Systematic review and evidence-based work and organizational psychology

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Learning objectives

1. Understand the origins of EBP, where it has been applied, barriers to its use, and how it is done

2. Understand the practical benefits and potential costs of EBP approaches

3. Be aware of the principles of methods for critically reviewing and summarizing evidence relevant to a practice questions and problems

4. Have knowledge of the wide range of resources and tools available to WOPs who want to conduct systematic reviews for practice or publication.
The over-arching goal of this workshop is to communicate *the main principles and thinking behind* evidence-based practice and systematic review.

Lots more information available...
These slides and more materials available online - www.cebm.org

Welcome to the Center for Evidence-Based Management

The Center for Evidence-Based Management (CEBMa) is a non-profit member organization dedicated to promoting evidence-based practice in the field of management. We provide support and resources to managers, consultants, organizations, teachers, academics and others interested in learning more about evidence-based management.
Reflection: Why are you here today?

- What do you expect?
- What do you want to get out of it?

- Turn to your neighbour and ask them – two minutes each
The underlying logic

- Practitioners in any field routinely make decisions and judgements (e.g., about interventions)
- Those decisions are based on evidence of various types
- The more, more valid and more relevant the evidence used the better the decision and outcome is likely to be
So what’s the problem EBP aims to fix?

- The *main* problem is that OPs and their clients (usually HR managers)
  - Use practices and techniques that are not supported by evidence
  - Are not strongly aware of nor use the best available academic/scientific (and other) evidence
Why does this happen?

- Not a single reason but many interlinked reasons including...
  1. Research and evidence produced by OPs and management schools *in general* is not being used or applied much
  2. Few incentives for academics to get involved in applying research
  3. OPs not trained in EBP
  4. Management practice often not much influenced by research or evidence
  5. Few incentives for managers or OPs to use research and evidence (including academic evidence) in their practice
Who thinks it’s a problem?

- Many Past-Presidents of the *Academy of Management* (professional body for management academics)
- Other management and OP academics
- Journalists and commentators
Reflection: What does evidence-based practice mean?

- Have you heard of it before?
- In relation to what?
- How would you define or describe it?
- *Think on your own for one minute*
What is EBMgt/OP?

- Evidence-based management is about making decisions through the conscientious, explicit, and judicious use of four sources of information: (1) practitioner expertise and judgment, (2) evidence from the local context, (3) a critical evaluation of the best available research evidence, and (4) the perspectives of those people who might be affected by the decision. (Briner, Denyer, Rousseau, 2009)
What is evidence-based management?

The Four Elements of EBMgt

- Evaluated external evidence
- Practitioner experience and judgments
- Stakeholders (e.g., employees, preferences, or values)
- Context, organizational actors, circumstances

Decision
So what is EBMgt?

Evidence-based practice is the conscientious, explicit and judicious use of the best available evidence in a decision-making process by

1. Asking: translating a practical issue into an answerable question
2. Acquiring: systematically retrieving the best available evidence
3. Appraising: critically appraising the evidence for validity and relevance
4. Aggregating: weighing and synthesizing the different sources of evidence
5. Applying: applying the evidence in the decision-making process
6. Assessing: assessing the outcome of the decision taken

To increase the likelihood of a favorable outcome.

Center for Evidence-Based Management, 2013
Example: Evidence-Based absence management

**Element 1: Practitioner expertise and judgement**

- Have I seen this before?
- What happened?
- What are my beliefs about the causes of absence?
- What’s worked in the past and why?
- What are my hunches?
- What do I think are the causes and possible solutions?
- Is this situation occurring elsewhere?
- How relevant and applicable is my experience?
Example: Evidence-Based absence management

**Element 2: Evidence from the local context**

- What actually is the absence rate?
- What type of absences and where?
- What are local explanations for absence?
- What absence management is currently in place and is it working?
- What do managers think is going on?
- What are the possible costs and benefits of interventions? Is it worth intervening here?
- What is happening or what is going to happen that might be affecting absence?
Element 3: Critical evaluation of best available research evidence

- What are the average rates of absence in my sector and location – is the absence rate here ‘high’?
- What does systematically reviewed research evidence suggest to be the major causes of absence?
- How relevant and applicable is that evidence here?
- What does research evidence from systematic reviews suggest as effective interventions?
- How well might the interventions the research describes work here?
Example: Evidence-Based absence management

**Element 4: Perspectives of those who may be affected by intervention decision**

- How do employees feel about the proposed interventions?
- Do they see downsides or unintended negative consequences?
- How do managers feel about these interventions?
- How practical or workable do those responsible for implementing the interventions feel?
- What alternative explanations and proposed solutions do others have?
Where did the idea of evidence-based practice come from?

- **1991/2 British Medical Journal editorials**
  - Only 15–20% of medical interventions were supported by solid medical evidence
  - Many practices do more harm than good
  - Started an evidence-based practice ‘movement’ in medicine

- **Evidence-based management just an example of evidence-based practice**
Evidence-Based Practice *in other fields*

1998 Education
1998 Probation service
1999 Housing policy
1999 Social care
1999 Regeneration policy and practice
2000 Nursing
2000 Criminal justice
2005 Management?
???? Organizational psychology
Welcome to CEBM

Welcome to the Centre for Evidence-based Medicine at the University of Oxford. CEBM aims to develop, teach and promote evidence-based healthcare through conferences, workshops and EBM tools so that all health care professionals can maintain the highest standards of medicine.

Many thanks for visiting this website

We are in the process of migrating to a new setup and updating our content. Whilst the resources remain the same details on all courses and events can be found at www.cebm.ox.ac.uk

Thank you for your patience.
Six of the 16 “Ideas in American Policing” Lectures have been given by CEBCP affiliated scholars:

- Evidence-Based Policing
  (Lawrence Sherman, 1998)
- Policing for People
  (Stephen Mastrofski, 1999)
- Place-Based Policing
  (David Weisburd, 2008)
- Translating Police Research into Practice

Translating Research into Practice

News and Events:

We invite researchers and practitioners to submit articles to *Policing: A Journal of Policy and Practice*.

David Weisburd and Cody Telep, in collaboration with the Inter-American Development Bank, publish “Police and the Microgeography of Crime” in English and Spanish.
The Centre for Evidence-Based Conservation (CEBC) was established in 2003 with the goal of supporting decision making in conservation and environmental management. CEBC promotes evidence-based practice through the production and dissemination of systematic reviews on both the effectiveness of management and policy interventions and on the
WHAT IS CEBE?

CEBE – the Center for Evidence-Based Education – is an independent network of experienced educators committed to assisting schools, networks of schools, and school systems in improving performance, transforming practice, and eliminating achievement gaps. Focusing on Designing Learning, Leadership for Learning, and New Cultures for Learning, CEBE draws upon a diverse range of strategies and tools, including Learning Rounds, Job-Embedded Coaching, Innovation Catalysts, and Strategic Networking, in support of its evidence-based approach.
Centre for Evidence-Based Agriculture (CEBA)

The Centre for Evidence Based Agriculture is a reviewing, training and coordinating hub for the collation and synthesis of agri-food evidence in order to support decision-making.

Agri-food research is often disparate and difficult to access. Evidence syntheses aim to collate, and sometimes re-analyse, research and other evidence in order to support policy and management decisions. Agri-food related reviews are increasingly required by government departments and agencies such as DEFRA, DFID, and the FSA in order to inform decisions and funding.

Evidence syntheses follow structured, transparent protocols, for searching, selection and where relevant analysis of evidence. This increases repeatability and reduces bias. The different types of evidence syntheses vary in their scope and methodology and are influenced by the type of question being addressed and also by the timescale available. All systematic reviews, for example, aim to answer specific questions. In contrast, systematic maps collate the available evidence for a topic area.
Australian Centre for Evidence Based Aged Care

The staff of ACEBAC are passionate advocates of person-centred, evidence-based care of older people. We are involved in research, education and professional practice and hope through this site we can share our learnings and assist visitors to link with other relevant resources.

A major factor in quality outcomes in the care of older people is interdisciplinary practice that is driven by the person receiving care, not by the ‘experts’. This theme pervades our work. All of our research involves collaboration with a mix of disciplines and consumers.

Too often research is undertaken and never makes a difference in practice. For this reason we have a focus on translating evidence into the real world and making a quality difference for patients/residents, families and staff.
EVIDENCE-BASED Practice

Partnerships to Promote Evidence-Based Practice

Evidence-based practice (EBP) is a process in which the practitioner combines well-researched interventions with clinical experience and ethics, and client preferences and culture to guide and inform the delivery of treatments and services. The practitioner, researcher and client must work together in order to identify what works, for whom and under what conditions. This approach ensures that the treatments and services, when used as intended, will have the most effective outcomes as demonstrated by the research. It will also ensure that programs with proven success will be more widely disseminated and will benefit a greater number of people.

This Web resource was partially funded by a contract to IASWR from NIMH. It seeks to promote the integration of evidence-based mental health treatments into social work education and research. The Evidence-Based Practice Resources section provides tools that can be used to identify EBPs, online resources that can inform the EBP process and a list of publications for further information. The Partnership Examples section highlights some existing partnerships created between researchers and practitioners that further EBP.
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We are a group of passionate students in Work, Organizational and Personnel Psychology, that is the science that studies how people think, feel and behave at work as individuals, part of groups or organizations.

During our studies, we often came into contact with the work of scientists and researchers in WOP Psychology, and we became aware of its value, not just for the academic world, but also for everyday professional practice. We strongly believe that scientific evidence, if properly used, can represent a strong competitive advantage for companies and organizations.

This is why we want to promote Evidence-Based Management.
What is a decision in this context?

- OPs and managers make many kinds of decisions
  - Small or large
  - Routine/programmed or unique/non-programmed
  - Fast/immediate or somewhat slower
  - Few resource implications or large resource implications
  - Full information with certain outcome or limited information with uncertain outcome
- Intuition or ‘gut feel’ great for some decisions but not so good for these
- Like any other source of evidence gut needs to be subject to critical scrutiny
What is evidence-based practice? Some misconceptions and myths

- **Evidence means quantitative ‘scientific’ evidence.** No. Evidence in general just means information – like the use of ‘evidence’ in legal settings – anything might count if it’s valid and relevant.

- **Evidence-based practice means practitioners cannot or should not use their professional expertise.** No. Expertise is another form of knowledge which can be as valid or relevant as any other. And expertise is necessary to apply evidence.

- **Evidence can prove things.** No. Just probabilities or indications based on limited information and situations.

- **Evidence tells you the truth about things.** No. Truth is a whole different thing.
What is evidence-based practice? Some misconceptions and myths

- **New exciting single ‘breakthrough’ studies provide the best evidence.** No. *It’s about what a body of research is suggesting.*

- **Collecting valid and relevant evidence gives you The Answer to The Problem.** No. *Evidence rarely gives you The Answer but helps you make better-informed decisions.*

- **Doing evidence-based practice means doing what the research evidence tells you works.** No. *Research evidence is just one of four sources of evidence. Evidence-based practice is about practice not research. Evidence doesn’t speak for itself or do anything.*
What is evidence-based practice? Some misconceptions and myths

- **If you don’t have the evidence you can’t do anything.** No. But you practice explicitly knowing this. It’s not about perfection or a completely knowable world.

- **Experts (e.g., consultants and management school professors) know all about the evidence so you just need to ask them.** Rarely true. Experts are invariably biased, have limited knowledge and have vested interests (particularly if their expertise is related to their power or other resources). We need to make our own judgements and overcome “trust me I’m a doctor”-type deference.
A common misconception/myth in OP

- Simply applying widely-used and vaguely ‘approved’ tools and techniques is the same as doing evidence-based practice (e.g., assessment centres, employee engagement surveys, leadership development, 360 degree feedback, training, team development, coaching). Absolutely NOT!

- What is the evidence for the problem the technique is aiming to fix? Has there been a thorough initial assessment?
- Will it fix it better than other techniques?
- What are the costs and benefits here?
- How much valid evidence shows that this technique is, in general, effective? Does it show that it will be effective here?
- Even using a technique which evidence shows might ‘work’ in some contexts in some ways is NOT evidence-based practice
Some immediate questions you may have

- Is that it?  Is that all EBP in OP is? – Kinda
- But it’s just sort of obvious and common sense isn’t it? - Yes
- So what’s the big deal? – It isn’t happening! This is not good for the OP profession, organizations, their members, and society
- Why isn’t it happening? - Because OPs, managers, consultants and others are rewarded for doing other not-very-evidence-based stuff
It is not weird to use evidence in everyday life

- Which film shall I watch this weekend?
- Which hotel shall I book in a city I’ve never been to before?
- What kind of camera should I buy?
- Are those plug in alarms that are supposed to deter mice and rats any good?
- Should I apply for that job?
Which film to watch?

- Imagine (or maybe you don’t need to) the following:
  - You have almost no spare money
  - You love film and going to the cinema
  - But you can only afford to go once cinema maybe once a month

- How are you going to decide which film to go see?
Evidence-based cinema-going decision-making

- Actors?
- Directors?
- Genre?
- A series sequel or prequel?
- Trailers?
- Personal recommendations?
- How else?
Seven Psychopaths (2012)

110 min - Comedy | Crime - 5 December 2012 (UK)

Your rating: ★★★★★★★★★★ -/10

7.8
Ratings: 7.8/10 from 15,716 users
Metascore: 66/100
Reviews: 90 user | 227 critic | 43 from Metacritic.com

A struggling screenwriter inadvertently becomes entangled in the Los Angeles criminal underworld after his oddball friends kidnap a gangster's beloved Shih Tzu.

Director: Martin McDonagh
Writer: Martin McDonagh
Stars: Colin Farrell, Woody Harrelson and Sam Rockwell
See full cast and crew

+ Watchlist  Watch Trailer  Share...
Seven Psychopaths (2012)

TOMATOMETER
- Certified Fresh: 81%
- Average Rating: 7/10
- Reviews Counted: 188
- Fresh: 153 | Rotten: 35

Seven Psychopaths delivers sly cinematic commentary while serving up a heaping helping of sharp dialogue and gleeful violence.

AUDIENCE
- 80% liked it
- Average Rating: 3.9/5
- User Ratings: 71,519

MY RATING

Add a Review (Optional)
Crowne Plaza Chester

Trinity Street, Chester CH1 2BD, England (Formerly Chester Moat House Hotel)

Hotel website  Hotel deals  0871 423 4917  Hotel amenities

Special Offer  Save on Hotel Packages!

Ranked #12 of 46 hotels in Chester

423 Reviews

Show the lowest price for this hotel*

Check In  Check Out  Adults

dd/mm/yyyy  dd/mm/yyyy  2

Show Prices
Abode Chester
Grosvenor Road, Chester CH1 2DJ, England

Ranked #6 of 46 hotels in Chester
5 Stars 337 Reviews

Show the lowest price for this hotel*

Check In: dd/mm/yyyy
Check Out: dd/mm/yyyy
Adults: 2

Show Prices

Available on Booking.com and LateRooms.com
So it’s not weird to use evidence in everyday life – but is it weird in organizational life?

- Managers. OPs and organizations are generally *supposed* to use evidence to make decisions – part of what being a professional is about
- But it often seems that management is not particularly evidence-based
- In *general* managers appear to make some use of evidence from three sources: Expertise and experience, stakeholders, context
- But, for various reasons, appear to make relatively little use of external academic evidence
- One reason is that managers are not trained to do this – and that *other things drive decisions*
Reflection: Why are we talking about evidence-based management?

- This workshop is about evidence-based OP so why are we talking about evidence-based management?

- *Think about this on your own for one minute*
Why are we talking about evidence-based management?

◆ Who are organizational psychology practitioners’ main clients?

◆ Who employs OPs?

◆ Who pays for the services of OPs?

◆ We need to understand the client to understand how evidence-based practice works (or not) in any context (e.g., medicine, police, policy-making, etc) – WHY?
So why do we need evidence-based management and OP?

Because other things (not evidence) drive management (and OP) decisions and practice in organizations

- Cognitive biases
- Fads and fashions
- Power and politics
A bat and ball cost one pound and ten pence. The bat costs a pound more than the ball. How much does the ball cost?
In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?
A certain town is served by two hospitals. In the larger hospital about 45 babies are born each day, and in the smaller hospital about 15 babies are born each day. As you know, about 50% of all babies are boys. However the exact percentage varies from day to day. Sometimes it may be higher than 50%, sometimes lower. For a period of 1 year, each hospital recorded the days on which more than 60% of the babies born were boys. Which hospital do you think recorded more such days?

1. The larger hospital
2. The smaller hospital
3. About the same (that is, within 5% of each other)
Error and biases in problem-solving and decision-making – some *examples*

- **Confirmation bias:** Tendency to interpret and search for information consistent with one’s prior beliefs
- **Mere exposure effect:** Tendency to develop a preference for things which we have become more familiar with
- **Hindsight bias:** Tendency to see past events as being more predictable than they were before the event occurred
- **Loss aversion:** Tendency to prefer avoiding losses than to acquiring gains
- **Anchoring effect:** Tendency to rely too heavily or over-emphasize one piece of information (e.g., restaurant wine lists, large reductions in price in sales)
- **Framing effect:** Drawing different conclusions from exactly the same information presented in different ways (e.g., would you prefer a ready meal that’s “85% fat free” or “15% fat”?)
- **Meta-cognitive bias:** The belief we are immune from such biases
Evidence-based practice can help because it’s about the *conscientious, explicit, and judicious* use of *different* sources of information.
Management fads and fashions

- What are they?
- Some example
- What do they do?
Examples

- Business process re-engineering
- Total quality management
- Quality circles
- Talent management
- Lean
- Outsourcing
- Employee Stock Ownership
THE NO. 1 BUSINESS BESTSELLER

MICHAEL HAMMER
AND JAMES CHAMPY

REENGINEERING THE CORPORATION
A MANIFESTO FOR BUSINESS REVOLUTION

“The best-written, most well-reasoned book since In Search of Excellence... the hottest management concept since the quality movement.”

Business Week
In Search of Excellence

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"Exuberant and absorbing... one of those rare books on management that are both consistently thought-provoking and fun to read."
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Thomas J. Peters and Robert H. Waterman, Jr.
"This is the essential book on TQM, the book everyone has been waiting for, to describe in useful detail what TQM is all about. It is must reading for anyone wanting to create effective, high-performing organizations."

WARREN BENNIS, author of 'On Becoming a Leader'

Putting Total Quality Management to Work

What TQM Means, How to Use It & How to Sustain It Over the Long Run

Marshall Sashkin & Kenneth J. Kiser
THE MACHINE THAT CHANGED THE WORLD

THE STORY OF LEAN PRODUCTION

HOW JAPAN'S SECRET WEAPON IN THE GLOBAL AUTO WARS WILL REVOLUTIONIZE WESTERN INDUSTRY

JAMES P. WOMACK, DANIEL T. JONES, AND DANIEL ROOS
The Black Book of Outsourcing
How to Manage the Changes, Challenges, and Opportunities

Practical Guidelines and Key Contact Information for:
- Implementing Outsourcing Projects
- What to Do If Your Job Is Outsourced
- Opportunities in Outsourcing Management

Douglas Brown and Scott Wilson
ABRAHAMSON (1996)


- **Stage 2 – Maturity**: Reengineering: The Hot New Managing Tool, The Reengineering Rage, Warning: This Good Idea May Become a Fad, Reengineering: Beyond the Buzzword.

- **Stage 3 – Decline**: Ten Reasons Why TQM Doesn't Work, TQM: The Mystique, the Mistakes, The Hocus-Pocus of Reengineering, Why TQM Fails and What to Do About It.
How are fads a problem? (Donaldson & Hilmer, 1998)

- “The main problem...is their lack of any solid intellectual foundation. Implicit in each fad is a cause effect statement that is rarely made explicit and never properly supported.”

- “...management needs to evolve a sound body of knowledge and clear language that will assist members of the profession to reason cogently. Faddism is the enemy of this professionalism.”
Reflection: Can you think of any OP fads and fashions?

- Can you think of any currently popular OP practices that may be more like fads or fashions?
- Can you think of any previously or historically popular OP practices that turned out to be fads of fashions?

- Reflect on your own for one minute
Example practices of Chartered Occupational Psychologists’ (UK) evidence-lite practices

- Google searches (not too reliable)
  - Belbin (674)
  - Coaching (31,700)
  - Master NLP (2,902)
  - MBTI (18,000)
  - NLP (84,900)

- 360 degree feedback

- Team building

- Assessment centres
Related concept of the quick fix

- Focus on style and presentation not content or process
- Not be evaluated
- Not be as quick as had been hoped
- Not be effective so followed by another quick fix
- Become subject to organizational amnesia*
- Can be career-enhancing for managers (e.g., issue selling, kick-ass CEOs)

*Kitchen equipment analogy
Contains Antioxidants & All Natural Ingredients
Naturally formulated to Detoxify and Cleanse your Body.
DRINK COFFEE & LOSE WEIGHT!

MAXIMUM Slim Original Green Coffee is not processed, so it is naturally caffeinated, unlike commercial coffee which enhances the effect of the natural caffeine in coffee. Consequently, if you are not a regular coffee drinker, you can still consume MAXIMUM Slim Original Green Coffee with no adverse effects. If you are a regular coffee drinker, you can still drink a cup of coffee and get slimmer results using MAXIMUM Slim.

By drinking coffee, you can take off those extra pounds that you have put on over the last few weeks, months, years, and even decades. MAXIMUM Slim Original Green Coffee is just right for you. MAXIMUM Slim Original Green Coffee can help you to achieve maximum results in a minimum amount of time.

Not only will you lose body fat, flatten your stomach, and slim your entire body, but you will also accomplish maximum results while using all natural ingredients and in a healthy way with no jitters or nervous side effects. With just one cup per day, you will enjoy great tasting coffee while on the path of achieving your fitness goals. MAXIMUM Slim Original Green Coffee will help you lose weight and make you feel great.
2011's Top 5 Diet Pills for Fast Weight Loss

Confused About Which Diet Pills Really Work? Let Us Help...

DietPillInsider.org is a one-stop consumer resource designed to help you compare the many diet products available to consumers and learn about diet products that deliver proven weight-loss results instead of empty promises.

On a month-to-month basis, we provide in-depth analysis on the top diet products on the market, providing consumers with the most up-to-date and complete diet product ratings and recommendations.

Our Proprietary 3-Stage Ratings System will help you find the market's best diet products that are not only clinically proven but also user recommended for fast, safe weight loss and fat reduction.

Combining customer reviews, clinical research, and in-depth expert analysis, quantifying each on a 10-point ratings system, we issue diet product recommendations consumers can use to help them make smart buying decisions.

You can be assured that with every review, we cut through the marketing hype to help you find the most effective diet products at the most cost-effective prices.

Our Proprietary 3-Stage Ratings System®

1. We Process Consumer Reviews: We compile and quantify thousands of the available consumer ratings and reviews of each diet product.

2. We Clinically Test: After thorough clinical testing and research of peer-reviewed, published studies, our experts present in-depth ratings and analysis of each product.

3. We Issue Final Recommendations: After thorough data analysis, we recommend the most effective diet products in terms of safety, quality, and efficacy.
The Maqui-6 Formula contains the highest amount of Maqui Berry extract of any product on the market today (over 1,000 mg per daily serving). New clinical research shows Maqui Berries, which are native to the remote Chilean Rainforests, have an antioxidant ORAC rating of 8,687 — the highest of any food, and 12.6 times the antioxidant levels of Acai Berries.

Further, research from South America shows the Maqui Berry extract found in Maqui-6 has powerful fat-fighting properties, speeding the metabolism, reducing appetite, and safely reducing fat cell size and number.

The Maqui Berry is known to have highest levels of a powerful fat-burning nutrient called anthocyanins of any food on earth. In fact, it contains over 10 times more anthocyanins than any other food source.

Clinical research shows anthocyanins have remarkable weight loss and fat-burning properties. A new study from Japan shows anthocyanins have "significant potency" against fat cells and strong "anti-obesity" benefits.

The Maqui-6 formula also contains high levels of 5 additional "superfood" extracts: Acai Berry, Goji Berry, Green Tea, Resveratrol, and Pomegranate.

After interviewing 250 Maqui-6 customers, as well as reviewing the clinical research studies, this product is our runaway #1 recommendation for 2011 for fast, sustainable weight loss.

**Bonus:** Last day for FREE Express Shipping. At checkout, use Coupon Code: **berry**


Click Here to Visit the Official Maqui-6 Website
Dr. Siegal’s COOKIE DIET® In the News
(Click to View Video/Article)

ABC’s Good Morning America
KCRG-TV  WKBT-TV  WFAA-TV  KPRC-TV

Having treated more than 500,000 (and counting!) overweight patients, renowned weight-loss expert and author Dr. Sanford Siegal knows that the best way to lose weight is not by starving but by eating—often! How often? Every two hours between wake-up and bedtime, to include nine small snacks and one generous meal. Why? Because less time without food means less time to get hungry and, as Dr. Siegal famously says, “Hunger Wrecks Diets!”
THE 7-DAY BELLY BLAST DIET

DROP UP TO 11 LBS OF EXCESS WATER, BELLY FAT, AND “TOXIC WASTE” IN THE NEXT 7 DAYS...

“Discover The 37 Foods that KILL up to 11 Pounds of Belly Fat, Excess Water, and ‘Toxic Waste’ In Just 7 Days... Including Forbidden Foods Like Chocolate, Peanut Butter, and BBQ!”

A breakthrough article by nutritionist Josh Bezoni.

Best-selling author, Personal Trainer and former Nutritionist for Bill Phillips at EAS, Muscle Media Magazine, and Body for LIFE... Josh Bezoni has shared his Belly Fat Free tips on nearly every major TV network and has helped hundreds of thousands of folks to win the battle against belly fat.

FORMERLY OBESE “DIET GURU” REVEALS THE DEADLY FOODS THAT CAUSE Belly Bulge and the 37 FOODS THAT KILL IT... MAKE THESE SIMPLE SWAPS TO YOUR MEALS AND FINALLY BLAST AWAY ALL OF YOUR UNATTRACTIVE Belly Fat FOREVER...
Who Would Have Thought That
Eating MORE Would Flatten Your Belly?!

Dear Friend,

If you haven’t been able to KILL your belly bulge no matter what you’ve tried …

And if you’re sick and tired of exercising like mad and starving yourself only to see the scale stop dead in its tracks, or even spin in the WRONG direction …

Then the PROVEN, belly-flattening breakthrough you’re about to discover will be music to your ears.

In fact, on this very page, I’m going to reveal the 3 things KEEPING you from a flat belly, and then I’m going to unveil my 3 BEST sneaky tricks to KILL up to 11 pounds of unattractive belly fat, excess water, and “toxic waste” from your body in just 7 short days …

And then you’ll continue to experience record weight loss until you have a flat belly fast… guaranteed.

WARNING: The high-speed weight loss information you’re about to discover is NOT for people who have a few vanity pounds to lose. It’s not for muscle-head “gym rats” with 4% body fat who already live on tuna and brown rice. And it’s certainly not for a “skinny chick” who love step aerobics and enjoys eating like a bird.

NOPE!

This information is for the busy folks (like me) who LOVE TO EAT but struggle to find the energy, willpower, and extra time in their day to achieve REAL and LASTING weight loss RESULTS.

The 3 Things KEEPING You From a Flat Belly

Doctors agree that internal belly fat is the most deadly kind of body fat there is. Studies show it dramatically increases the chance of illness such as heart disease, diabetes, certain cancers, Alzheimer’s, stroke, and even depression (suicide).

And if that wasn’t bad enough, that dreaded belly bulge makes us look unattractive and it can demolish our self-esteem and confidence to boot.
Kyle lost 37 lbs
Jonni lost 17 lbs
Gail slashed 53 lbs of fat

Linn lost 40 lbs
Marcia lost 52 lbs
Tina lost 35 lbs
So why are fads and fashions followed?

- Promise to deliver a lot and fast
- Appear simple
- New and shiny
- Will make everything alright
- Help contain anxieties around intractable problems
- Help user feel effective and cutting edge
- Seems very ‘human’ to want to find quick, easy answers that other people are adopting too

_Evidence-based management/OP not really much of a fad using these criteria_
Evidence-based practice can help because it’s about the conscientious, explicit, and judicious use of different sources of information.
BANANA GUARD

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£10.69

Banana Shaped Stress Reliever by SAR-Holdings Limited
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£5.99
The role of consultants

- Translators of research evidence?
- Brokers or sellers of management fads and fashions?
- External objective advisors?
- Repositories of experience and wisdom?
- Change agents?
- Ways of justifying and externalizing unpopular decisions?
Pfeffer & Sutton (2006)

- “...consultants and others who sell ideas and techniques are always rewarded for getting work, only sometimes rewarded for doing good work, and hardly ever rewarded for whether their advice actually enhances performance.

- The incentives are often even more perverse than that, because if a client company’s problems are only partly solved that leads to more work for the consulting firm.”
What are the incentives for consultancies to be evidence-based?

- Get the work, get more work, and keep getting work (so depends almost entirely on what clients want)
  - Persuade (may not take much) clients they need some new thing, idea, technique, approach
  - Sell them the relevant product or service or intervention based on that idea, technique or approach
  - Saturate the market until everyone’s bought it
  - Invent or borrow new ideas, techniques and approaches clients do not yet use
  - Sell them the relevant product or service or intervention
  - Repeat
Evidence-based practice can help because it’s about the **conscientious, explicit, and judicious** use of **different** sources of information.
Power, politics and careers

What are managers rewarded for?
- Doing what works? But very few evaluations
- Getting things done?
- Making things happen?
- Not rocking the boat?
- Working hard?
- Obeying orders?
- Solving problems?
- Meeting targets and goals? But who sets and why?
- Making their bosses look good?

Do very senior people get there by being evidence-based managers?
Espoused and more implicit goals of managers

**ESPOUSED GOALS**
- To do what works (but few evaluations)
- To help organization fulfil its mission
- To identify and solve important problems
- To do what matters
- Treating everyone equally
- Look after the organization’s interests and speak truth to power(?)

**IMPLICIT GOALS**
- To get things done and fast
- To further career
- To avoid trouble
- To fix political or presenting problems
- To meet targets
- To do what gets measured
- Favour those who help advance personal goals
- Say what higher-ups want to hear
Evidence-based practice can help because it’s about the conscientious, explicit, and judicious use of different sources of information.
What are the incentives for managers to be evidence-based?

- Not rewarded for doing what ‘works’ – few evaluations
- Speed and action valued more highly than accuracy and analysis
- Managing and understanding power and politics to get things done more valued than understanding and using evidence to make decisions
Reflection: What are the implications of this for evidence-based OP?

- If managers often have to work in this way and experience these incentives what does this mean for OP practitioners who want to be evidence-based?

- *Discuss with your neighbour for two minutes*
So what is evidence-based OP?

- Similar, in principle to:
  - Evidence-based medicine
  - Evidence-based management
  - Evidence-based anything
An immediate problem...

- Most OPs are freelance or in small consultancies.
- Their clients are usually HR managers who for the most part have already decided what intervention or practice is required.
- It seems most OPs are brought in as technical experts to carry out this intervention or practice.
- If OPs want the work they do what the client wants.
- Do OPs get much opportunity to practice in an evidence-based way?
A reminder

- Evidence-based management [OP] is about making decisions through the **conscientious, explicit, and judicious** use of four sources of information: (1) practitioner expertise and judgment, (2) evidence from the local context, (3) a critical evaluation of the best available research evidence, and (4) the perspectives of those people who might be affected by the decision. (Briner, Denyer, Rousseau, 2009)
Some criteria for evaluating EBP professions[1] (Briner & Rousseau, 2011)

1. The term “evidence-based” is well-known and used: While it may be possible to practice in an evidence-based way without using the term given the huge growth in this area it is unlikely that any field which was using this approach would not use this term.

2. The latest research findings and systematic research summaries are accessible to practitioners: It is not possible to practice in an evidence-based way without access to evidence in journals and systematic research summaries.

3. Articles reporting primary research and traditional literature reviews are accessible to practitioners.

4. ‘Cutting-edge’ practices, panaceas and fashionable new ideas are treated with healthy scepticism: While some new ideas do eventually turn out in the longer-term to be sustainable and supported by evidence most do not.
Some criteria for evaluating EBP professions[2]

5. There is a demand for evidence-based practice from clients and customers: In order for practitioners to practice in an EBP way their clients have to want or at least not reject interventions based on evidence.

6. Practice decisions are integrative and draw on the four sources of information and evidence described in the definition of EBMgt: Evidence from external research is just one source of evidence.

7. Initial training and CPD adopt evidence-based approaches: EBP approaches to initial training and CPD emphasize both the acquisition of knowledge and the development of skills required to find and use relevant external evidence.
1. Is the term ‘evidence-based’ well-known in OP?

- Evidence-based medicine – around 3.5 million hits
- Evidence-based management – around 1.5 million hits
- Evidence-based nursing – 388,000 hits
- Evidence-based clinical psychology – 212,000 hits
- Evidence-based human resource management – 127,000 hits
- Evidence-based public health – 73,100 hits
1. Is the term ‘evidence-based’ well-known in OP?

- Evidence-based health psychology – 49,200 hits
- Evidence-based health promotion – 39,900 hits
- Evidence-based occupational medicine – 12,900 hits
- Evidence-based I-O psychology – 89 hits
- Evidence-based organizational psychology – 1 hit
- Evidence-based occupational health psychology – 0 hits
2. Are systematic reviews of OP evidence available to practitioners?

- Are there any systematic reviews or rapid evidence assessments in OP?
- When practitioners finish their University training can they get free access to academic journals?
3. Articles reporting primary research are available to practitioners

- When practitioners finish their University training can they get free access to academic journals?
- Do they have to pay for each article?
- Part of the purpose of Center for Evidence-Based Management
4. Fashionable new ideas are treated with healthy scepticism

- Is OP into fads and fashions? Remember previous discussion...

- Does OP have to use fads and fashions because it’s what our clients and customers want?

- Or is OP sceptical?
5. There is a demand for evidence-based OP from clients and customers

- Who pays for OP services? What OP practices do they want?

- Are they paying for this:

- Or have they already decided what they want and are paying OPs to be skilled technicians?
OPs’ clients don’t seem to like it

- Just want a technician to implement a practice
- Want something to happen fast
- Don’t want to pay for diagnosis
- Don’t want to pay for review of evidence
- Don’t want to pay for evaluation
- Prefer a ‘cutting-edge’ practice or ‘best practice’ or something ‘benchmarked’
6. Practice decisions are integrative and draw on the four sources of information

- Do you know any OP practitioners working now?
- How do they make decisions about what to do?
- Do they make decisions or are they skilled technicians?
7. Initial training and continuing professional development (CPD) adopt evidence-based approaches

- Are OPs trained in evidence-based practice?
- Is OP education and training based on the ‘filling with information’ model of education?
- Do OP Masters’ courses train evidence-based practice?
- Do OPs learn how to learn for themselves?
OP practitioners are not particularly evidence-based

- Not trained in EBP
- Clients don’t want EBP
Reflection: Are OP academics evidence-based?

- How do OP academics support evidence-based practice of OPs?
- What are the incentives for OP academics to get involved in EBP?
- How evidence-based are OP academics in their own research practices?

*Discuss with neighbour for two minutes*
OP academics don’t seem to like it

- Systematic reviewing not valued as research activity – no incentives
- Embarrassed that it will expose the limited nature of OP and management research evidence and undermine rather than enhance discipline
- Worried that systematic review might reveal their own research to be limited
- Concern that it will threaten academic ‘freedom’
- Undermine formal authority and the ‘expert’ or ‘guru’ status of some academics (EBMgt is not about who you are or what you know or how media-friendly you are but what is known)
OP academics are not very evidence-based

- Unethical research practices
- Unscientific research practices
- Publishing mostly only positive results
- Not publishing replications
- Not freely disseminating their findings
Espoused and more implicit goals of researchers

**ESPOUSED GOALS**
- To advance scientific understanding
- Using the best research techniques
- Publishing *all* results and replications – unbiased
- Focus on what’s important
- Being honest about existing evidence
- To disseminate all our evidence and make publically available
- Collaboration & cooperation

**IMPLICIT GOALS**
- To advance career
- Use whatever techniques will get you published
- Publishing (mostly) only positive results, no replications
- Identifying ‘new’ or trendy topics – creating empires
- Exaggerating how much we know
- Locking up our evidence behind publishers’ paywalls
- Competition for resources, slots in journals, between universities
Management researchers (including OPs) research misconduct (Bedeian et al, 2012)

<table>
<thead>
<tr>
<th>Category I – Fabrication, Falsification, and Plagiarism</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Withheld methodological details or results</td>
<td>79.2</td>
</tr>
<tr>
<td>2. Selected only those data that support a hypothesis and withheld the rest</td>
<td>77.6</td>
</tr>
<tr>
<td>3. Used another’s ideas without permission or giving due credit</td>
<td>72.1</td>
</tr>
<tr>
<td>4. Dropped observations or data points from analyses based on a gut feeling that they were inaccurate</td>
<td>59.6</td>
</tr>
<tr>
<td>5. Withheld data that contradicted their previous research</td>
<td>49.5</td>
</tr>
<tr>
<td>6. Fabricated results</td>
<td>26.8</td>
</tr>
</tbody>
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<tr>
<th>Category II – Questionable Research Practices</th>
<th></th>
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<tbody>
<tr>
<td>7. Developed hypotheses after results were known</td>
<td>91.9</td>
</tr>
<tr>
<td>8. Published the same data or results in two or more publications</td>
<td>86.2</td>
</tr>
<tr>
<td>9. Developed “ins” with journal editors</td>
<td>83.3</td>
</tr>
<tr>
<td>10. Inappropriately accepted or assigned authorship credit</td>
<td>78.9</td>
</tr>
<tr>
<td>11. Circumvented aspects of human-subjects requirements</td>
<td>58.1</td>
</tr>
</tbody>
</table>
OP academics’ poor scientific practices (e.g., Kepes & McDaniel, 2013)

- Fabrication of data
- “Established” effects often much smaller than implied
- Publication bias (and the file drawer problem)
- Hypotheses in I/O psychology journals almost always supported (and is increasing) – are academics approaching omniscience?
- Peer review process
- HARKing (authors, reviewers, and editors) – Hypothesizing After the Results are Known
- Journal policies (insisting on ‘theory’, discouraging replications (has to be ‘original), not liking null findings
- Null hypothesis significance testing
- No value placed on systematic reviews
How do papers get published?

- **Refereed (peer-reviewed) journal articles**
  - Submit article
  - Desk reject or reviewed by referees
  - Rejected or requests for revisions
  - Resubmitted and sent back to referees (sometimes several times)
  - Final decision made

- ‘Good’ journals have very high rejection rates (80% +)

- ‘Good’ highly ranked journals have high impact factor

- Research published in ‘good’ highly ranked journals is ‘better’ research
Obsession with rankings

- A researchers’ publications are judged in relation to such lists and can have a very large affect on
  - Salary
  - Promotion
  - Job mobility
  - Perceived professional standing

- Universities and Schools and Departments within them are judged (amongst other things) in relation researchers’ outputs
Adler & Harzing (2009)

It is not just that [journal] ranking systems are inconsistent, volatile, and in many ways inherently unfair; it is also that the motivation systems they engender—including encouraging blatant individual self-interest and a consequent lack of loyalty to any particular university or broader societal mission—undermine the very essence of good scholarship.
Lawrence (2008)

- As a result [of rankings], scientists have been forced to downgrade their primary aim from making discoveries to publishing as many papers as possible—and trying to work them into high impact factor journals...scientific behaviour has become distorted and the utility, quality and objectivity of articles has deteriorated. Changes to the way scientists are assessed are urgently needed

- creative discovery is not helped by measures that select for tough fighters and against more reflective modest people
How editors can increase their journal’s impact factor (Wilhite & Fong, 2012)

One side-effect of impact factors is the incentive they create for editors to coerce authors to add citations to their journal.

- 19% of authors experienced coercion
- 86% agree it is inappropriate
- Though 57% would still add superfluous citations
Published research not used much by practitioners or even other researchers

- Journal impact factor (how often papers from a journal are cited in other papers)
- There are 1000s of business and management peer-reviewed journals
- Web of Science includes the 174 with the highest impact factor
- On average (median) journals in this list had an impact factor of 1.26 (2-year) and 1.68 (5-year)
Published research not used much by practitioners
Purchase 24-hour online access to this article
Evidence-Based I–O Psychology: Not There Yet
INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY
Volume 4, Issue 1, March 2011, Pages: 3–22, ROB B. BRINER and DENISE M. ROUSSEAU
Article first published online: 11 FEB 2011,
DOI: 10.1111/j.1754-9434.2010.01287.x

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24 hour online access: US$ 35.00
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Sales tax: US$ 7.00
Total US$ 42.00
The Causes and Consequences of a Scientific Literature We Cannot Trust: An Evidence-Based Practice Perspective
INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY
Volume 6, Issue 3, September 2013, Pages: 269–272,
Rob B. Briner and Neil D. Walshe
Article first published online: 6 AUG 2013,
DOI: 10.1111/iops.12046

The costs, benefits, and limitations of organizational level stress interventions
JOURNAL OF ORGANIZATIONAL BEHAVIOR
Volume 20, Issue 5, September 1999, Pages: 647–664,
Rob B. Briner and Shirley Reynolds
Article first published online: 16 SEP 1999,
DOI: 10.1002/(SICI)1099-1379(199909)20:5<647::AID-JOB919>3.0.CO;2-1
Researchers’ incentives (Nosek et al, 2012)

the demands for novelty and positive results create incentives for: (a) generating new ideas rather than pursuing additional evidence for or against ideas suggested previously; (b) reporting positive results and ignoring negative results; (c) pursuing design, reporting, and analysis strategies that increase the likelihood of obtaining a positive result in order to achieve publishability...This paints a bleak picture of the incentive structures in science.
Negative results are disappearing from most disciplines and countries (Fanelli, 2012)
Positive results by discipline (Fanelli, 2010)
Management Research Is Fishy, Says New Management Research
Don't believe everything you read in management journals.

An analysis of academic articles on topics like job performance and an entrepreneurial mindset reveals that papers were often substantially changed between their publication as dissertations and their appearance in peer-reviewed journals.
The chrysalis effect (O’Boyle et al, in press, JoM)

- At the dissertation level, 82 hypotheses were supported for every 100 that were unsupported. By the time the papers made it into journals, the ratio shifted to 194:100.

- Nearly 90% of papers dropped or added hypotheses

- 70% of the added hypotheses were statistically significant, and those that were dropped were 1.5 times as likely to not be statistically significant

- 20% of studies dropped subjects
The chrysalis effect (O’Boyle et al, in press, JoM)

“If practitioners can’t trust what’s coming out of academia, we don’t have a reason to exist,” says Ernest O’Boyle Jr....He blames an academic system that ties tenure and pay to publication in elite journals.
Limited replications

Unreliable research

Trouble at the lab

Scientists like to think of science as self-correcting. To an alarming degree, it is not

Oct 19th 2013 | From the print edition

"I see a train wreck looming," warned Daniel Kahneman, an eminent psychologist, in an open letter last year. The premonition concerned research on a phenomenon known as "priming". Priming studies suggest that decisions can be influenced by apparently irrelevant actions or events that took place just before the cusp of choice. They have been a boom area in psychology over the past decade, and some of their insights have already made it out of the lab and into the toolkits of policy wonks keen on "nudging" the populace.
Economist leader (19.10.13)

- Too many of the findings that fill the academic ether are the result of shoddy experiments or poor analysis
- Careerism also encourages exaggeration and the cherry-picking of results
- ...failures to prove a hypothesis are rarely even offered for publication, let alone accepted
- The hallowed process of peer review is not all it is cracked up to be, either
Problems with published findings: NHSTs (Schwab et al, 2011)

- **Conceptual problems with null hypothesis significance tests**
  - portray finding as clear cut
  - let validity of findings depend entirely on efforts to get big samples
  - disprove hypotheses that could not be correct (e.g., there is no relationship between X and Y)

- **Practical problems with null hypothesis significance tests**
  - difficult to understand and misinterpreted
  - highlight trivial findings
  - obscure important findings
  - make assumptions most research does not satisfy
  - corrode researchers’ motivation and ethics
OP academics do not necessarily produce trustworthy research

- Academics are not ‘pure’ or in ivory towers – have vested interests like any other group
- Routinely commit crimes against science
- So you can’t trust the scientific findings in journals (but doesn’t mean you shouldn’t use it)
- But you should not just trust any information or evidence from whatever source – always need to critically appraise
OP academics don’t seem to like evidence-based practice

- Are not evidence-based in their own research practices (e.g., publishing mostly positive results, no replications, NHST)

- Do not seem to have much interest in supporting OP practitioners to become more evidence-based (other incentives)

- These act as *barriers*
Where have we got to?

- Evidence-based OP similar in evidence-based medicine and management
- We need it because managers and organizations seem to make decisions for reasons other than evidence (e.g., fads, politics)
- OP does not seem to be very evidence-based according to the criteria
- Practicing in an evidence-based way is challenging
- One part of being evidence-based is knowing the published evidence relevant to a practical question or issue – systematic reviews and rapid evidence assessments
What are systematic reviews?

- They are research on existing research
- Precise question (like a research question)
- Explicit methodology
- Replicable

Make it clear:
- What is known
- What is not known
- And the basis for those claims
What are they?

- “systematic reviews never provide ‘answers’. What they do is report as accurately as possible what is known and not known about the questions addressed in the review” (Briner, Denyer, & Rousseau, 2009, p. 27).
Core principles of REAs and SRs

- **Systematic/organized:** Systematic reviews are conducted according to a system or method which is designed in relation to and specifically to address the question the review is setting out to answer.

- **Transparent/explicit:** The method used in the review is explicitly stated.

- **Replicable/updatable:** As with many forms of primary research, the method and the way it is reported should be sufficiently detailed and clear such that other researchers can repeat the review, repeat it with modifications or update it.

- **Synthesize/summarize:** Systematic reviews pull together in a structured and organized way the results of the review in order to summarize the evidence relating to the review question.
Why REAs and SRs?

- Systematic reviews of evidence one of the (four) cornerstones of evidence-based management
- Cannot do evidence-based OP without access to summaries or syntheses of best available evidence
- Where are the systematic reviews in OP?
- Has anybody here had any training of any kind in doing literature reviews?
Reflection: What types of literature review are available in OP?

- Thinking about the literature reviews you come across in OP, how many different types, lengths, styles can you think of? And where are they published?

- Discuss with your neighbour for two minutes
What sort of reviews are available in OP?

- Literature reviews motivating empirical studies
- Formal full-length literature reviews by academics
- Meta analyses
- Reviews in current textbooks
- Reviews in popular management books
Nature of claims made by most of these reviews

- “Previous research has shown that team building improves performance”
- “It has been demonstrated that management development is effective”
- “Many studies have shown that employee engagement increases performance”
- “There is much evidence that job stress causes ill health”
Nature of claims made by most of these reviews

- **BUT!**
  - Did *all* previous research show this?
  - What proportion of previous research?
  - How many studies?
  - How strongly or clearly or consistently was this shown?
  - Were the study designs such that the conclusions reached could be justified?
  - What did the authors do to avoid the biases of pre-existing beliefs?
Nature of claims made by most of these reviews

- These are therefore meaningless statements or vague opinions
  - “Previous research has shown that team building improves performance”
  - “It has been demonstrated that management development is effective”
  - “Many studies have shown that employee engagement increases performance”
  - “There is much evidence that job stress causes ill health”
You should not trust the ‘experts’

- Experts (such as OP academics and professors) have limited and very biased knowledge
- Almost none of them have conducted systematic reviews
- They may have **opinions** about the evidence-base but these are not likely to be accurate representations
- So experts may be good at helping explain and understand and research things but they are **not reliable sources of information about the body of evidence**
A survey of 75 European OP Professors (Guest & Zijlstra, 2012) [1]

- Stage 1: “In your opinion, what are the five most fundamental findings in W/O psychology that every informed human resource manager should know?”

- Each respondent provided around five findings
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<thead>
<tr>
<th>Rank</th>
<th>Topic Category</th>
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<tbody>
<tr>
<td>40</td>
<td>Selection, assessment, and personality</td>
</tr>
<tr>
<td>35</td>
<td>Employment relationships including psychological contract, trust, and fairness</td>
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<tr>
<td>35</td>
<td>Motivation and rewards</td>
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<td>34</td>
<td>Stress, well-being, and health and safety</td>
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<td>26</td>
<td>Leadership</td>
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<td>17</td>
<td>Groups/teams</td>
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<td>17</td>
<td>Job design</td>
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<td>16</td>
<td>Goal setting</td>
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<td>11</td>
<td>Job satisfaction and related attitudes</td>
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<td>9</td>
<td>Organizational change</td>
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<td>9</td>
<td>Diversity, discrimination, and disadvantage</td>
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<td>8</td>
<td>High-performance/high-commitment work systems</td>
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<td>Training and development</td>
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<td>Communication</td>
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<td>HCl/ergonomics</td>
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<td>2</td>
<td>Careers</td>
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<td>36</td>
<td>General comments</td>
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A survey of 75 European OP Professors (Guest & Zijlstra, 2012) [2]

- **Stage 2**: Those statements most frequently mentioned in Stage 1 were presented in a short questionnaire of 24 items

- **Response scale**
  1. strongly agree that there is good evidence to support this statement
  2. tend to agree that there is good evidence to support this statement
  3. uncertain about the quality of the evidence
  4. tend to disagree that there is good evidence to support this statement
  5. strongly disagree that there is good evidence to support this statement
Procedural justice/fairness has a positive influence on work-related attitudes and behaviour $^a$
Violation of the psychological contract has a negative impact on work-related attitudes and behaviour $^a$
Participation in decisions improves commitment to the decisions $^a$
A good safety climate is associated with fewer accidents/injuries
Goal-setting is a motivational technique that works
Job insecurity causes stress and reduces well-being
Perceived organizational support moderates the
Workplace stress is a major cause of ill health
Higher job autonomy is associated with higher well-being and performance outcomes\(^a\)
High-performance/high-commitment HR systems are associated with higher firm performance
High self-efficacy beliefs are associated with higher motivation
Some US research findings will not transfer to Europe because of societal/cultural differences
Intrinsic motivation is generally more effective than extrinsic motivation\(^a\)
Structured interviews are more valid than unstructured interviews
Leadership can be trained\(^b\)
Good management can eliminate all conflict in organizations
Older workers are as productive as younger workers in most jobs
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<tbody>
<tr>
<td>General mental ability is one of the strongest predictors of performance</td>
<td>39</td>
<td>25</td>
<td>16</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Relational psychological contracts are more likely to raise motivation and commitment than transactional contracts</td>
<td>15</td>
<td>48</td>
<td>21</td>
<td>12</td>
<td>4</td>
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<tr>
<td>Job satisfaction is associated with higher performance</td>
<td>20</td>
<td>37</td>
<td>24</td>
<td>16</td>
<td>3</td>
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<tr>
<td>Transformational leadership is more effective than other forms of leadership</td>
<td>4</td>
<td>39</td>
<td>26</td>
<td>26</td>
<td>6</td>
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<tr>
<td>Personality predicts most important work attitudes and behaviours</td>
<td>7</td>
<td>35</td>
<td>28</td>
<td>18</td>
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<tr>
<td>Organizational culture has a larger impact on performance than structural factors</td>
<td>5</td>
<td>27</td>
<td>50</td>
<td>12</td>
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<tr>
<td>Pay is not a good motivator of performance at work</td>
<td>5</td>
<td>23</td>
<td>23</td>
<td>30</td>
<td>19</td>
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</table>
A survey of 75 European OP Professors (Guest & Zijlstra, 2012) [3]

- For only 7 of the 24 statements was there over 75% agreement that there was good evidence to support the statement.
- And remember the first stage asked about “fundamental findings”
- “There was one item that was included as a check...‘Good management can eliminate all conflict in organizations’. We believed this to be manifestly inaccurate and expected to get no positive responses. We were therefore somewhat disconcerted to find that 14% agreed with the statement.”
- Nevertheless, the finding of a strong consensus on only seven of the 24 items suggests that we have some way to go to establish a strong research evidence base with academic consensus about the consistency of the findings.
A survey of 75 European OP Professors (Guest & Zijlstra, 2012) [4]

- “the finding of a strong consensus on only seven of the 24 items suggests that we have some way to go to establish a strong research evidence base with academic consensus about the consistency of the findings.”
SRs already happening in other areas

Worldwide communities devoted to promoting access to evidence-based practice
Members collaborate to summarize state of the art knowledge on specific practices identified as important and under/over/mis-used
On-line access to information, designed for ease and speed of use
Cochrane Collaboration

- Founded in 1993 it aims to help people make well-informed decisions by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of interventions in all areas of health care

- Cochrane Database of Systematic Reviews
  - 1995 36 reviews
  - 1999 500 reviews
  - 2001 1000 reviews
  - 2004 2000 reviews + 1400 published protocols (plans)
  - 2012 5000+ reviews

- Reviews prepared by healthcare professionals who volunteer (10000 people worldwide)

- Cochrane Review Groups

- Application of the rigorous quality standards
Systematic reviews answer these type of questions

- What do we know?
- What do we not know?
- What are we not sure about?
- How do we know we know or don’t know or are not sure that…?
- What is the basis for our claims? (e.g., How much evidence? What quality?)
- Conscious ignorance very under-rated – but knowing we don’t know very important
Typical steps in a RAE or SR

1. Identify and clearly define the question the review will address.

2. Determine the types of studies and data that will answer the question.

3. Search the literature to locate relevant studies.

4. Sift through all the retrieved studies in order to identify those that meet the inclusion criteria (and need to be examined further) and those that do not and should be excluded.

5. Extract the relevant data or information from the studies.

6. Critically appraise the studies by assessing the study quality determined in relation to the review question.

7. Synthesize the findings from the studies.

8. Consider potential effects of publications or other biases.
2. Determine the types of studies and data that will answer the question

- What designs of studies and what kinds of data would, in principle, provide good quality data/evidence given the review question
- Need to identify and work this out given the review question
- Types of data (e.g., Quantitative? Qualitative? Both?)
- Types of study design (e.g., Longitudinal? Experimental? Case study?)
The example of questions about the effectiveness

- A hierarchy of evidence from the best quality to the lowest quality
  1. Systematic reviews (REAs) and meta-analyses
  2. Randomised controlled trials
  3. Non-randomized controlled trials
  4. Cohort studies
  5. Case control studies
  6. Cross-sectional studies
  7. Case reports
  8. Expert opinion

- Does *not* apply to questions about process or meanings or other types of questions
3. Search the literature to locate relevant studies

- Choose databases
- Identify correct keywords
- Use systematic searching
- This is an iterative process
  - Go backwards and forwards
  - Experiment and try things out
  - Keep recording your results
4. Sift through all the retrieved studies in order to include or exclude

- Start with a long list
- Move to a shorter list
- Inclusion criteria: What properties does the study have to have to be included
- Exclusion criteria: What properties does the paper have to have to be excluded?
- Read abstract and sometimes details of method to decide
- The long list may be reduced a lot (70% plus)
5. Extract the relevant data or information from the studies

- Exactly what information do you need to take from each study? For example:
  - Date of study
  - Location of study
  - Design
  - Methods and measures used
  - Main research questions addressed
  - Main findings
  - Limitations

- Use database or table to record this information
6. Critically appraise the studies by assessing the study quality (in relation to question)

- ALL RESEARCH HAS FLAWS, LIMITATIONS, WEAKNESSES AND PROBLEMS

- Your task is to critically appraise each study in relation to the question

- What is the quality of each piece of evidence (study) you find? Excellent? Good? OK? Poor?

- Use a critical appraisal tool or checklist or scale to help you identify/score the quality of each study
7. Synthesize the findings from the studies

- How will you pull together the findings so reader can make sense?

- For example:
  - Total of 50 studies
  - 10 high quality, 40 poor quality
  - The answer to the REA question from the high quality studies was...
  - The answer to the REA question from the low quality studies was...

- Use tables and simple quantitative summaries
8. Consider potential effects of publication or other biases

- Looking across the relevant evidence you found what were the biases?
  - Were results likely to be in one direction rather than another?
  - How do you know?
  - Is it possible to check?
  - What should the reader know to help them make a judgement (e.g., all studies of a drug treatment funded by a drug company who makes the drug)
The review question is very important

- Like any piece of research, it is only as good as the question
  - Clear
  - Specific
  - With a purpose
  - Informed
Examples of SR questions (each must be more specific)

- Does team-building work?
- Can you improve emotional intelligence?
- Do increases in EI lead to performance improvements?
- Does management development improve the performance of managers?
- Does employee engagement predict organizational performance?
- Is 360 degree feedback effective?
- Can potentially great leaders be identified?
- Is coaching effective?
Reflection: Focusing the review question

- Suppose you initially start with this question: **Does team-building work?**
- How would you make this question more specific?
- Read *Discuss with your neighbour for two minutes*
DOES TEAM-BUILDING WORK?

- What is meant by ‘team’? And what is not included as a ‘team’?
- What kind of teams?
- In which particular contexts or settings?
- What is ‘team building’? And what is not ‘team building’?
- What does ‘work’ mean?
- ‘Work’ compared to any other team intervention? No intervention?
- What outcomes are relevant?
- What are the mechanisms, processes and theory which might account for possible effects of team building on outcomes?
- What time periods are relevant for observing any possible effects?
- What about possible negative effects or harm?
- What types of data from what sorts of designs would in principle provide good quality, medium quality and poor quality evidence?
Using PICOC to narrow the question

- **Population** (which people or groups or type of employee?)
- **Intervention** (or presumed influencing factor or two different situations or an independent variable)
- **Comparison** (compared to what or in relation to what?)
- **Outcome** (what is the outcome or dependent variable of interest?)
- **Context** (what settings or sectors or situations)
How PICOC may be relevant to SRs in OP: Some *examples*

- **Population** (men or women, minority ethic groups, older workers, middle management, team workers)
- **Intervention or influencing factor** (training programme, management skills, coaching, employee engagement, employer branding, commitment)
- **Comparison** (compared to doing nothing, another intervention, before and after, other factors known to influence outcome)
- **Outcome** (individual performance, organizational performance, customer satisfaction, intention to quite, retention, learning)
- **Context** (multinationals, manufacturing, hospitality, Europe, public sector)
The use of PICOC needs to be explained and justified

- Can’t be random or arbitrary (e.g., What is the effectiveness of employee engagement programmes compared to performance appraisal in increasing the organizational citizenship behaviours of female Norwegian fishing workers in Stamsund between 2006 and 2011)

- Has to make sense and be explained (explain your decisions!)
Other techniques for focusing question

- Do some initial reading of the literature
- Do some form of scoping study or search
  - Use the keywords
  - Do a limited search (e.g., only some databases, restrict years of search, restrict to a handful of journals)
  - What do results tell you about your question?
  - Are your search terms right?
- A REA can be quite an iterative process: Initial question > scoping study > check results > revise question > scoping study > better understanding of evidence-base > revise question > etc
- Would the findings of the review be *useful* for OP practitioners? You don’t know but you can guess!
Examples of REAs and SRs
First example (but not a REA or SR)

- Stress interventions
  - Primary (reduce presence of ‘stressors’)
  - Secondary (preventative - training)
  - Tertiary (treating harmed individuals)

- For decades virtually all writers claimed primary interventions are effective

- Similar claims at the start of many papers:
  - It has been shown that...
  - It is well-established that...
  - Previous research has demonstrated that...
  - There is mixed evidence that...
  - All meaningless without systematic reviews
First example (but not a REA or SR)

- Few (or no) good studies or primary stress interventions
- So instead reviewed 12 job redesign studies (Briner & Reynolds, 1999)
- These studies measured several variables before and after the job redesign
- Most designed to increase autonomy (control)
- It is widely assumed that low autonomy is a major stressor
First example (but not a REA or SR)

Wall et al (1986):
Manufacturing; autonomous workgroups;
18 and 30 month follow-ups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic satisfaction</td>
<td>Increase</td>
</tr>
<tr>
<td>Extrinsic satisfaction</td>
<td>Increase short-term</td>
</tr>
<tr>
<td>Job motivation</td>
<td>No effect</td>
</tr>
<tr>
<td>Org. commitment</td>
<td>No effect</td>
</tr>
<tr>
<td>Mental health</td>
<td>No effect</td>
</tr>
<tr>
<td>Performance</td>
<td>No effect</td>
</tr>
<tr>
<td>Turnover</td>
<td>Increase</td>
</tr>
<tr>
<td>Disciplinary dismissals</td>
<td>Increase</td>
</tr>
</tbody>
</table>
First example (but not a REA or SR)

Cordery et al (1993):
Manufacturing;
Autonomous workgroups; 12 month follow-up

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic satisfaction</td>
<td>Increase</td>
</tr>
<tr>
<td>Extrinsic satisfaction</td>
<td>Increase short-term</td>
</tr>
<tr>
<td>Org. commitment</td>
<td>Increase</td>
</tr>
<tr>
<td>Trust in management</td>
<td>Increase</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>Increase</td>
</tr>
<tr>
<td>Turnover</td>
<td>Increase</td>
</tr>
</tbody>
</table>
First example (but not a REA or SR)

Griffin (1991):
Bank tellers; increase responsibility and authority, 24 and 48 month follow-ups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Increase short-term</td>
</tr>
<tr>
<td>Org. commitment</td>
<td>Increase short-term</td>
</tr>
<tr>
<td>Performance</td>
<td>Increase</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>No effect</td>
</tr>
<tr>
<td>Propensity to quit</td>
<td>No effect</td>
</tr>
</tbody>
</table>
First example (but not a REA or SR)

- All showed exactly same pattern of results
  - Some things get better
  - Some things get worse
  - Some stayed the same

- How can it be generally claimed that primary interventions are effective?

- Where or what is the evidence for this widely-made claim?
Second example

- Flexible working conditions and their effects on employee health and wellbeing (Joyce et al, 2010)
- Widely assumed flexible working ‘good’ but what is the evidence?
Structured abstract

**Background:** Flexible working conditions are increasingly popular in developed countries but the effects on employee health and wellbeing are largely unknown.

**Objectives:** To evaluate the effects (benefits and harms) of flexible working interventions on the physical, mental and general health and wellbeing of employees and their families.

**Search strategy:** Our searches (July 2009) covered 12 databases including the Cochrane Public Health Group Specialized Register, CENTRAL; MEDLINE; EMBASE; CINAHL; PsycINFO; Social Science Citation Index; ASSIA; IBSS; Sociological Abstracts; and ABI/Inform. We also searched relevant websites, hand searched key journals, searched bibliographies and contacted study authors and key experts.
Structured abstract

- **Main results:** Ten studies fulfilled the inclusion criteria. Six CBA studies reported on interventions relating to temporal flexibility: self-scheduling of shift work ($n = 4$), flexitime ($n = 1$) and overtime ($n = 1$). The remaining four CBA studies evaluated a form of contractual flexibility: partial/gradual retirement ($n = 2$), involuntary part-time work ($n = 1$) and fixed-term contract ($n = 1$). The studies retrieved had a number of methodological limitations including short follow-up periods, risk of selection bias and reliance on largely self-reported outcome data. Four CBA studies on self-scheduling of shifts and one CBA study on gradual/partial retirement reported statistically significant improvements in either primary outcomes (including systolic blood pressure and heart rate; tiredness; mental health, sleep duration, sleep quality and alertness; self-rated health status) or secondary health outcomes (co-workers social support and sense of community) and no ill health effects were reported...
Structured abstract

- ... Flexitime was shown not to have significant effects on self-reported physiological and psychological health outcomes. Similarly, when comparing individuals working overtime with those who did not the odds of ill health effects were not significantly higher in the intervention group at follow up. The effects of contractual flexibility on self-reported health (with the exception of gradual/partial retirement, which when controlled by employees improved health outcomes) were either equivocal or negative. No studies differentiated results by socio-economic status, although one study did compare findings by gender but found no differential effect on self-reported health outcomes.
Structured abstract

- **Authors’ conclusions:** The findings of this review tentatively suggest that flexible working interventions that increase worker control and choice (such as self-scheduling or gradual/partial retirement) are likely to have a positive effect on health outcomes. In contrast, interventions that were motivated or dictated by organizational interests, such as fixed-term contract and involuntary part-time employment, found equivocal or negative health effects. Given the partial and methodologically limited evidence base these findings should be interpreted with caution. Moreover, well-designed intervention studies are needed to delineate the impact of flexible working conditions on health, wellbeing and health inequalities.
Systematic review on the association between employee worktime control and work–non-work balance, health and well-being, and job-related outcomes

by Hylco H Nijp, MSc, Debby GJ Beckers, PhD, Sabine AE Geurts, PhD, Philip Tucker, PhD, Michiel AJ Kompier, PhD


Objectives The aim of this review was to assess systematically the empirical evidence for associations between employee worktime control (WTC) and work–non-work balance, health/well-being, and job-related outcomes (eg, job satisfaction, job performance).

Method A systematic search of empirical studies published between 1995–2011 resulted in 63 relevant papers from 53 studies. Five different categories of WTC measurements were distinguished (global WTC, multidimensional WTC, flextime, leave control, and “other subdimensions of WTC”). For each WTC category, we examined the strength of evidence for an association with (i) work–non-work balance, (ii) health/well-being, and (iii) job-related outcomes. We distinguished between cross-sectional, longitudinal, and intervention studies. Evidence strength was assessed based on the number of studies and their convergence in terms of study findings.
Results (Moderately) strong cross-sectional evidence was found for positive associations between global WTC and both work–non-work balance and job-related outcomes, whereas no consistent evidence was found regarding health/well-being. Intervention studies on global WTC found moderately strong evidence for a positive causal association with work–non-work balance and no or insufficient evidence for health/well-being and job-related outcomes. Limited to moderately strong cross-sectional evidence was found for positive associations between multidimensional WTC and our outcome categories. Moderately strong cross-sectional evidence was found for positive associations between flextime and all outcome categories. The lack of intervention or longitudinal studies restricts clear causal inferences.

Conclusions This review has shown that there are theoretical and empirical reasons to view WTC as a promising tool for the maintenance of employees’ work–non-work balance, health and well-being, and job-related outcomes. At the same time, however, the current state of evidence allows only very limited causal inferences to be made regarding the impact of enhanced WTC.
Specifically, our research questions were: (i) How strong is the empirical evidence regarding the association between (categories of) WTC and indicators of work–non-work balance, health/well-being, and job-related outcomes? (ii) In case of significant associations between (categories of) WTC and these indicators, how strong is the empirical evidence that these associations are causal in nature?
Worktime control literature search (PubMed & PsycINFO)

- 2000 hits

References from review Joyce et al. (2010)

- 67 references

Other studies known from the authors’ WTC-files

- 3 references

Total: 2070 references

Abstract scan: 1829 studies did not focus on association WTC and indicators of work-nonwork balance, health/well-being, or job outcomes

241 references

Paper retrieval: 3 papers could not be retrieved online, and authors did not respond to requests for papers

238 references

Full-text paper scan: 72 studies did not focus on association WTC and indicators of work-nonwork balance, health/well-being, or job outcomes

166 references
Publication type: 56 studies were not empirical and/or quantitative in nature

Study design: 2 cross sectional studies did not apply N > 100, 1 intervention study had no control group; 1 intervention study was confounded

Study sample: 8 studies not dealing with healthy, working respondents

Measure of WTC: 30 studies used an invalid or confounded measure of WTC; authors from 5 papers did not respond to request for clarification

Figure 1. Systematic literature search and selection of relevant papers regarding the association between (categories of) worktime control (WTC) and indicators of work–non-work balance, health/well-being, and job-related outcomes.
Table 2. Five worktime control categories and three outcome categories: associations and synthesis of evidence [standardized index of convergence (SIC values)] for cross-sectional, intervention, and longitudinal studies. The table shows study number and its reported overall association between every type of worktime control (WTC) and the outcome category under consideration. (+) = favourable association reported; (0)= no association reported. xx/xx (eg, 17/32) means: both papers report on an overlapping study. Areas marked in **BOLD** represent cells with sufficient number and homogeneity of studies for assessing SIC values. Regarding evidence of strength based on SIC: 0 = no/inconsistent evidence; + = limited evidence for a positive association; ++ = moderately strong evidence for a positive association; +++ = strong evidence for a positive association. [CS=cross sectional study]

<table>
<thead>
<tr>
<th>Type of WTC</th>
<th>Work–non-work balance</th>
<th>Health/ well-being</th>
<th>Job-related outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15(+), 25/26(+), 27/28/29(+), 41(+)</td>
<td>25(+), 27(0), 29(+), 43(0), 49(0), 51(+), 52(0), 53(-), 57(+), 60(0), 61(0)</td>
<td>29(+), 47(0), 52(+), 53(+), 55(0), 56(0), 59(0), 61(0)</td>
</tr>
<tr>
<td></td>
<td>42(+) 43(0), 44(+),45(0), 47(+)</td>
<td>48(+)</td>
<td></td>
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<tr>
<td></td>
<td>51(+), 53(0), 54(+), 56(0), 58(+)</td>
<td>60(0), 61(+)</td>
<td></td>
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<tr>
<td>Intervention study</td>
<td>32(+), 46(0), 48(+)</td>
<td>38(0), 40(0), 46/50(0), 48(0)</td>
<td>33(+), 48(+)</td>
</tr>
<tr>
<td>Longitudinal study</td>
<td>42(0), 47(0)</td>
<td>47(0)</td>
<td></td>
</tr>
<tr>
<td>Strength of evidence based on SIC</td>
<td>CS: SIC (N=16) 0.69(++)</td>
<td>CS: SIC (N=11) 0.27(0)</td>
<td>CS: SIC (N=8) 0.50(++)</td>
</tr>
<tr>
<td><strong>Multi-dimensional</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CS study</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>62(+), 64(0), 65(+)</td>
<td>30/31(0), 63(+), 65(+), 66(0)</td>
<td>16(+), 39(0), 65(0)</td>
</tr>
<tr>
<td></td>
<td>67(0), 70(0), 72(0), 73(+)</td>
<td>68(+), 70(+), 71(0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>74(0), 75(0), 76(0)</td>
<td>67(0), 73(+), 76(+), 77(+)</td>
<td></td>
</tr>
<tr>
<td>Strength of evidence based on SIC</td>
<td>CS: SIC (N=3) 0.67(++)</td>
<td>CS: SIC (N=4) 0.50(+)</td>
<td>CS: SIC (N=3) 0.33(+)</td>
</tr>
<tr>
<td>Flextime</td>
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<tr>
<td>CS study</td>
<td></td>
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<tr>
<td></td>
<td>67(+), 69(+), 71(0), 72(0), 73(+)</td>
<td>68(+), 70(+), 71(0)</td>
<td>67(0), 73(+), 76(+), 77(+)</td>
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<tr>
<td></td>
<td>74(0), 75(0), 76(0)</td>
<td>67(0), 73(+), 76(+), 77(+)</td>
<td></td>
</tr>
<tr>
<td>Longitudinal study</td>
<td>22/23(+)</td>
<td>22/23(+)</td>
<td>CS: SIC (N=4) 0.75(++)</td>
</tr>
<tr>
<td>Strength of evidence based on SIC</td>
<td>CS: SIC (N=8) 0.38(++)</td>
<td>CS: SIC (N=3) 0.67(++)</td>
<td>CS: SIC (N=3) 0.67(++)</td>
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<tr>
<td>Leave control</td>
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<tr>
<td>CS study</td>
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<tr>
<td></td>
<td>74(+), 78(+)</td>
<td>68(+), 79(0)</td>
<td></td>
</tr>
<tr>
<td>Longitudinal study</td>
<td>42(+) 78(+)</td>
<td>22(+)</td>
<td></td>
</tr>
<tr>
<td>Other subdimensions</td>
<td>CS study</td>
<td>27(+), 76(+), 82(+)</td>
<td>12(+), 27(0), 66(0), 80(+), 81(+)</td>
</tr>
<tr>
<td>Strength of evidence based on SIC</td>
<td>CS: SIC (N=3) 1.0(++)</td>
<td>CS: SIC (N=5) 0.6(++)</td>
<td>CS: SIC (N=4) 1.0(++)</td>
</tr>
</tbody>
</table>
Empirical evidence supports the efficacy of psychodynamic therapy. Effect sizes for psychodynamic therapy are as large as those reported for other therapies that have been actively promoted as “empirically supported” and “evidence based.” In addition, patients who receive psychodynamic therapy maintain therapeutic gains and appear to continue to improve after treatment ends. Finally, nonpsychodynamic therapies may be effective in part because the more skilled practitioners utilize techniques that have long been central to psychodynamic theory and practice. The perception that psychodynamic approaches lack empirical over time. Finally, I consider evidence that nonpsychodynamic therapies may be effective in part because the more skilled practitioners utilize interventions that have long been central to psychodynamic theory and practice.

Distinctive Features of Psychodynamic Technique

Psychodynamic or psychoanalytic psychotherapy refers to a range of treatments based on psychoanalytic concepts and methods that involve less frequent meetings.
<table>
<thead>
<tr>
<th>Treatment type and reference</th>
<th>Description</th>
<th>Effect size</th>
<th>N of studies or meta-analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General psychotherapy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith et al. (1980)</td>
<td>Various therapies and disorders</td>
<td>0.85</td>
<td>475 studies</td>
</tr>
<tr>
<td>Lipsey &amp; Wilson (1993)</td>
<td>Various therapies and disorders</td>
<td>0.75</td>
<td>18 meta-analyses</td>
</tr>
<tr>
<td>Robinson et al. (1990)</td>
<td>Various therapies for depression</td>
<td>0.73</td>
<td>37 studies</td>
</tr>
<tr>
<td><strong>CBT and related therapies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipsey &amp; Wilson (1993)</td>
<td>CBT and behavior therapy, various disorders</td>
<td>0.62b</td>
<td>23 meta-analyses</td>
</tr>
<tr>
<td>Haby et al. (2006)</td>
<td>CBT for depression, panic, and generalized anxiety</td>
<td>0.68</td>
<td>33 studies</td>
</tr>
<tr>
<td>Churchill et al. (2001)</td>
<td>CBT for depression</td>
<td>1.0</td>
<td>20 studies</td>
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<tr>
<td>Cuijpers et al. (2007)</td>
<td>Behavioral activation for depression</td>
<td>0.87</td>
<td>16 studies</td>
</tr>
<tr>
<td>Ost (2008)</td>
<td>Dialectical behavior therapy, primarily for borderline personality disorder</td>
<td>0.58</td>
<td>13 studies</td>
</tr>
<tr>
<td><strong>Antidepressant medication</strong></td>
<td>FDA-registered studies of antidepressants approved between 1987 and 2004</td>
<td>0.31</td>
<td>74 studies</td>
</tr>
<tr>
<td>Turner et al. (2008)</td>
<td>Tricyclic antidepressants versus active placebo</td>
<td>0.17</td>
<td>9 studies</td>
</tr>
<tr>
<td><strong>Psychodynamic therapy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbass et al. (2006)</td>
<td>Various disorders, general symptom improvement</td>
<td>0.97</td>
<td>12 studies</td>
</tr>
<tr>
<td>Leichsenring et al. (2004)</td>
<td>Various disorders, change in target problems</td>
<td>1.17</td>
<td>7 studies</td>
</tr>
<tr>
<td>Anderson &amp; Lambert (1995)</td>
<td>Various disorders and outcomes</td>
<td>0.85</td>
<td>9 studies</td>
</tr>
<tr>
<td>Abbass et al. (2009)</td>
<td>Somatic disorders, change in general psychiatric symptoms</td>
<td>0.69</td>
<td>8 studies</td>
</tr>
<tr>
<td>Messer &amp; Abbass (in press)</td>
<td>Personality disorders, general symptom improvement</td>
<td>0.91</td>
<td>7 studies</td>
</tr>
<tr>
<td>Leichsenring &amp; Leibing (2003)</td>
<td>Personality disorders, pretreatment to posttreatment</td>
<td>1.46c</td>
<td>14 studies</td>
</tr>
</tbody>
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Psychosocial factors at work and risk of depression: a systematic review of the epidemiological evidence

J P E Bonde

ABSTRACT

Objectives: Major depression is a leading cause of psychiatric morbidity and may be influenced by psychosocial factors in the workplace, although evidence so far remains circumstantial. This paper reviews follow-up studies addressing the risk of major depression and depressive symptoms relative to psychosocial stressors in the working environment and evaluates the evidence for causality.

use of the Major Depression Inventory (MDI), a validated self-rating scale which assesses depressive episode according to the symptomatic criteria in the DSM-IV and the ICD-10, revealed a 3.3% point prevalence of major depression in a random sample of Danish citizens. Major depression is more prevalent in women than in men. The peak age of a first-onset major depressive episode is between 25 and 45 years of age. Some 75% of patients

risks. The objective of this review is to identify follow-up studies that explicitly address the risk of major depression or depressive symptoms relative to psychosocial factors in the working environment and to discuss the evidence of causal association.
Table 1  Characteristics of 16 follow-up studies included in a review of risk of depression according to psychosocial factors in the workplace

<table>
<thead>
<tr>
<th>Design and logistics</th>
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</thead>
<tbody>
<tr>
<td>Sample size (n), median (range)*</td>
<td>3370 (367–11 552)</td>
</tr>
<tr>
<td>Proportion of baseline participants who provided follow-up data, median (range)</td>
<td>83% (37–100%)</td>
</tr>
<tr>
<td>Follow-up period (years), median (range)</td>
<td>2.5 (1–13)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data collection and quality assurance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis by diagnostic manual or specialist in psychology or psychiatry</td>
<td>7 Studies$^{19,20,22,23,25,27,29}$</td>
</tr>
<tr>
<td>Self-administered questionnaire</td>
<td>7 Studies$^{14–16,18,23,26,28}$</td>
</tr>
<tr>
<td>Ascertainment of outcome</td>
<td></td>
</tr>
<tr>
<td>Telephone interview</td>
<td>4 Studies$^{21,22,24,27}$</td>
</tr>
<tr>
<td>Face-to-face interview</td>
<td>4 Studies$^{17,19,20,29}$</td>
</tr>
<tr>
<td>Clinical case</td>
<td>1 Study$^{25}$</td>
</tr>
<tr>
<td>Multi-item measures of psychosocial factors</td>
<td>All except for 4 studies$^{17,23,27,28}$</td>
</tr>
</tbody>
</table>
Table 2  Characteristics of 16 core studies (17 papers) included in a systematic literature review of follow-up studies linking measures of psychosocial work factors at baseline with occurrence of depressive disorder or depressive symptoms at or during follow-up

<table>
<thead>
<tr>
<th>Reference</th>
<th>Sampling frame</th>
<th>Sample</th>
<th>Participation*</th>
<th>Follow-up time</th>
<th>Data collection</th>
<th>Exposure, dimension (number of questionnaire items)</th>
<th>Baseline prevalence of depression or depressive symptoms</th>
<th>Diagnostic criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelsen and Bildt, 2003 (Sweden)</td>
<td>Urban population</td>
<td>Employees, n = 367</td>
<td>89%</td>
<td>24 months</td>
<td>Face-to-face interview</td>
<td>Mental load (1) Monotonous work (1) Hectic work (1) Social support (1)</td>
<td>11–13%</td>
<td>Modified ICD-8/DSM-III (psychologist/psychiatrist)</td>
</tr>
<tr>
<td>Tokuyama et al., 2003 (Japan)</td>
<td>Insurance company</td>
<td>White collar workers, n = 1265</td>
<td>50–62%</td>
<td>1 year</td>
<td>Questionnaire</td>
<td>Job overload (1) Difficult job (1) Inadequate evaluation of contribution (1) Problems with co-workers (1)</td>
<td>3–7%</td>
<td>DSM-IV criteria (≥5 of 8 symptoms, self-rating depression scale &gt; 40)</td>
</tr>
</tbody>
</table>
The example of employee engagement (not work engagement)
Schaufeli & Bakker (2010)

- March 2008 and April 2012

<table>
<thead>
<tr>
<th>The internet</th>
<th>Google</th>
<th>Google scholar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee engagement</td>
<td>626,000</td>
<td>4.15m</td>
</tr>
<tr>
<td>Work engagement</td>
<td>21,400</td>
<td>175,000</td>
</tr>
<tr>
<td>Total</td>
<td>645,130</td>
<td>4.33m</td>
</tr>
</tbody>
</table>

**PsycINFO**

<table>
<thead>
<tr>
<th>Anywhere</th>
<th>In title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee engagement</td>
<td>35</td>
</tr>
<tr>
<td>Work engagement</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
Number of Google searches by year

- Has satisfaction gone out of fashion to be replaced by employee engagement?
The case of employee engagement (not work engagement)

- What are the fundamental questions we need to ask about engagement?

  - **Fundamental Question 1.** Do increases in engagement *cause* increases in performance?

  - **Fundamental Question 2.** Do engagement interventions *cause* increases levels of engagement and subsequent increases in performance?
Problem 1: Definition

- No agreement
- Wildly different
- Focus on different things and some on all these things
  - Behaviour (e.g. OCBs)
  - Attitudes (e.g., commitment)
  - Feelings (e.g., enthusiasm)
  - What the organization does (e.g., provides support)
Problem 1: Definition

- This lack of continuity [in definition] contributes to a deep misconception of the complexities around the concept. (Shuck and Wollard, 2010)

- ...if the meaning of engagement “bleeds” into so many other more developed constructs, then engagement just becomes an umbrella term for whatever one wants it to be. (Saks, 2008)

- The existence of different definitions makes the state of knowledge of employee engagement difficult to determine as each study examines employee engagement under a different protocol. In addition, unless employee engagement can be universally defined and measured, it cannot be managed, nor can it be known if efforts to improve it are working. (Kular et al, 2008)
Problem 2: Measurement

- If definitions are confused inevitably measures will be a mess

- the most common way to measure engagement is by a group of survey items that include measures of satisfaction, effort, and commitment to the organization; in other words, a potpourri of items looking at different types of attitudes that have different relationships to performance. (Lawler, 2013)
Problem 2: Measurement

- Many correlate highly with existing measures (e.g., Gallup Q12 correlates .91 with existing measures of job satisfaction)
- Only one (note *one*) study to date has found measures of engagement to correlate with performance over and above other measures
- Poor construct validity
- Almost no predictive validity
Problem 3: Is engagement anything new?

- The employee engagement concept does not constitute new content but rather offers a particular blend of older, familiar constructs. (Newman & Harrison, 2008)

- There is nothing new with respect to how attitudes and performance are related. Article after article puts old wine in new bottles, in many cases this does more to confuse than clarify. (Lawler, 2013)

- ...if the engagement concept is unique, it requires a distinct meaning...Failure to make these distinctions and to continue to define and measure engagement in terms of older constructs is likely to muddy the engagement water even more and to perpetuate the belief that engagement is nothing more than old wine in a new bottle. (Saks, 2008)
Problem 3: Is engagement anything new? Only two possibilities

- **Engagement is *not* a new and different idea:** If so the term and idea should be immediately discontinued because using a new term to describe existing concepts is confusing and unhelpful.

- **Engagement *is* a new and different idea:** If this is so then there is a huge amount of work to be done first to *define* engagement in a distinctive way and to gather good quality evidence to show that *measures* of engagement are measuring something new and different.
Problem 4: Almost no good quality evidence about the fundamental questions

- **Fundamental Question 1.** Do increases in engagement *cause* increases in performance?

- **Fundamental Question 2.** Do engagement interventions *cause* increases levels of engagement and subsequent increases in performance?

- So what would, in principle, be good quality evidence that can be used?
Three conditions for causality

1. That the cause occurs before effect – in this case that increases in engagement happen *before* increases in performance.

2. That there is covariation of cause and effect – in this case this means that as engagement goes up performance goes up *and* as engagement comes down performance goes down.

3. That there are no plausible alternative explanations such as reverse causality (that performance increases engagement) or other factors which might be the causes of changes in both engagement and performance.
Hierarchy of evidence in relation to *these* questions

- Systematic reviews
- Meta-analyses
- Randomized controlled trials
- Longitudinal studies
- Cross-sectional studies
- Commercial non-peer-reviewed consultancy research reports
- Expert opinion, anecdotes, case studies
How much?

- Systematic reviews – none
- Meta-analyses – 3 (but almost all cross-sectional data)
- RCTs – none
- Longitudinal – none
- Cross-sectional – quite a few
- Commercial non peer-reviewed consultancy research reports – a lot
- Expert opinion, anecdotes, case studies – lots and lots and lots
Problem 5: Mis- and over-claiming

- Despite there being some debate about the precise meaning of employee engagement there are three things we know about it: it is measurable; it can be correlated with performance; and it varies from poor to great. Most importantly employers can do a great deal to impact on people’s level of engagement. That is what makes it so important, as a tool for business success. *(Engage for Success, 2013)*
Problem 5: Mis- and over-claiming

- If employee engagement (as measured) is the same as job satisfaction why should we expect to see a relationship with performance in any case?

- The search for a relationship between job satisfaction and job performance has been referred to as the 'Holy Grail' of organizational behaviour research...The relationship (or lack thereof) has fascinated organizational scholars for decades...study after study failed to produce the expected strong relationship. (Fisher, 2003)

- ...the satisfaction–performance relationship is largely spurious... (Bowling, 2007)
Problem 5: Mis- and over-claiming

- Organizational psychologists conducted many studies that correlated job satisfaction with performance. The results consistently showed low or no correlation between the two. In some cases, there was low correlation only because performing well made employees more satisfied, not because employees worked harder because they were satisfied. (Lawler, 2012)
Summary and conclusions [1]

- Evidence-based practice is now seen as a professional standard in many areas of professional practice

- Organizational psychology practice is not particularly evidence-based – there are many barriers from the contexts in which they work

- Organizational psychology academics are not particularly evidence-based in their own practice (which does not help)
Summary and conclusions [2]

- Systematic reviews are essential for evidence-based practice but there are very few in OP – and OPs are not trained how to do them

- They are research on existing research using a very focused question

- There are many resources available to help OPs conduct systematic reviews (and rapid evidence assessments)
These slides and more materials available online - www.cebma.org
Thank you – questions or comments or criticisms?

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