to 3 days a year and small networks of I-O psychologists. With online forums, the virtual roundtable can operate around the world, all year long. These forums may one day facilitate a more rapid advancement of the field of I-O psychology.

An Invitation

The forums are extremely easy to use, there is no software to download, and best of all they're free. Although I have provided the means for keeping the momentum of the SIOP conference going, the forums rely on the material provided by their visitors. As such, I would like to extend an invitation to all those interested in I-O psychology to visit the forums via the following URL: http://www-dept.usm.edu/~psy/io/forum.htm.

Testing the Scope of ADA: What do the Justices Face in 1999

Heather Roberts Fox
APA Science Directorate

Plaintiff in Test-Anxiety Case May Appeal to the Supreme Court

Attorneys for plaintiff-appellant Kevin M. McGuinness, a former University of New Mexico medical student, announced that they are planning a U.S. Supreme Court appeal after a federal appellate court rejected his claim that the university should recognize his test anxiety as a disability protected under the Americans with Disabilities Act ("ADA") and the Rehabilitation Act of 1973. Employment and educational test administrators have been particularly concerned that the number of text-anxiety claims under ADA has risen, and were pleased that the appellate court upheld the position of the university and the district court that an impairment limited to specific stressful situations is not a disability.

When Mr. McGuinness entered the University of New Mexico Medical School in 1992, he had a bachelor of science degree in chemistry and biology, a degree in physiological psychology, and a doctorate in psychology. Mr. McGuinness informed his professors that he had an "anxiety disorder" that manifests itself when he takes chemistry and mathematics tests. However, he also indicated he did not need any test-taking accommodations because he had acquired study habits in both graduate and undergraduate school that allowed him to overcome his difficulties. During his first year in the medical school program, Mr. McGuinness received a grade of "marginal" in two courses. According to the medical school's grading policy, students who receive "marginal" grades in more than 15% of their first-year courses must repeat the first year or leave the program. He was offered but refused the opportunity to take makeup exams in biochemistry, and after three makeup tests in the cardiovascular pulmonary physiology, he still did not obtain a "satisfactory" grade. Mr. McGuinness left the university and filed suit against the University of New Mexico Medical School.

In his complaint to the federal district court, Mr. McGuinness attempted to assert a claim under the ADA but failed to distinguish between Title I and Title II. Title I proscribes discrimination against employees or prospective employees because of their disabilities, while Title II bars public entities from discrimination on the basis of disability in the provision of programs and benefits. The district court granted summary judgment for the medical school on the ground that Mr. McGuinness was not disabled within the meaning of the ADA.

A three-judge panel of the U.S. Court of Appeals for the Tenth Circuit ("Tenth Circuit") affirmed the district court's grant of summary judgment. They agreed that the district court correctly held that such a disorder, limited to certain academic subjects, does not constitute a disability under the ADA. On appeal, the judges treated the Title I and Title II claims separately, even though they did not appear distinguished in the complaint to the district court, and found that both claims failed because he did not show that he has a disability within the meaning of the ADA. The term "disability" means "a physical or mental impairment that substantially limits one or more of the major life activities" of the individual. "For the purposes of the ADA, inability to pursue one career, such as medicine, does not constitute a severe impact on an individual's life," Judge Paul J. Kelly, Jr., wrote for the panel. Judge Kelly also noted that even if Mr. McGuinness had shown a disability under the ADA, he could not demand an unreasonable accommodation from the medical school. "Requiring the University of New Mexico to advance Mr. McGuinness to the next level of the medical school program would represent a substantial, rather than a reasonable accommodation," he continued.

The Tenth Circuit court also reviewed the plaintiff-appellant's cause of action under the Rehabilitation Act of 1973, and concluded that it contained the same flaw as his ADA claims because the statute defines "disability" in the same way as ADA.

In December, the office of Mr. McGuinness's lawyer, Dennis W. Montoya, issued a statement announcing their intention to appeal the decision to the Supreme Court.

U.S. Supreme Court Agrees to Hear Arguments on Scope of ADA

Justices of the Supreme Court recently agreed to decide whether the Americans with Disabilities Act applies to workers whose condition may be corrected by medicine or other measures. At issue is whether the determination that a person has a disability under the law must be made without regard to mitigating measures, such as medicines or glasses that can correct the problem. The ADA defines "disability" as a "physical or mental impairment that substantially limits one or more of the major life activities" of the individual. The federal Circuit courts have rendered conflicting opinions about whether mitigating measures should factor into an evaluation of whether the disability is covered under the law.

The Supreme Court said it will hear arguments on three cases in April, and will decide the reach of the ADA by the end of June. The first case involved two nearsighted pilots for United Air Lines. A federal judge and a U.S. appeals court ruled that the two pilots were not protected by the law because their nearsighted vision was fully correctable when they use glasses or contact lenses (see Toner & Arnold, November 1998 PTC newsletter for a complete discussion of the Tenth Circuit court ruling).

The second case involved a United Parcel Service mechanic suffering from high blood pressure. His job required him to drive a commercial motor vehicle, but the U.S. Department of Transportation prohibits individuals from

driving commercial vehicles if blood pressure readings are higher than 160/90. He filed a lawsuit after he was fired, but a federal appeals court ruled that the high blood pressure was not a disability under the law because it is correctable if medication is administered.

The third case involved a truck driver for Albertson's Inc., who did not meet the U.S. Transportation Department requirements of 20–40 vision in each eye, with correctable lenses. Even with lens, the plaintiff did not meet the minimum vision requirements. He also filed a lawsuit after he was fired, and a federal appeals court ruled that he was disabled. It rejected the company's argument that it tried to accommodate his disability by offering him another job, which he declined.

Newly Released Reports of Interest for I-O Practitioners

Listed below are three important government reports that were released within the past few months that may be of particular interest to I-O psychologists.

U.S. Commission on Civil Rights, *Helping Employers Comply With the ADA: An Assessment of How the United States Equal Employment Opportunity Commission is Enforcing Title I of the Americans with Disabilities Act*, September, 1998, 312 pp. No. 906-00013-0.

This report focuses specifically on the efforts of the U.S. Equal Employment Opportunity Commission (EEOC) to enforce Title I of the Americans with Disabilities Act, which prohibits discrimination based on disability in employment. The report evaluates and analyzes EEOC's regulations and policies clarifying the language of the statute, processing of charges of discrimination based on disability; litigation activities under Title I of the Americans with Disabilities Act; and outreach, education, and technical assistance efforts relating to the act.

U.S. Commission on Civil Rights, *Helping State and Local Governments Comply with the ADA: An Assessment of How the United States Department of Justice is Enforcing Title II, Subpart A, of the Americans with Disabilities Act*, September 1998, 167 pp. No. 907-00590-1.

This report focuses specifically on the efforts of the U.S. Department of Justice (DOJ) to enforce Title II, subtitle A, of the Americans with Disabilities Act, which prohibits discrimination based on disability by public entities such as state and local governments. This report evaluates DOJ's regulations and policies clarifying the language of the statute; processing of complaints of discrimination based on disability; litigation; and outreach, education, and technical assistance efforts relating to the act. The report also assesses DOJ's effectiveness in its role as coordinator of the Americans with Disabilities Act enforcement efforts of seven other designated Federal agencies.

Commission publications may be obtained from:

U.S. Commission on Civil Rights
624 Ninth Street NW
Washington, DC 20425
Telephone: (202) 376-8128
http://www.usccr.gov/catalog.html

Presidential Task Force on Employment of Adults with Disabilities, *Re-charting the Course: The First Report from the Presidential Task Force on Employment of Adults with Disabilities* (Washington, DC: Presidential Task Force on Employment of Adults with Disabilities, November 1998).

As mandated by Executive Order 13078, the Task Force on Employment of Adults with Disabilities has been charged to examine programs and policies related to employment of adults with disabilities, to "determine what changes, modifications and innovations may be necessary to remove barriers to work faced by adults with disabilities" and to recommend options for such changes. The ultimate mission of the Task Force is to create a coordinated and aggressive national policy to bring adults with disabilities into gainful employment at a rate that is as close as possible to that of the general adult population. This first report tracks the progress of the Task Force as it develops recommendations for the President.

Copies of this report are available from:

Presidential Task Force on Employment
of Adults with Disabilities
200 Constitution Avenue, NW, Room S2312
Washington, DC 20210
(202) 219-6081
http://www.dol.gov

1999 American Psychological Association Convention Division 14 (SIOP) Program Highlights

Murray R. Barrick
University of Iowa

This year's APA Division 14 Convention Program in Boston will be held from August 20 to August 24 at the Sheraton Boston, the Boston Marriott Copley Place, and Westin Copley Place. The Division 14 (SIOP) Program promises to be an exciting program. There will be 11 symposia and 2 workshops sponsored by Division 14. In addition, Division 14 will co-list another 22 symposia with a number of related APA divisions, including Divisions 5 (Quantitative), 8 (personality and Social), 9 (Social Issues), 13 (Consulting), and 19 (Military). Topics range from "New Directions in Organizational Research" to "Employment Tests and Dishonesty: The Problem of Faking."

The Division 14 posters for the program will be presented in two large extended poster sessions labeled "Psychology in the Workplace" and "Evaluation, Assessment, Measurement, and Statistics." The posters from other divisions included in the extended poster sessions as well as the complete Focus on Science programming can be found on the Web at: www.apa.org/science/fos.html

Thanks go to members of the APA Program Committee for their efforts in putting together a high quality program: **Cheryl Adkins, Lynda Aiman-Smith,** Matt Bloom, **Bob Bretz, Paula Caligiuri, Dawn Carlson, Marcie Cavanaugh, Allan Church, Judy Collins, Dave Day, Rick DeShon, Nita French,** Jackie Gilbert, **Stan Gully, Julie Holliday Wayne, Micki Kacmar, Amy Kristof-Brown, Ron Landis,** John Maslyn, **Suzanne Masterson, Todd Maurer, Deniz Ones, Jean Phillips, Chet Robie, Chris Riordan, Phil Roth, Mark Schmit,** Steve Scullen, **Greg Stewart,** Michael Sturman, **Paul Tesluk, Chockalingham Viswesvaran,** and **Stephanie Wilk.** We look forward to seeing you in Boston in August!

1999 APA Division 14 Program
(Locations, Dates, and Times TBA)

Symposium with Division 21: ***Design Is Where the Action Is: Creating New Products for the Millennium***
Regina Colonia-Willner, *Chair*
Regina Colonia-Willner, ***Electronic Self-Delivery Systems: Using Sensors to Discover What Customers Do***
Jane Fulton-Suri, ***Making Effective Contributions to Product Design: Priorities in Application***
Martha J. Lindeman, ***Computer-Telephony Integration (CTI): Determining Priorities for User-Interface Design***
Sara Czaja, ***Computer Interface Design for Older Adults***
Christopher K. Hertzog, Discussant

Symposium: *Individual Versus Context: What Matters in Determining Self-Efficacy*
Robert E. Wood, *Chair*
Catherine D. Lees, Jason Y. M. Chong, ***Self-Efficacy and Probability Judgments: Feedback and Gender Effects.***
Renu Burr, ***Can Job Design Determine Self-Efficacy?***
Christina Sue-Chan, ***Relationship Between Individual and Organizational Context Factors and Self-Efficacy***

Discussion Panel: Work for Women in the 21st Century?
Barbara A. Gutek, *Chair*
Faye J. Crosby, Barbara A. Gutek, Maureen Ann O'Connor, Virginia O'Leary, Margaret S. (Peggy) Stockdale, and Dianna Stone, *Panelists*

Master Lectures: *Leadership: Who becomes a Leader and Why?*, Robert Sternberg, *Presenter*

Master Lectures: *Individual Differences, Personality, and Psychometrics*, Niels Waller, *Presenter*

Plenary Speaker: Edwards O. Wilson

Symposium: *New Directions in Organizational Justice Research*
K. Denise Bane, *Chair*
K. Denise Bane, ***Inoculation vs. Sensitivity: Competing Frameworks of Reactions to Historical Injustice***
Nathan J. Mondragon, ***Attitudes Toward Drug Testing Programs: Individual Differences and Perceptions of Fairness.***
Christine A. Henle, Herman Aguinis, ***Antecedents of Employee Reactions to Drug Testing: Going Beyond Job and Testing Characteristics***

Symposium: *Why Employees Leave: Ideas and Methodologies for Conducting Retention*
Laura S. Hamill, *Chair*
Pauline Velez, ***It's Not Just About Why They Leave. It's Also About Why They Stay***
Steven D. Ashworth, ***Development of an Organizational Retention Index for Company Executives***
Laura S. Hamill, ***Retention Research at Microsoft***

Workshop: *An Instructor's Guide for Introducing I-O Psychology in Introductory Psychology*

Peter D. Bachiochi, *Co-Chair*
Debra A. Major, *Co-Chair*

Symposium: *Assessing, Changing, and Growing: Current Research and Practice Advances in Feedback-Based Interventions*
Allan H. Church, *Chair*
Janine Waclawski, ***Multirater Feedback for Executive Development***
David W. Bracken, Carol W. Timmreck, ***360-Degree Feedback: A Different Angle on Uses for Decision Making***
Allan H. Church, ***Large Scale Applications of Small Scale Feedback Data***

Mini-convention: *Multi-Division Task Force on School to Work.* CPSE Task Force, Courtney Leyendecker

Symposium with Division 8: *Treatment of Burnout: Clinical and Organizational Interventions.*
Barry A. Farber, ***Understanding and Treating Burnout in a Changing Culture***
Christina Maslach, Michael P. Leiter, ***Preventing Burnout and Building Engagement: Organizational Issues***
Michael P. Leiter, Phyllis Harvie, Cindy Frizzell, ***Supporting Staff Members Through a Major Transition: Implications for Burnout***
Ester R. Greenglass, Ronald J. Burke, ***Social Support and Burnout in Nurses: Implications for Intervention***
Wilmar Schaufeli, ***Interventions to Reduce Work Stress and Burnout***
Ayala M. Pines, ***Treating Burnout: Clinical Intervention from an Existential Perspective***

Symposium: *Integrity in Corporate America 2000: Questionable Ethics*
Greg Gormanous, *Chair*
Keith A. Markus, ***Concepts Versus Constructs in Theories of Integrity***
Judith M. Collins, ***Female Frauds in the Corporate Suite: Personality and Biodata Predictors***
Allan H. Church, ***A Question of Balance: Understanding Professional Values, Ethics, and Integrity in Corporate Consulting***
Rodney L. Lowman, *Discussant*

Symposium: *Consulting to Healthcare: Psychologists' Role in Improving Selection Processes*
Eric J. Summons, *Chair*
Michael K. McElhenie, ***The Face of Customer Service in Health Care***
Eric J. Summons, ***Implementing Service Personality Assessment in a University Hospital Setting***

Carolyn A. Jenkins, ***Improving Selection by Implementing an Integrated Process for Health Care***

Symposium/Conversation Hour: ***Qualitative Research in a Quantitative World.***
Laura Donorfio, *Co-Chair*
Maura Stevenson, *Co-Chair*

Symposium: ***The Potential of Virtual Environments at Multiple Organizational Levels***
Joan R. Rentsch, *Co-Chair*
Debra Steele-Johnson, *Co-Chair*
Debra Steele-Johnson, Valerie L. Shalin, Joan R. Rentsch, ***Key Features Of Ves: Effects On Individuals And Possible I-O Applications***
Joseph Psotka, ***Modeling Person Characteristics In Simulations***
Michael McNesse, ***Socio-Cognitive Perspectives Of Virtual Environments***
Paul Radtke, Janis A. Canon-Bowers, Eduardo Salas, ***Enhancing Teamwork Through Virtual Presence***
Douglas T. Hall, *Discussant*

Division 14 Symposium: ***Employment Tests and Dishonesty: The Problem of Faking***
Joyce C. Hogan, *Chair*
Ryan P. Pennock, Kenneth S. Shultz, Thung-Rung, ***Fakability in Structured Interviews: A Comparison of Situation and Past Behavior Formats***
Stacy L. Jackson, ***Responses to Feedback Seeking Measures in a 360-Degree Assessment: Initial Evidence of Social Desirability***
Judith M. Collins, Richard P. DeShon, Mark Rader, ***The Incremental Validity of the Socialization Trait Over the Five Factors for the Prediction of Performance, Controlling for Faking***
Richard L. Griffith, Richard L. Frei, Andrea F. Snell, ***Examining the Measurement Structure of Applicant Responses: A LISREL Comparison with Honest and Faking Conditions***
Robert Hogan, *Discussant*

Symposium with Division 20: ***Work, Family and Well-Being: A Life Course Perspective***
Richard Shore, *Chair*
Robert Orrange, ***Work, Family And Meaning: Thoughts Of Professionals Transitioning To Work***
Elaine Wethington, ***Employment and Family Transitions and Their Relationship to Generativity***

Patricia Roehling: Work-Family Spillover and Well-Being: A Life Course Perspective
Jungmeen Kim: ***Couples' Work Status and Psychological Well-Being in Older Adults***
Patricia Roehling, *Discussant*

Mini-Convention on Education and Training, BEA Task Force

Science Directorate Posters: Evaluation & Measurement, Applied Psychology

Code, S. L., Langan-Fox, J., & Langfield-Smith, K. ***Applications of Pathfinder in Mental Models Research: A New Approach***

Wells, T. S., Culp, R. E., & Culp, A. M. ***Expatriate Social Support Index: Preliminary Reliability and Validity Data***

Baltes, B. B., Bauer, C. C., LaCost, H., Altmann, R., & Parker, C. ***Psychological Climate and Job Satisfaction: Multitrait-Multimethod Evidence for Nonlinear Relationships***

Kraus, E., Fraser, S. L., & Schriesheim, C. A. ***Content Adequacy Assessment of the Influence Tactic Questionnaire***

Cochrane, R. E. ***The Selection and Psychological Testing of Police Officers***

Fekken, G. C., Saltstone, R. P., Robinson, C. ***Comparison of Two Psychopathology Tests for Police Constable Selection***

McFarlin, S. K., Fals-Stewart, W. S., Cole, V., & Major, D. ***The Response to Workplace Conflict Scale: A Preliminary Psychometric***

Science Directorate Posters: Psychology in the Workplace

Baltes, B. B., Dickson, M. W., Sherman, M., Bauer, C., LaGanke, J., & Brewster, S. ***Computer-Mediated Communication and Group Decision-Making: A Meta-Analysis***

Ensher, E. A., Grant-Vallone, E. J., & Marelich, W. D. ***Contrasting Effects of Perceptions, Race, and Gender on Mentoring Relationships***

Seijts, G. H., & Latham, G. P. ***Effectiveness of Personal and Group Goals in Social Dilemma Situations***

Kwan, D., Heffner, T. S., & Fals-Stewart, W. ***Factors that Affect Team Performance***

Thompson, R. C., Bailey, L. L., Joseph, K. M., Worley, J. A., & Williams, C. ***Effects of Fairness Perceptions on Organizational Cynicism***

Myers, V., & Morgan, L. M. ***Calling & Coping: The Relationship Between Work Orientation and Well-Being***

Daus, C. S., Ward, J. R., Nicholas, J. P., & Weiss, H. M. *Task and Affective Influences on Satisfaction*

Byosiere, P. H. R. *Leadership Through Knowledge Creation: Theoretical, Empirical and Practical Considerations*

Kabacoff, R. I. *Management Level, Job Function and Leadership Style*

Carswell, J. J., & Pepper, S. *Leadership and Influence: The Role of Style, Gender, and Personality*

Rospenda, K. M., & Richman, J. A. *Workplace Harassment, Services Utilization, and Drinking Outcomes*

Bachiochi, P. D., Sinar, E. F., & Slaughter, J. E. *Mentoring Experiences of Minority Interns and Attraction to the Company*

Dickson, M. W., & Wendorf, C. A. *Managers' Implicit Theories of Motivation: How Managers Think Motivation "Works"*

Raymark, P. M., & Galloway, B. *Rater Evaluation of Indirectly-Obtained Performance Appraisal Information*

Farmer, W. L., & Fiedler, E. R. *Personality and Biodata Overlap in Air Traffic Controllers*

Kolz, A. R., Walsh, L., Ferraro, K., & Cuban, D. *Personality, Honesty, and Counterproductive Work Behavior*

Murphy, P. J., & Tett, R. P. *Personality and Situations in Co-Worker Preference: Birds of a Feather?*

Lucius, R. H., & Giltrow, M. A. *Beyond Conscientiousness: Neuroticism at Work*

Lee, F. K. *Personality and Work Values in Formal Mentoring Relationships*

Lucius, R. H., Turknett, C. N., & Turknett, R. L. *Differences in Self/Other Perceptions and Personality*

Hoeft, S., Quell, P., & Schuler, H. *Behavioral Expressions of "Big Five"—Dispositions at the Workplace*

Mannix, L. M., & Hebl, M. R. *Stigma by Association: Hiring Can Be a Weighty Decision*

Wiesen, J. P. *A New Mechanical Aptitude Test: Valid With Low Adverse Impact*

Joseph, L. M., & Greenberg, M. A. *Effects of Guided Imagery on Employment Status in Unemployed Professionals*

Adams, G. A., & Jex, S. M. *Self-Esteem and Job Involvement As Moderators of Reactions to Stressors*

Gareis, K. C., Barnett, R. C., & Brennan, R. T. *Fit, Work-Family Conflict, and Quality-of-Life Outcomes*

Brown, T. J., & Sumner, K. E. *Differences and Similarities of Initiators and Targets of Workplace Aggression*

McIntyre, S. E., McIntyre, T. M., & Silverio, J. M. *Stress Responses and Coping Resources in Portuguese Health Professionals*

Fried, Y., Shperling, Z., Ben-David, H.A., Franz, C. A., & Tiegs, R. *Competitive Advantage in Successful Transfer of Learning*

IOTAS

Allan H. Church
W. Warner Burke Associates, Inc.

Listed below are the latest accolades, assignments, and professional updates in the merry old land of SIOP. Send all future IOTAS to me at Allanhc96@aol.com and see your own name in print.

Awards

Congratulations to SIOP member **Andrew Imada** in Carmichael, California who was recently awarded the very first Liberty Mutual Prize in Ergonomics. Andrew also told us that "as I said in accepting the award—behind every man, there's a woman...who's really surprised!"

People on the Move

Jim Sharf, formerly of Aon Consulting and long-time contributor to *TIP*, has recently changed jobs and is now President of Sharf & Associates: Employment Risk Advisors focusing on selection and appraisal litigation support. He can be reached at his new number (703) 684–4886.

Dianne Brown Maranto informed us that she is resigning from her position with APA to pursue her own consulting practice in I-O and testing applications. She's been with APA's testing office for 9 years, with prior experience at both Edison Electric Institute and HumRRO. She will be on contract with APA to complete the revision of the test standards as project director, but will otherwise be consulting with The Maranto Group. She can now be reached at pmaranto@erols.com, (301) 206–2368.

Fran Karamouzis recently joined Stromberg Consulting, a Fortune 100 HR consulting firm, as a Senior Consultant. Her expertise is centered on strategic consulting emphasizing the linkage between business strategy, operational strategies, human resource practices, and technology initiatives.

Steve Ashworth wrote to let people know that he has left rainy and cloudy Seattle and Microsoft (he actually saw a car on the road there that was covered in mold!) for the sunnier climate of San Diego. He is now the Manager of Personnel Research and Measurement for Sempra Energy in San Diego. Steve can be reached at SAshworth@sempra.com

Books and Things

Julian Barling of the School of Business at Queen's University in Kingston, Ontario wrote to announce the publication of a book he recently edited with Kevin Kelloway. The full citation is Barling, J., & Kelloway, E.K. (Eds.) (1999). *Young workers: Varieties of experience*. Washington, DC. American Psychological Association. The authors can be reached at barlingj@qsilver.queensu.ca (Julian Barling) or kkellowa@uoguelph.ca.

Corrections

There was a mistake inadvertently made in the opening line of last issue's Real World column by **Janine Waclawski**. It should have read "Welcome to the penultimate year in the 20th century" as several individuals (including this author) have pointed out.

CONFERENCES AND MEETINGS

This list was prepared by David Pollack. If you would like to submit additional entries, please write to David Pollack at the U.S. Immigration and Naturalization Service, 800 K Street, NW, Room 5000, Washington, DC 20536, (or call (202) 305–0081, or fax entries to (202) 305–3664).

1999

April 10–14: Annual Conference of the American Society for Public Administration. Orlando, FL. Contact: ASPA, (202) 393–7878.

April 19–23: Annual Convention, American Educational Research Association. Montreal, Quebec. Contact: AERA, (202) 223–9485.

April 19–23: Annual Convention, National Council on Measurement in Education. Montreal, Quebec. Contact: NCME, (202) 223–9318.

April 30–May 2: 14th Annual Conference of the Society for Industrial and Organizational Psychology. Atlanta, GA. Contact: SIOP, (419) 353–0032.

May 18–21: 29th Annual Information Exchange on "What is New in O.D. and Human Resource Development." San Antonio, TX. Contact: Organization Development Institute, (440) 729–7419.

May 22–27: Annual Conference of the American Society for Training and Development. Atlanta, GA. Contact: ASTD, (703) 683–8100.

June 1–4: 27th International Congress on the Assessment Center Method. Orlando, FL. Contact: DDI, (412) 257–3952.

June 3–6: Annual Convention of the American Psychological Society. Denver, CO. Contact: APS, (202) 783–2077.

June 4–11: Annual Conference of the International Personnel Management Association Assessment Council. Clearwater, FL. Contact: IPMA, (703) 549–7100.

June 26–27: 3rd Australian Industrial and Organizational Psychology Conference. Brisbane, Queensland, Australia. Contact: Conference Secretariat, 61 7 3846 5858 or kcross@eventcorp.com.au.

June 27–30: Annual Conference of the Society for Human Resource Management. Atlanta, GA. Contact: SHRM, (703) 548–3440.

July 12–17: 19th O.D. World Congress. Harare, Zimbabwe, Africa. Contact: Organization Development Institute, (440) 729–7419.

August 6–8: Annual Conference of the Association of Management/International Association of Management. San Diego, CA. Contact: AoM/IAoM, (804) 320–5771.

August 8–11: Annual Meeting, Academy of Management. Chicago, IL. Contact: Academy of Management, (914) 923–2607.

August 8–12: Annual Convention of the American Statistical Association. Baltimore, MD. Contact: ASA, (703) 684–1221.

August 20–24: Annual Convention of the American Psychological Association. Boston, MA. Contact: APA, (202) 336–6020.

Sept. 28–Oct. 2: Annual Conference of the Human Factors and Ergonomics Society. Houston, TX. Contact: The Human Factors and Ergonomics Society, (310) 394–1811.

2000

March 8–12: Annual Conference of the Academy of Human Resource Development. Raleigh-Durham, NC. Contact: AHRD, (504) 334–1874.

March 28–April 2: Annual Conference of the Southeastern Psychological Association. New Orleans, LA. Contact: SEPA, (850) 474–2070.

CALLS AND ANNOUNCEMENTS

Call For Nominations: 2000 APA Scientific Awards Program

The American Psychological Association (APA) invites nominations for its 2000 awards program. The Distinguished Scientific Contribution Award honors psychologists who have made distinguished theoretical or empirical contributions to basic research in psychology. The Distinguished Scientific Award for the Applications of Psychology honors psychologists who have made distinguished theoretical or empirical advances in psychology leading to the understanding or amelioration of important practical problems.

To submit a nomination for the Distinguished Scientific Contribution Award and the Distinguished Scientific Award for the Applications of Psychology, you should provide a nomination form, nominee's current vita with list of publications, letter of nomination, up to five representative reprints, and the names and addresses of several scientists who are familiar with the nominee's work.

The Distinguished Scientific Award for Early Career Contribution to Psychology recognizes excellent young psychologists. For the 2000 program, nominations of persons who received doctoral degrees during and since 1990 are being sought in the areas of animal learning and behavior, comparative; developmental; health; cognition/human learning; and psychopathology. To submit a nomination for the Distinguished Scientific Award for Early Career Contribution to Psychology, you should provide a letter of nomination, nominee's current vita with list of publications, and up to five representative reprints.

To obtain nomination forms and more information, please contact **Suzanne Wandersman, Science Directorate, American Psychological Association, 750 First Street, NE, Washington, DC 20002–4242; by phone, (202) 336–6000; by fax, (202) 336–5953; or by e-mail, swandersman@apa.org.** The deadline for all award nominations is June 1, 1999.

Announcement of 1999 Award Competitions of the Society for General Psychology

The Society for General Psychology (formerly APA's Division of General Psychology) announces its 1999 awards program to recognize outstanding achievements in General Psychology. In addition to its prestigious William James Book Award, the Society sponsors two other awards—the Ernest R. Hilgard Award recognizing life-time contributions to General Psychology and

the George A. Miller Award given for an outstanding recent article in General Psychology. In each case the awards include a plaque or certificate and a cash prize—$500 for the Hilgard and Miller awards, and $1000 for the William James Book Award.

For all of these awards, the focus is on the quality of the contribution and the linkages made between the diverse fields of psychological theory and research. The Society for General Psychology encourages the integration of knowledge across the subfields of psychology and the inclusion of contributions from other disciplines. The Society is looking for creative synthesis, the building of novel conceptual approaches, and a reach for new integrated wholes. A match between the goals of the Society and the nominated work or person will be an important evaluation criterion. Self-nominations are encouraged for these awards as well as nominations by others. For the Hilgard Award, nominators are asked to submit the candidate's name and vitae along with a detailed statement indicating why the nominee is a worthy candidate for the award and supporting letters from others who endorse the nomination.

For the Miller Award, nominations should include: vitae of the author(s), four copies of the article being considered (which must have a post-1993 publication date), and a statement detailing the strength of the candidate article as an outstanding contribution to General Psychology.

Nominations for the William James Award should include four copies of the book (dated post-1993 and available in print); the vitae of the author(s) and a one-page statement that explains the strengths of the submission as an integrative work and how it meets criteria established by the Society. Text books, analytic reviews, biographies, and examples of applications are discouraged.

Winners will be announced at the Fall convention of the American Psychological Association the year of submission. Winners will be expected to give an invited address at the subsequent APA convention and also to provide a copy of the award address for inclusion in the newsletter of the Society.

All nominations and supporting materials for each award must be received on or before May 1, 1998. Nominations and materials for all awards and requests for further information should be directed to **General Psychology Awards, c/o C. Alan Boneau, Department of Psychology, George Mason University, Fairfax, VA, 22030. Phone: 703–993–4118; Fax: 301–320–2845; Email: aboneau@gmu.edu.**

Call for Nominations: ASTD Dissertation Award

The American Society for Training & Development (ASTD) Dissertation Award is presented annually to the person who has submitted the best dissertation completed during the previous academic year on some issue of relevance to the practice of workplace learning and performance. Illustrative areas of concentration include: training and development, organizational development/learning, performance analysis, work design, career development, human resource planning. The dissertation must report a study for which a degree was granted in the previous year between July 1, 1998, and June 30, 1999. The award winner will receive a commemorative plaque presented at the awards ceremony during the 2000 ASTD International Conference and Exposition, May 20-25 in Dallas, Texas; $500 cash prize; designated place on the 2000 ASTD International Conference and Exposition program to present the research (with conference registration fee paid); and an announcement of the award and a summary of the findings in the *Training & Development* magazine.

Applications will be evaluated by the ASTD Research Committee and other reviewers. Finalists will be asked to submit a manuscript that is based on the dissertation and that follows the general guidelines of the *Human Resource Development Quarterly*. All research methodologies will be considered on an equal basis including, for example, field, laboratory, quantitative, and qualitative investigations. All materials submitted must be in English. Initial applications are due **September 15, 1999** and must include *five copies* of the following items, without exception:

1. Letter of application from candidate.
2. Letter of recommendation and sponsorship from committee chair, *on letterhead,* with the dissertation completion date.
3. Abstract of the dissertation, 5-15 pages in length, double-spaced (1-inch margins; 12-point font), that includes: (a) summary of the problem addressed by the study; (b) critique of relevant literature; (c) synopsis of the findings; (d) implications for practice and research.
4. Responses by the candidate to the following questions. Total length of response should not exceed three pages, double-spaced: (a) Why is the problem addressed in the dissertation of importance? (b) Why was the overall design chosen a "good" (i.e., methodologically rigorous and appropriate) design? (c) What measurement and analysis problems did you encounter, and how did you resolve them?
5. Send *five copies* of the above (and all additional questions) to the Award Chair: **Jennifer D. Dewey, Ph.D., Arthur Andersen, 1405 North Fifth Avenue, St. Charles, IL 60174, Phone: (630) 444–3828, Fax: (630) 377–3794, jennifer.d.dewey@us.arthurandersen.com**

1999 Organization Development Institute Awards

The O.D. Institute has made a significant commitment to recognize outstanding organization development efforts and to help build the field of O.D. into a profession. Each year the winners of the O.D. Institute awards are announced at the Annual Information Exchange. This year the 29th Annual Information Exchange is on May 18-21, 1999 in San Antonio, Texas.

Excellence in Authorship: The Most Outstanding Organization Development Journal Article of the Year. This award will be given to the author(s) of the article published in the during the prior volume year article that has made the greatest contribution to practice, theory and/or research in the field of O.D. The winning author(s) will receive a cash prize of $2,000 and a wall plaque.

The Jack Gibb Award for the best presentation at The 29th Annual Information Exchange by a fulltime student not working fulltime. The winner receives $1,000 and a wall plaque.

The Outstanding O.D. Project of the Year. This award is given to the O.D. effort that has achieved the greatest impact and has advanced the science or art of O.D. in some significant way. Self-nominations are accepted. For more information and nomination procedures, please contact: Dr. Robert Golembiewski, RODC, Tel: 706/542-2970, e-mail: rgolem@uga..cc.uga.edu

For more information regarding these awards, the O.D. Institute, or the 29th Annual Information exchange, contact: Dr. Donald W. Cole, RODC, c/o The O.D. Institute, 11234 Walnut Ridge Road, Chesterland, OH 44026, E-mail: DonWCole@aol.com, http://members.aol.com/odinst. For submission information and to be considered for the best paper award for the *O.D. Journal* contact either **Dr. Bill Kahnweiler, RODC, Associate Editor, Peer Review-USA, wkahnweiler@gsu.edu or Dr. David Coghlan, Associate Editor for Peer Review–International, dcoghlan@tcd.ie.**

Call For Papers:
Behavioral Safety Now 1999

The Cambridge Center for Behavioral Studies and Quality Safety Edge invite you to present at the Behavioral Safety Now Conference 1999. The conference will be held Tuesday, October 5 to Friday, October 8, 1999 at the Riviera Hotel in Las Vegas, NE.

The Behavioral Safety Now Conference was founded in 1996 to promote the understanding and use of Behavioral Safety. The conference provides a forum for all those interested in Behavioral Safety with educational workshops by leading experts, keynotes by the pioneers, informative presentations, and exciting networking and discussion opportunities. Proceeds from this conference support the Cambridge Center for Behavioral Studies and promote research in Behavioral Safety.

Presenters: Users of Behavioral Safety technology—safety professionals, managers, and Behavioral Safety team members as well as researchers, consultants, and other interested and qualified people are invited to deliver presentations. All presenters receive a reduced registration rate.

Audience: Your audience will include people from all levels and functions within many types of organizations and industries. Some registrants are considering Behavioral Safety for the first time, others are seeking solutions to challenges within their established process. Many people attend the conference simply to talk to others involved in Behavioral Safety and hear ideas on improving and expanding their process.

Information: If you are interested in sharing your experience and knowledge this year, please call or e-mail **Grainne A. Matthews, Ph.D., Program Chair at (713) 807–1112 or grainneam@sprynet.com or visit http://www.qualitysafetyedge.com/**

Deadline for Proposals is May 31, 1999.

Call For Information:

Center for Organizational and Personnel Police Psychology (www.copp-psychology.org)

The Center for Organizational and Personnel Psychology is a new, non-profit organization dedicated to advancing the status of organizational and personnel police psychology. The Center was formed to encourage the sharing of information and research for the benefit of all in the spirit of fellowship. Please send us your:

- **Research:** We post previously unpublished personnel and organizational law enforcement-related research. See our web site on how we can protect your right to re-publish these same articles in another journal at a later time. Send a short summary of your pending, ongoing, or completed research. We will also serve as a conduit to match law enforcement agencies that desire research with those willing to conduct research.
- **Citations:** We post a bibliography of research and articles (published or unpublished) that deal with law enforcement organizational or personnel issues… so send us your citations related to these areas! (in APA format, please).
- **News items of interest**: We post law enforcement personnel and organizational news items of interest. Include the entire article, the publication date, and the title of the publication from which the article was taken so we can properly credit them.
- **Job listings**: We post job descriptions and where to find more information. Jobs must be related to organizational or personnel positions in law enforcement and the closing date must be supplied. This is a ***free*** job listing!!!
- **Links:** Send us the web sites related to personnel and organizational issues that interest you so we can share them with others.
- **Calendar items:** We strive to post the most complete and up-to-date calendar of meetings/events related to organizational and personnel police psychology issues.

Please e-mail all information to **director@copp-psychology.org** or mail to **Center for Organizational and Personnel Police Psychology, Inc., P.O. Box 9054, Akron, OH 44305.** Be sure to include your name, title, company or organization, phone number, and return e-mail address.

Call for Papers:
Consulting Psychology Journal

The Division of Consulting Psychology (13) is seeking manuscripts for its quarterly publication *Consulting Psychology Journal: Practice and Research.* An official APA division journal, CPJ is masked reviewed and publishes articles in the following areas:

1. theoretical and conceptual articles with implications for consulting
2. original research regarding consultation
3. in-depth reviews of research and literature on consulting practice
4. case-studies that demonstrate applications or critical issues
5. articles on consultation practice development
6. articles that address unique issues of consulting psychologists

Potential authors are encouraged to contact the editor for more information. Submissions (in triplicate) for review should be sent directly to **Richard Diedrich Ph.D., Editor, The Hay Group, 116 Huntington Avenue, Boston, Massachusetts, 02116–5712, tel. 617–425–4540, fax: 617–425–0073.**

Call for Papers: The Kenneth E. Clark Research Award

The Center for Creative Leadership is sponsoring the Kenneth E. Clark Research Award, our annual competition to recognize outstanding unpublished papers by undergraduate and graduate students.

The winner of this award will receive a prize of $1,500 and a trip to the Center to present the paper in a colloquium.

Submissions may be either empirically or conceptually based. The content of the paper should focus on some aspect of leadership or leadership development.

Submissions will be judged by the following criteria: (a) The degree to which the paper addresses issues and trends that are significant to the study of leadership; (b) The extent to which the paper shows consideration of the relevant theoretical and empirical literature; (c) The extent to which the paper makes a conceptual or empirical contribution; (d) The implications of the research for application to leadership identification and development. Papers will be reviewed anonymously by a panel of researchers associated with the Center.

Papers must be authored and submitted only by graduate or undergraduate students. Entrants must provide a letter from a faculty member certifying that the paper was written by a student. Entrants should submit four copies of an article-length paper. The name of the author(s) should appear only on the title page of the paper. The title page should also show the authors' affiliations, mailing addresses, and telephone numbers.

Papers are limited to 20 double-spaced pages, including title page, abstract, tables, figures, notes, and references. Papers should be prepared according to current edition of the Publication Manual of the American Psychological Association.

Entries (accompanied by faculty letters) must be received by August 27, 1999. Winning papers will be announced by October 29, 1999. Entries should be submitted to: **Cynthia McCauley, Ph.D., Acting Vice President New Initiatives, Center for Creative Leadership, One Leadership Place, P.O. Box 26300, Greensboro, N.C. 27438-6300**

CALL FOR PROPOSALS

International Personnel Management Association Assessment Council

The International Personnel Management Association Assessment Council (IPMAAC) is now preparing the program for its 23rd annual conference of Personnel Assessment that will be held at the Trade Winds Resort in St. Petersburg, Florida June 6–10, 1999. Practitioners and researchers in personnel assessment and selection or in other related areas of personnel management,are invited to participate and submit proposals.

Even if you are not an IPMAAC member or have never presented at a conference before, please consider submitting a proposal to this year's IPMAAC program. IPMAAC conferences provide an excellent avenue to share cutting-edge assessment and personnel management techniques. While the emphasis is primarily on personnel assessment and selection, related fields are also welcome such as personnel management and organizational development. The following are just samples of potential presentation areas.

1. Challenges and Innovations
2. Demonstrating Excellence
3. Managing the Assessment Function
4. Information Technology
5. Changing Roles & Environment
6. Legal Issues
7. Leadership Assessment

If you are interested in submitting a proposal, or would like to receive the official Call for Proposals, please contact **David Hamill at (301) 320-9500 or davidh@pittmanlc.com.**

THE AMERICAN PSYCHOLOGICAL ASSOCIATION AND THE UNIVERSITY OF TULSA ANNOUNCE A SCIENTIFIC CONFERENCE

"Applied Personality Psychology:
The Intersection of Personality and I/O Psychology"

Friday, May 21–Saturday, May 22, 1999, The University of Tulsa

The American Psychological Association and the University of Tulsa are cosponsoring a conference that will bring together researchers from the fields of personality and I/O psychology. Participants will discuss emerging trends and research in their respective disciplines to promote a shared research agenda of applied personality psychology.

INVITED SPEAKERS
Walter C. Borman, University of South Florida
Deniz Ones, University of Minnesota
Timothy Judge, University of Iowa
Rhona Flin, University of Aberdeen
Leaetta Hough, University of Minnesota
Adrian Furnham, University of London
David Funder, University of California, Riverside
Roy Baumeister, Case Western University
Sampo Paunonen, University of Western Ontario
Nicholas Emler, Oxford University

The conference will follow a traditional lecture-discussant format. The conference will begin Friday morning, May 21st, and end Saturday afternoon, May 22nd.

Individual papers relevant to applied personality psychology are invited for poster presentation. Both theoretical papers and practical applications to problems are welcome. Please provide the following information: Title of Poster, Author(s), Mailing Address, Telephone Number, Fax Number, Email Address (first Author), Abstract (250 words).

Submit posters by March 12th to: **Poster Selection Committee, C/O Brent Roberts, Ph.D., The University of Tulsa, 600 South College Avenue, Tulsa, OK 74104-3189**

The registration fee is $60.00 payable to The University of Tulsa. Deadline for registration is March 31st. For conference registration inquiries, contact:

Abby Hallford, Psychology Department Administrative Assistant, The University of Tulsa, 600 South College Avenue, Tulsa, OK 74104-3189, (918) 631-2248, email: abby-hallford@utulsa.edu

SIOP

Society for Industrial and Organizational Psychology, Inc.

Division 14 of the American Psychological Association
Organizational Affiliate of The American Psychological Society

How Do I Join SIOP?

Thank you for your interest in joining–or rejoining–the Society for Industrial and Organizational Psychology, Inc. (SIOP). The following information is provided to guide you through the application process.

Article 1, Section 2 of the Society's Bylaws describes the Society's purpose as "to promote human welfare through the various applications of psychology to all types of organizations providing goods and services." Examples of such applications include selection and placement of employees, organizational development, personnel research, design and optimization of work environments, career development, consumer research and product evaluation, and other areas affecting individual performance in or interaction with organizations.

Who Is Eligible?

Membership in the Society for Industrial and Organizational Psychology, Inc., (SIOP) is open to Fellows, Members, and Associates of the American Psychological Association (APA) and Fellows and Members of the American Psychological Society (APS). Applications for Society Member, Associate or as Foreign or Student Affiliates of the Society are handled through the Society Membership Committee. Recommendations for status as Fellows are made through the Fellowship Committee.

What Are the Criteria for Membership?

Applicants for Society Membership must (1) be paid Members of either APA, APS, or the I-O Section of the Canadian Psychological Association at the time of application; (2) have a doctoral degree based in part upon a psychological dissertation conferred by a graduate school of recognized standing; (3) be engaged in study or professional work that is primarily psychological in nature; and (4) be engaged in professional activities (research, teaching, practice) related to the purpose of the Society, as stated above.

Applicants for Society Members not receiving a doctoral degree in I-O Psychology must support their application with any one of the following: (1) two articles published in I-O related journals; (2) two letters of recommendation written by current Society Members; (3) name of I-O related courses taught; or (4) copies of unpublished research or evaluation reports in the I-O areas.

Applicants for Associate Membership must: (1) be paid Associate Members of APA or paid Members of APS at the time of application; (2) have completed two years of graduate study in psychology at a recognized school; (3) have a Master's degree in psychology (or related area) from a recognized graduate school; (4) have a minimum of one year's full-time professional work in psychology; and (5) be engaged in professional or graduate work related to the purpose of the Society, as stated above.

Applicants for Foreign Affiliate Membership must: (1) reside in a country other than the United States; and (2) meet all the criteria for Society Member or Society Associate status with the exception that membership in APA or APS is not required.

Applicants for Student Affiliate Membership must be currently enrolled, and must have their faculty advisor sign their application form to verify that they are currently a student in good standing. They do not necessarily have to be majoring in psychology. Student Affiliate Members are not required to be Student Members of APA or APS, but must be presently engaged in formal study related to the purpose of the Society, as stated above.

How Do I Proceed?

To apply for membership in SIOP, you should complete a Member/Associate Member/Foreign Affiliate application or a SIOP Student Affiliate application and return it to the SIOP Administrative Office. Student applicants should include a $10 membership fee with their application and the signature of their faculty advisor, all other applicants should not send any money until they have been accepted into membership.

Send applications (Student Affiliates should include payment and an advisor's signature) to:

SIOP Administrative Office • PO Box 87 • Bowling Green OH 43402-0087
(419) 353-0032 • (FAX) 352-2645

Application for Membership

Society for Industrial and Organizational Psychology, Inc.
Division 14 of the American Psychological Association
Organizational Affiliate of the American Psychological Society

Mailing Address and Contact Information

Name________________
Address________________
____
City________ State____ Zip____ - ____
Office Phone________________
Fax________________
Home Phone________________
E-mail________________

Indicate your affiliation:
Current APA Status
☐ Fellow ☐ Member
☐ Associate ☐ Foreign Affiliate
Current APS Status
☐ Fellow ☐ Member
Current Canadian Psychological Association Status in I/O Section
☐ Fellow ☐ Member

Check status in SIOP for which you are applying: ☐ Member ☐ Associate ☐ Foreign Affiliate
(Please refer to SIOP membership criteria)

Educational Background (List graduate education first)

Institution	Degree	Date	Major Area of Specialization

Professional Experience (List present position first)

On a separate sheet of paper, provide the following information for your last three (3) jobs:

- Employer
- Title
- Employment dates
- Brief description of the duties for each job

This information is critical for the committee's deliberation of your application. ***Applications without this information will not be considered.***

If your degree is not in I-O Psychology, you must also submit any one of the following:

(1) two articles published in I-O related journals; or
(2) two letters of recommendation written by current Society Members; or
(3) name of I-O related courses taught; or
(4) copies of unpublished research or evaluation reports in the I-O areas.

In making this application, I subscribe to and will support the purpose of the Society, "to promote human welfare through the various applications of psychology to all types of organizations..." I also subscribe to and will support the American Psychological Association's Ethical Principles of Psychologists as adopted by APA and endorsed by the Society. I affirm that the statements made in this application correctly represent my qualifications for election, and understand that if they do not my membership may be voided. I authorize investigation of all statements contained in this application.

Date________ Signature________________

Return your application, along with supporting documents, to:
SIOP Administrative Office, P.O. Box 87, Bowling Green, OH 43402-0087
Phone 419/353-0032 Fax: 419/352-2645

Committee Volunteer Form

Society for Industrial and Organizational Psychology, Inc.

Deadlines: The deadline for volunteering to serve on the Continuing Education and Workshop Committee is December 1st. For all other committees, nominations are accepted at any time. Please submit a completed form to the address given at the bottom of this page.

Mailing Address

Name: ______________________
(Last) (First) (MI)

Address: ______________________

City: __________ State: ___ Zip: ________

Telecommunications

Office: ______________

Fax: ______________

E-mail: ______________

Home: ______________

JobTitle: ______________ **Organization:** ______________

Highest Degree: ________ **Year Granted:** _____ **Institution:** ______________

Society Status: Associate ☐ Member ☐ Fellow ☐

Committee Preference: If you have preferences concerning placement on committees, please indicate them by writing the number 1, 2, and 3, respectively, by the names of your first, second, and third most preferred committee assignments. Note, however, that you need not provide these rankings if you are indifferent about committee placement.

___ Awards	___ Education & Training	___ Professional Practice	___ Scientific Affairs
___ Committee on Committees	___ Fellowship (Fellows only)	___ Program (APA Meeting)	___ State Affairs
___ Continuing Education & Workshops	___ Membership	___ Program (SIOP Conference)	___ TIP Newsletter

___ **Please check here if you would be willing to serve as a mentor for a new SIOP member.**

Prior Society Service: If you have previously served on SIOP committees, please list their names and the years you served ______________________

Prior APA/APS Service: If you have previously served on APA or APS boards or committees, please list their names and the years you served ______________________

References: Please provide the names and addresses of two Members or Fellows of the Society who the Committee on Committees may contact to obtain additional information about you.

Name	Address	City	State	Zip
Name	Address	City	State	Zip

Your Signature: ______________________ **Date:** __________

Please mail or fax the completed form to: SIOP Administrative Office, PO Box 87, Bowling Green, OH, 43402-0087.
Fax (419) 352-2645. If you need further assistance call (419) 353-0032.

POSITIONS AVAILABLE

SBC COMMUNICATIONS INC. SBC Communications Inc., an international leader in the telecommunications industry, is accepting applications for pre-doctoral internships in HR Research. SBC is made up of the merged companies of Southwestern Bell, and Pacific Bell, Nevada Bell, and Southern New England Telephone, with a total of approximately 129,000 employees. The internship position is located in corporate headquarters in San Antonio, Texas.

Our internship program provides students with a strong I/O background the opportunity to apply their training in a fast-paced corporate environment. Interns work in a team setting on a full range of HR Research projects, including selection, performance management, employee surveys, and organizational development initiatives. We strive to develop interns to the point of taking end-to-end responsibility for a project.

Qualified candidates should have completed their Master's degree (or equivalent) and be currently enrolled in a Ph.D. program in I/O Psychology, Psychometrics, Organizational Behavior, or related discipline. Preference will be given to candidates who have prior work experience in areas such as job analysis, selection procedure validation and/or survey research. A strong background in research methods and statistics is desired. Experience using SPSS is a plus.

If you meet the above qualifications, have strong written and oral communication skills, and desire to work in a Fortune 50 company, please submit your resume and a list of at least 3 references for internships beginning in January or beginning in July. Internships are designed to last either 6 months or 1 year.

Please send materials to: **Robert L. Hartford, Ph.D., SBC Communications Inc. 111 Soledad, Suite 150, 9th Floor, San Antonio, TX 78205-2212, e-mail: rhartfo@corp.sbc.com, fax: 210-370-1945**

I/O PSYCHOLOGY INTERNS. FORD MOTOR COMPANY is accepting applications for pre-doctoral internships in industrial/organizational psychology. Ford is a worldwide leader in automotive products and financial services with 325,000 employees, including 143,000 employees in U.S. automotive operations.

The internships are full-time and last 12 months. Interns will be working with I/O psychologists and HR professionals on a variety of projects, most of which are international in scope. Projects include selection research, employee surveys and organizational development. All positions are located in Dearborn, Michigan.

Applicants must be enrolled in an I/O doctoral program and have completed a master's degree or be admitted to doctoral candidacy. Candidates should have experience in the following areas: selection research, construction of tests/surveys, and statistical analysis. Familiarity with SPSS is preferred but not required. Experience with web authoring or foreign language skills such as German, Spanish, or French are also preferred but not required.. Ford is an Equal Employment Opportunity Employer committed to a culturally diverse workforce.

Interested applicants should submit a cover letter and resume to: **Michele Jayne, Ph.D., Ford Motor Company, Personnel Research Services, World Headquarters Room 710, Dearborn, MI 48121–1899. Fax: 313–323–8531; e-mail: mjayne@ford.com.**

I/O PSYCHOLOGY INTERNSHIP OPPORTUNITIES. GTE, a leader in telecommunications, is seeking candidates for internships in its Employee Capability and Competency Design Department. These positions will provide the opportunity to gain experience in a large corporation and to become an active participant in a Human Resources team. The intern will assist I/O Psychologists in planning and carrying out content and/or criterion-related test development and validation projects, writing technical reports, and other related projects.

Candidates must be advanced Ph.D. students in I/O psychology (3rd or 4th year). Training or experience in job analysis, development and validation of paper-and-pencil tests and structured interviews, competency modeling, and criterion development is required. Knowledge of current legal and professional guidelines for employee selection procedures is also required. A solid background in psychometrics is essential, and experience with SAS, SPSS, or a similar statistical package is highly desirable. Candidates must be able to cooperate in team efforts and have strong interpersonal, organizational, and communications skills, both oral and written.

These internships are full-time positions with a duration of 6 to 12 months. Internships will start at various times during the year. All positions are located in Irving, Texas. Interested applicants are invited to submit a resume, desired start date, a list of references, and graduate transcript to: **Nancy T. Tippins, Ph.D., GTE, 700 Hidden Ridge, HQW01J52, Irving, Texas 75038, E-mail: nancy.tippins@telops.gte.com, Fax: (972) 718–4521**

At **DEVELOPMENT DIMENSIONS INTERNATIONAL (DDI),** now in its 30th year, rapid growth and expansion are creating multiple opportunities for highly qualified candidates. We are looking for your innovative contributions to be a part of our continued success!

Consultants work with leading companies worldwide to develop creative solutions for their business needs by applying innovative I/O techniques and methodologies. You will work within a team of 4–6 professionals. Varied consulting assignments with the largest corporations in the world will provide you with exciting challenges. Ph.D. or Masters level I/O psychologists with past history of achievements may apply. 30% travel involved.

Internship positions available beginning in spring/summer 1999 one or more pre-doctoral interns in our Assessment Technology Group (ATG) in Pittsburgh. Candidates should be advanced graduate students (e.g., post-Master's degree) in an I/O doctoral program and be available for 9–12 months. Superior research design and statistical analysis skills, strong project management and experience working with large data sets required.

The following two positions are primarily responsible for the delivery of DDI's executive assessment/development technology:

Executive Development Team Leader is involved in the delivery and management of projects; staffing and development of consultants, along with being the primary client interface. A Ph.D. candidate with relevant experience required. Location: Pittsburgh. 25–40% travel involved.

Executive Coaches—Pleasanton, CA and Washington DC area; Responsibilities include carrying an assessment caseload, providing feedback to executive participants, creating development plans and acting as an ongoing mentor. Coaches will have both project and client management responsibilities. Prior experience with assessment techniques required. Advance degree in related discipline preferred.

If you are interested in opportunities with DDI, please send resume to: **Development Dimensions Intl., Code EATIP, 1225 Washington Pike, Bridgeville, PA 15017, Fax: 412–257–5367 or 412–220–2958, e-mail: resumes@ ddiworld.com**

For more information about our company, visit our website: http://www.ddiworld.com.

DDI values diversity and is an equal opportunity employer.

HR RESEARCH CONSULTANT: SBC COMMUNICATIONS. Various US Locations. SBC Communications Inc., an international leader in the telecommunications industry, is accepting applications for a unique job opportunity in corporate Human Resources Research. SBC is made up of the merged companies of Southwestern Bell, Pacific Bell, Nevada Bell, and Southwestern New England Telephone, with a total of approximately 129,000 employees. This job opportunity is available either in San Antonio, TX, or Dallas, TX, or San Francisco, CA.

Job responsibilities of this position include managing major components of the company's test portfolio in support of management and non-management staffing activities. This person manages projects to develop and implement new employee selection procedures and associated test policies, and ensures that all implemented selection procedures are administrative efficient, fair, valid, and legally defensible. The job also includes providing test and interview training and certification for staffing employees, and providing guidance and support for staffing activities in selection policy and procedure areas. Enjoy working as a member of a professional HR Research team, providing internal consulting services and managing vendor provided work.

Qualified candidates should have completed their Master's degree (or equivalent) in I/O Psychology, Psychometrics, Organizational Behavior, Human Resources, or a related discipline. Preference will be given to candidates who have prior work experience in areas such as job analysis and selection procedure development and validation. A strong background in research methods and statistics is desired. Experience using SPSS is a plus.

If you meet the above qualifications, have strong written and oral communication skills, and desire to work in a highly successful Fortune 50 company, please submit your resume and a list of at least 3 references to **Robert L. Hartford, Ph.D., SBC Communications Inc., 111 Soledad, Suite 150, 9th Floor, San Antonio, TX 78205–2212, e-mail: rhartfo@corp.sbc.com, fax: 210–370–1945**

SENIOR CONSULTANT OR PROJECT MANAGER. Aon Consulting, formerly HRStrategies, is an internationally known HR consulting firm specializing in the design and implementation of creative solutions to human resource and organizational transition needs. Our staff of over 1,500 professionals includes more than 60 I/O psychologists offering exceptional service to the most recognized and innovative organizations in the world. As a member of the Aon family of companies, we offer global consulting capabilities through a worldwide network of offices.

Due to rapid growth, we are continually in search of exceptional candidates who can make valuable contributions to our team. Project work includes the construction and implementation of selection and assessment systems, performance management systems, career development programs, employee opinion surveys, and change management consulting.

We seek experienced I/O psychologists with a proven track record of superior project management and strong statistical skills with the ability to present in an applied manner. Send your resume outlining related experience to **Jennifer K. Burns, Human Resources Manager, Aon Consulting, P.O. Box 36778, Grosse Pointe MI 48236**. Aon Consulting is an Equal Opportunity Employer and a member of the Aon family.

PARKSIDE ASSOCIATES, INC., Leaders in healthcare survey research since 1980. Parkside Associates Inc. is a rapidly growing healthcare survey

research firm specializing in the development and utilization of employee, medical staff and patient satisfaction tools to monitor satisfaction for quality improvement. Our office is located in suburban Park Ridge, Illinois, just outside of Chicago. Since we are a growing firm, we are continuously searching for creative, highly motivated candidates with strong quantitative and interpersonal skills as possible additions to our staff.

Research Assistant/Survey Research Account Manager is the starting point for your career at Parkside. Responsibilities for this position include: consulting with clients on appropriate survey data collection methodologies, report writing and programming/data analysis using SAS, on-site data collections at client hospitals, and working with clients on effective utilization of survey data. Ideal candidates will possess an M.S. degree in I/O Psychology, an appropriate Social Science field, or Statistics, as well as knowledge/experience in survey research methods and SAS. Problem solving ability, good organizational skills and the ability to adapt in a dynamic environment are necessary. 5–10% travel.

Consultant is a senior position, specializing in directing employee, and physician survey projects or patient satisfaction survey projects. Responsibilities for this position include: advanced client management, presentation of survey results to senior management at client sites, and some report writing. Ideal candidates will posses, in addition to the requirements described above, outstanding presentation skills and 2–3 years successful consulting experience. 10%–20% travel.

We offer competitive salaries and comprehensive benefits. Please forward your resume and salary requirements to: **Attn.: RA/CON TIP597, Parkside Associates, Inc., 205 W. Touhy Avenue, Suite 204, Park Ridge, Il 60068.** We are an equal opportunity employer and encourage people of all cultural backgrounds to apply.

DIRECTOR, M.S. PROGRAM IN HUMAN RESOURCES MANAGEMENT, HOUSTON BAPTIST UNIVERSITY, Houston, Texas. Qualified individuals will possess an earned doctorate in field, significant professional experience, and effective communication, leadership, and administrative skills. Background and experience should support appointment as Associate Professor or Professor.

The University is an independent, private Christian institution affiliated with the Baptist General Convention of Texas with a denominationally diverse Christian faculty of approximately 115. Total enrollments are over 2200. Visit us at www.hbu.edu

The College of Business & Economics has 19 full-time faculty and approximately 400 students pursuing majors in Accounting, Business Administration, Computer Information Systems, Economics, Finance, Management and Marketing. More than 300 graduate students are pursuing the MBA, the M.S.

in Human Resources Management, the M.S. in Management, Computing, and Systems, or the M.S. in Management. Within the College is the Human Resources Institute (HRI), Economic Education Center (EEC), Information Management Institute (IMI), and the Compaq Competency Center (CCC), an alliance between Compaq, SAP, Oracle and the University.

The Master of Science in Human Resources Management is designed to provide preparation for careers in Human Resources Management and continued development for the HR professional. The program consists of fourteen courses combining specialized subjects with relevant business topics.

The Opportunity. To provide leadership in the M.S. in Human Resources Management program, to lead in the development of HR courses in the graduate and undergraduate programs, and to play an active role in our Human Resources Institute, offering professional training and development courses to practicing HR managers.

Applications and nominations should include a current curriculum vitae, information for at least three references, a letter of application, and a one-page statement of administrative philosophy. Submit to: **Dr. Carter Franklin, Chair, Search Committee: Director M.S. in HRM Program, Houston Baptist University, 7502 Fondren Rd., Houston, TX 77074, e-mail CarterF@ hbu.edu.**

APPLIED PSYCHOLOGICAL TECHNIQUES, INC. (APT) has immediate openings for Consultant and Project Manager positions.

APT is a human resources consulting firm located in the New York metropolitan area. Our team of industrial/organizational psychologists, training and development specialists, statisticians, and business professionals work together to deliver customized products and extraordinary service to our Fortune 100 clients. Products and services include pre-employment and promotional assessment, 360° assessment and feedback, performance management, training and development, surveys, and litigation support.

We are currently looking for candidates whose innovation, initiative, and commitment to excellence will contribute to the work of our highly dedicated professional team and continued growth of our firm. Qualifications for each position are listed below:

Consultant

- Primary responsibilities include the development, analysis and implementation of selection, performance management, survey systems, and litigation support
- Ph.D. or ABD in Industrial/Organizational Psychology or related field
- 1–2 Years of practical I/O related experience
- Strong research, quantitative, and data analytical skills, including management of databases

- Experience with test validation, performance appraisal, and statistical software packages (e.g., SPSS, SAS)

Project Manager

- Primary responsibility includes management of project teams to develop and deliver products and services to our clients
- Ph.D. in Industrial/Organizational Psychology or related field
- 5–10 years of human resources consulting or corporate experience
- Strong customer focus, project management, communication, and interpersonal skills
- Experience with managing large projects and project teams, and significant experience in one or more of the following: selection and assessment, performance management, survey research, or training and development

Compensation is commensurate with qualifications and experience. We offer competitive salaries that include health benefits, 401K, and pension plans. Please send resume with cover letter and three references to: **John R. Curtis, Jr., Ph.D., Applied Psychological Techniques, Inc., 1120 Post Road, Darien, Connecticut 06820, jrcurtis@appliedpsych.com, fax 203–655–8288, APT is an equal opportunity employer.**

LITTON INDUSTRIES, INC., a Fortune 500 company, offers exceptional challenges to career-minded individuals. As an innovator in advanced electronics and information systems for both military and commercial applications, we recognize that our success is driven by our high-caliber employees. We are seeking a Manager of Organization and Leadership Development at our corporate office in Woodland Hills, CA.

Requires a BA. MBA preferred (Organizational Behavior, Organizational Psychology, or related field). Minimum five years' related organizational experience. Some travel required.

- Will design and implement management development initiatives
- Facilitate organizational planning sessions
- Conduct team building/team development sessions
- Design and deliver management training
- Design, develop, and analyze surveys
- Develop and utilize H.R. database for succession planning
- Provide coaching and development to executives
- Assist integrating acquisitions effectively (e.g., communications, staff assimilation)
- Provide internal organizational consulting expertise to management
- Design and implement a strategy/curriculum for management education, training, and job related learning

Please send resume and salary history to: **Litton Industries, Inc., HR/MOLD/TIP, 21240 Burbank Blvd., Woodland Hills, CA 91367. Fax: (818) 598–3361, e-mail: jobs@littoncorp.com.** Equal Opportunity works for all of us.

PERSONNEL DECISIONS INTERNATIONAL. Join the dynamic world of human resources consulting working with global 1000 companies. Personnel Decisions International (PDI), a fast-growing consulting firm, is a great place to work, to grow, and to have fun!

We have openings for generalist **ASSOCIATE CONSULTANTS, CONSULTANTS** and **SENIOR CONSULTANTS** based in our operating offices around the country. These positions require a Masters or Ph.D. in I.O. psychology or a related field and high energy, flexibility, excellent communication skills, the ability to manage clients and projects and to develop business.

Also, based in Minneapolis in our Assessment Solutions practice area, we have openings for **SENIOR CONSULTANTS** and **CONSULTANTS**. These positions will: build solutions for selection, promotion/succession management, and determining readiness for changing roles; manage large, complex clients; train assessors and coaches; build PDI's competitive advantage; book new business and consult in a wide range of PDI offerings. The qualified senior consultant candidate will have a Ph.D. in I/O or counseling psychology or a related field and a minimum of eight years of business experience. The consultant candidate will have a Masters degree in I/O or counseling psychology and four years of business experience.

Both positions require:

- Background in measurement, individual differences, and validation
- Strong experience in design and validation of assessment tools
- Experience with behavioral assessment and assessment centers
- Creativity and motivation to drive continuous improvement
- Ability to work effectively with people from multiple offices and cultures
- Results orientation
- An ability to work in a team environment
- Willingness to travel 30%

Send [or fax] a cover letter indicating which position you are responding to along with a resume to: **Vice President of Human Resources, Personnel Decisions International, Suite 700, 730 2nd Avenue, Minneapolis, Minnesota 55402. Fax: 612–573–7800.** No phone calls please. We will respond to qualified applicants within four weeks.

PDI is an equal opportunity employer committed to employing a team of diverse professionals.

Visit our website @ www.pdi-corp.com

SPIELMACHER ASSOCIATES. This small, but nimble psychological consulting firm in Grand Rapids, Michigan is seeking an experienced Organizational Psychologist to provide broad-based consulting, assessment and training services for a diverse local and international mixture of clients. Responsibilities include organizational development consultations, executive and career assessments, management and leadership training, team building, coaching, conflict management and a variety of facilitation services. The position requires an ability to work independently with executives, high level professionals and hourly employees, as well as an ability to work as a member of multiple teams.

Minimum requirements include a Masters or Ph.D. in IO Psychology organizational behavior with at least three years of experience in a consulting or corporate position. An ability to relate to senior executives is required, along with team leadership and training experience. The ability to manage multiple projects is also essential, along with a willingness to travel up to 30%.

We are a well established firm and offer the right candidate a competitive salary, benefits and profit sharing, as well as an opportunity to assume an equity position with the firm. To apply, send a cover letter and resume to **Patrick E. Spielmacher, Ph.D, Spielmacher Associates, 355 Covell N.W., Grand Rapids, MI., 49504 or e-mail, spielmac@pathwaynet.com or fax (616) 453–0424.**

DELOITTE & TOUCHE, ranked #8 on Fortune magazine's list of 100 Best Companies to Work for in America, offers outstanding career growth opportunities to creative individuals with strong skills in human resource management. Our Human Resources Strategies Group is a national consulting practice that focuses on providing innovative solutions to our clients that lead to bottom-line results. Our CHICAGO office is seeking Ph.D. Industrial/Organizational Psychologists with skills in the areas of organization development, change management, survey design and analysis, job analysis, selection, instructional design, performance management, compensation, and management development. Experience with HR information systems and web-design is desirable. For immediate consideration, fax your resume to **1–888–APPLYDT. Please indicate job code CHIBTK–ABC** and for optimum scanning use non-italic font, minimal graphics, bolding or underlining. OR, reference the name and job code above and mail your resume to **Deloitte & Touche National Recruiting, 4022 Sells Drive, Hermitage, TN 37076–2930. (No Search Firms) E-mail: crecruit@dttus.com** Visit our web site at: www.us.deloitte.com

We recruit, employ, train, compensate and promote without regard to race, religion, creed, color, national origin, age, gender, sexual orientation, marital status, disability or veteran status.

TOWERS PERRIN. Towers Perrin, one of the world's largest international management consulting firm specializing in human resource consulting, has an excellent career opportunity for a **Consultant** in our Chicago and New York offices.

As a Consultant, you will work on a variety of projects spanning a broad range of industries and clients. Project work may cross many areas of our business including employee/customer research, performance measurement and compensation. Typical activities include: supporting clients in planning and implementing Organizational Research consulting projects, developing program materials and training guides, participating in the firms' People Strategy activities as a member of one or more teams, participating in marketing and sales activities, and supporting consultants in managing client engagements.

Candidates must have at least a master's degree with an excellent academic record. Two to four years of human resource-related work experience is desired. The position requires the ability to work on multiple projects simultaneously, coupled with excellent written and verbal communication skills. He/she will demonstrate initiative and flexibility, and be able to prioritize multiple tasks and complete them in a timely manner. The ability to work under tight time constraints in a fast-paced environment is a must. Strong computer skills and a solid working knowledge of statistics are a plus.

As a premier consulting firm, we offer opportunities for professional growth and recognition in a progressive, profitable environment. This is complemented by an excellent compensation package including tuition reimbursement and profit sharing. For more information about Towers Perrin, please visit our web site at www.towers.com. Candidates interested candidates in the Chicago position should send cover letter and resume to: **Marguerite Kunze, Ph.D., Towers Perrin, 200 West Madison Street, Chicago, IL 60606–3414. Fax # (312) 609–9839. Email at kunzem@towers.com. Candidates interested in the New York position should fax resumes to Denis Joseph (914) 745–4420.**

THE FEDERAL BUREAU OF INVESTIGATION, the premier law enforcement agency in the world, is currently accepting applications for the position of Personnel Psychologist ($58, 027 – $75,433) at its headquarters in Washington, DC. This is a unique opportunity to join a rapidly expanding research group specializing in:

- Designing and implementing state-of-the-art assessment systems
- Providing direction and support to the FBI's personnel management system
- Providing expert professional advice to management officials regarding complex and sensitive personnel matters

Ideal candidates will possess a Ph.D. in I/O Psychology (or be within 6 months of completion) and a minimum of 2 years applied experience in job analysis, test development and validation. A solid background in psychometrics is essential, as is experience with SPSS, or similar statistical package.

The FBI offers a competitive compensation package, including the potential for a recruitment bonus. In addition, we offer outstanding benefits as well as ongoing opportunities for professional development. Interested applicants should submit a resume along with two letters of reference to: **Russell Lobsenz, Ph.D., FBI, 935 Pennsylvania Ave., NW, Room 10143, Washington, DC 20535.** Applications will be accepted until April 16, 1999. Selectee is subject to satisfactory completion of a rigorous background investigation. An Equal Opportunity employer.

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ADVERTISE IN TIP AND THE ANNUAL CONVENTION PROGRAM

The Industrial-Organizational Psychologist (TIP) is the official newsletter of the Society for Industrial and Organizational Psychology, Inc., Division 14 of the American Psychological Association, and an organizational affiliate of the American Psychological Society. **TIP** is distributed four times a year to more than 3,000 Society members; the **Society's Annual Convention Program** is distributed in the spring to the same group. Members receiving both publications include academicians and professional-practitioners in the field. In addition, **TIP** is distributed to foreign affiliates, graduate students, leaders of APA and APS, and individual and institutional subscribers. Current circulation is 5,500 copies per issue.

Advertising may be purchased in **TIP** and **the Annual Convention Program** in units as large as two pages and as small as one-half page. **"Position Available"** ads can also be obtained in **TIP** at a charge of $80.00 for less than 200 words, and $95.00 for less than 300 words. These ads may be placed on our Web page at no additional charge. Please submit position available ads by e-mail or disk. For information or placement of ads, contact: **SIOP Administrative Office, 745 Haskins Rd., Suite D, P.O. Box 87, Bowling Green, OH 43402–0087, Lhakel@SIOP.bgsu.edu, (419) 353–0032.**

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