**DEAKIN UNIVERSITY**

**FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT**

**Research Development Workshop Series** **Workshop 1 2014**

# "Pathways for Women in Research"

**Tuesday 22 July via video conference**

## Notes and documents following the workshop

**Chair:** David Cahill. Associate Dean (Research)

**Invited speakers for this workshop**

- Professor Tes Toop Director, International Research Initiatives.
- Dr Anne Brocklebank Proud Manager Research Grants and Analysis
- Dr Vicky Mak and Dr Rebecca Lester, who provided feedback from the Women in Research Leadership course they were recently able to attend.

**Secretary:** Teresa Treffry

# ...Contents . . .

## Introduction and welcome……………………………………………………………… *Chair David Cahill*

You are all very welcome to the workshop today. This is the first in a series of workshops planned by the Faculty and the topic is an important one, as despite an increase in the number of female academics overall, participation rates for women above senior lecturer level are low, at present only around 10%

We do not expect to find all the answers to this problem here today but our speakers each present insights from their own career path and experience, which ask us to consider ways to assist the goals and aspirations of women pursuing a career in research at Deakin.

Guest speakers for this session are;

- **Professor Tes Toop** *Director, International Research Initiatives. - An active researcher in her own right, Professor Toop is responsible for the oversight of international research and research training MOUs and agreements*.

- **Dr Anne Brocklebank Proud** *Manager Research Grants and Analysis, who will speak of her own career path and pathways into research administration.*

- **Dr Vicky Mak and Dr Rebecca Lester**, *who will provide feedback from the Women in Research Leadership course they were recently able to attend.*

The remaining workshops in this series are as follows, each will last for 2 hours and will be by VMP across all campuses. In each case the format allows for discussion and questions following presentations from invited speakers.

| Faculty Research Development Workshops | | |
|---|---|---|
| Workshop 2 | Engaging with Industry | 28 August 2-4pm<br>*A calendar invitation to staff and HDR's was sent 6 August* |
| Workshop 3 | Developing your research career | Late September date TBC depending on availability of speakers |
| Workshop 4 | Dealing with the ARC | Late October date TBC depending on availability of speakers |
| Workshop 5 | Leading by example: Future Fellows & DECRAs | November date TBC depending on availability of speakers |

## Overview and notes from workshop…………………………………….. *Secretary: Teresa Treffry*

### Presentation 1

**Professor Tes Toop,** did not begin academic life with a career plan but rather a fascination for the study of osmoregulation and endocrinology in fish. Following a PhD at Florida University thoughts of a career became increasingly important

Accepting that it would be difficult to get funding for agnathan research a change was made to the study of more commercial species i.e. trout, salmon and Murray cod. This was still an enjoyable area of research but by 2001 a need was felt for change, or perhaps for more stimulation.

With the implementation of gene technology regulations, an opportunity became available. Deakin needed a director of biosafety, initially a 0.6 position it had the advantage of still allowing time for research in the School of Life and Environmental Sciences. The ability to continue research was an advantage and it was noted that others might consider asking for a split position if in a similar situation.

However by 2007 it became obvious that a decision would have to be made whether to stay with the School or with Research management. Following the release of the 'Australian code for the responsible conduct of research' Tes was asked to set up the Research Integrity office at Deakin, now a manager of 24 people, responsible for organisation, legislation and paperwork, this was a very different experience from academia.

After 4 years thoughts again turned to career development as by this time other institutions had also offered interviews; Tes became acting PVC during the 2012 era until Joe Graffam returned and this in turn led to her current role of Director, International Research Initiatives.

This career path was made within the Deakin system and the following 'thoughts' are offered…

- In this case it may have helped having no plan to start with – but this is not necessarily recommended.
- Accept change, this may be something you want or something that is forced on you.
- A split position is helpful as it keeps the academic option open. If offered a full time position it is be worthwhile negotiating in order to keep an academic role.
- Be aware of any difficulties a new role might offer, ethics for example.
- Take advantage of any management and leadership courses offered as this also builds up a skill set for any future employer.

The slide presentation from **Professor Tes Toop** follows

# PATHWAYS FOR WOMEN IN RESEARCH

# SEBE WORKSHOP

# 22 JULY 2014

**Tes Toop**

**Director, International Research**

**tes.toop@deakin.edu.au**

# CAREER OUTLINE

- PhD Zoology, Florida, 1994
- Deakin 1995 – lecturer: human anatomy and physiology, pathophysiology, animal behaviour
- Research – osmoregulation, endocrinology in fish – moved to more commercially important species (easier to get funding) – trout, salmon, Murray cod.

# THEN - 2001

**Gene Technology Act 2000**

**Act No. 169 of 2000 as amended**

**Gene Technology Regulations 2001**

**Statutory Rules 2001 No. 106 as amended**

made under the

*Gene Technology Act 2000*

## Director of Biosafety (0.4 Time)

# 2007

Australian Government
National Health and Medical Research Council
Australian Research Council

## AUSTRALIAN CODE FOR THE RESPONSIBLE CONDUCT OF RESEARCH

Director, Office of Research Integrity,
(Full time – first management role)

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# ERA 2012

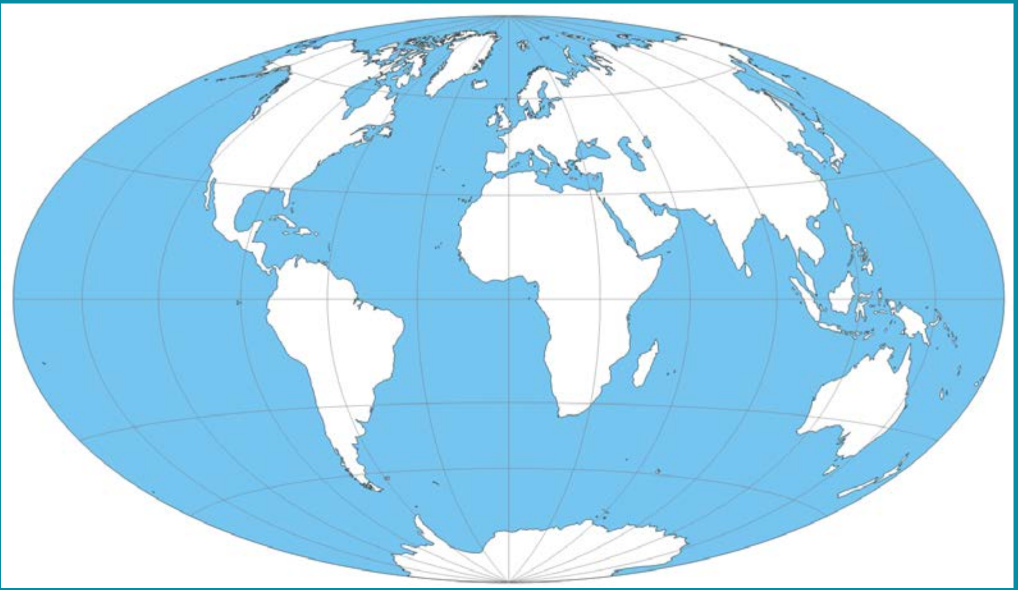

First senior project management role

Interviewed for a couple of Dean Graduate Studies/PVC(R) positions

***Raised awareness with home institution***

Appointed Acting PVC (Research Development and Training) – managed ERA submission

# 2012 - CURRENT



http://www.freeworldmaps.net/printable/printable-world-map.gif

New role under DVCR created: Director, International Research

Focus on Deakin's international research activities, in particular regarding international research students.

So can consider a career path in aspects of Research Management – and get interesting jobs!

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# Research management – some hints

- Split positions - foot in academic role
  - Keep research active and maintain a research profile

- Full-time from an academic role – negotiate to keep academic status

- There are some quite difficult jobs in this area (e.g.. ethics officer) so make sure you know what is involved

# HINDSIGHT – WHAT I KNOW NOW

- Always say ‘Yes’ to opportunities and challenges
- It is possible to have an interesting career path and stay in the same organisation
- Communicate with your boss about your career aspirations
- Seek a mentor
- Take advantage of professional development opportunities (e.g.. leadership/management skills)
- Try and think outside the square about your future career if what you have currently doesn’t fulfil you

# FINALLY – WORK/LIFE BALANCE - CONSTRAINTS

- Other things do matter – family and self
- As with all things there are career compromises that sometimes need to be made:
  - Where you live
  - Managing family/children/partners/friends

- And lastly – good luck for your future

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## Presentation 2

**Dr Anne Brocklebank –Proud** also had no career plan in mind but was passionate about science in year 11 and at that point, wanted to work in cancer research to find a cure.

The difficulties of tertiary study and student life proved to be greater than anticipated and the direction of study altered slightly but after completing a PhD in Biochemistry began work as a tutor level A.

The following year led to work as a as a medical scientist at the ARCBS Development Unit and later in pathology. When an opportunity presented itself locally, Anne applied for the position of Research Fellow at The University of Melbourne (in conjunction with Geelong Hospital). Although not having the obvious qualifications for the job the application was successful and the work enjoyable.

Changes in the work environment prompted a career change to that of grants officer at Deakin University. Again learning on the job Anne gained Australasian Research Management Society (ARMS) accreditation and progressed to senior grants officer and finally to the present position of Manager Research Grants and Analysis for SEBE.

Commenting on her own experience, Anne states that she has never found any impediment in being female or in having a child later in life.

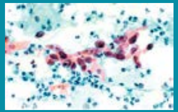
The following hints are offered.

- There is more competition to move into academia post PhD, so focus on your C.V now.
- Aim to publish papers pre-completion.
- Apply for ARC fellowships and other awards.
- Consider going overseas.
- Seek help from your peers
- Speak up if you need more research direction.
- Know yourself – but don't be afraid to take the 'scary job' in another area.

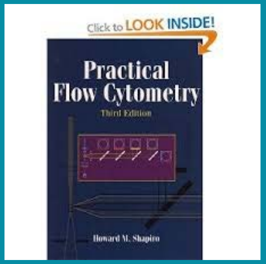
The slide presentation also offers the impressions/ the pros and cons of working in research in pathology and in a research office.

The slide presentation from **Dr Anne Brocklebank –Proud** follows

# CAREER OVERVIEW

- Bachelor of Science – UniMelb
- PhD – Biochemistry
- Tutor – Level A
- Medical Scientist Grade III – ARCBS Development Unit 
- Medical Scientist Grade II – PathLab 
- Research Fellow – UniMelb/Geelong Hospital
- Grants Officer - Deakin Research
- Senior Grants Officer
- Manager, Research Grants & Analysis, SEBE

# FLOW CYTOMETRY - NO BUSINESS LIKE FLOW BUSINESS?



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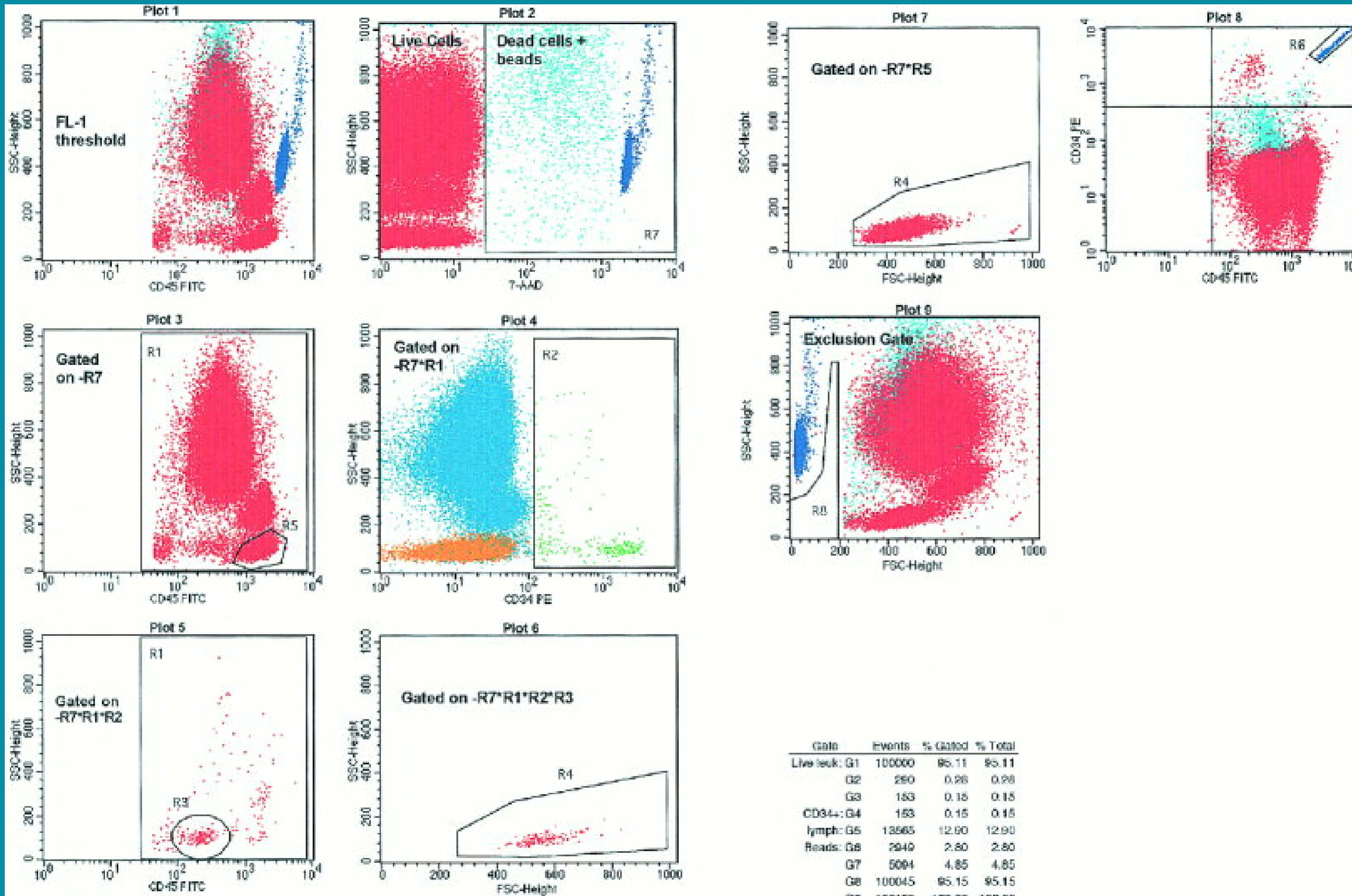
# ENUMERATION OF HSC IN CORD BLOOD




| Gate | Events | % Gated | % Total |
|---|---|---|---|
| Live leuk: G1 | 100000 | 95.11 | 95.11 |
| G2 | 290 | 0.28 | 0.28 |
| G3 | 153 | 0.15 | 0.15 |
| CD34+: G4 | 153 | 0.15 | 0.15 |
| lymph: G5 | 13565 | 12.90 | 12.90 |
| Beads: G6 | 2949 | 2.80 | 2.80 |
| G7 | 5094 | 4.85 | 4.85 |
| G8 | 100045 | 95.15 | 95.15 |
| G9 | 105139 | 100.00 | 100.00 |

# IMPRESSIONS OF WORKING IN RESEARCH

- Rewarding in the long term (opportunity to contribute to knowledge/discovery)
- Good direction/leadership is essential as an ECR
- Research involves risk so a lot of experiments may fail! Some experiments take 2 hours, some 12 months
- Job security - not guaranteed (Research Assistant & Research Fellow contracts)

# IMPRESSIONS OF WORKING IN PATHOLOGY

- Rewarding in the short term (sense of role fulfilment at the end of each shift)
- Highly automated procedures in Biochemistry, not so much Haematology
- Quality Control essential – adherence to exact procedure
- Customer service skills required (often developed on the job)
- Can be high pressure work (especially hospital pathology)
- Job security - usually permanent positions
- Shift work

# IMPRESSIONS OF WORKING IN A RESEARCH OFFICE

- Again, rewarding in the short term (sense of role fulfilment at the end of each day)
- Rewarding when researchers are successful in applying for funding
- Researchers grateful for help
- Scope for learning is almost unlimited (grant writing skills/finance/contracts)
- Job security – reasonable, some short-term contracts
- New ARMS accreditation program gives more oomph to the profession

# ARMS ACCREDITATION

Accredited Research Manager (Foundation) - ARM(F) involves completion of 5 study modules and a case study assessment

3 Compulsory Modules:

- Module A: The National Research and Innovation System in Australia
- Module C: Legislation as it affects research in Australia
- Module E: Understanding Research and Researchers

- Plus a number of elective modules including Ethics, Research Data Analysis, pre- and post-award Grants processes

- What would I do differently to have stayed in research?
  - more papers during PhD
  - go for that ARC fellowship (10% success rate)
  - go overseas
  - spoken up if I needed more research direction
  - sought help from peers in the area
  - taken the “scary” research job in another area

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## Presentation 3

**Dr Vicky Mak** is a Senior Lecturer in the School of Information Technology.

After completing a PhD at the University of Melbourne in 2001 and Post-doc work at CSIRO and Melbourne University, Vicky joined Deakin in 2004.

Modestly describing herself as “*doing a bit of this and that*” and her area of research ‘Combinatorial Optimisation’ as “*Finding the best way to do things!*” Vicky’s skill set as a mathematician means that she is called upon to work in a wide variety of areas including Wireless sensor network for Architecture design, Telecommunications network design, Radiotherapy treatment planning, Medical imaging, Motion capture data analysis and the present work in progress a Kidney exchange programme.

Vicky was one of three Deakin staff members nominated to attend a “Women in Research Leadership” course at the University of Queensland

Asked to comment on the problems of work / life balance Vicky stressed the importance of first knowing yourself,

- What are your strong points and how do these work for you?
- How do you prefer to work, what times are easiest for you,
- What are your own needs at this time, ensure support
- If you have a family, what do the family need at this time?

The slide presentation from **Dr Vicky Mak** which follows, also gives feedback from the “Women in Research Leadership” course

# Women in Research Leadership Course at UQ

# The turning point exercise

- We were asked to write down 6 “turning points” in our lives.
- *Leadership is about engaging people*
- *Sharing stories is a way to fast track connection*

# Prof Kaye Basford's talk

- Translational research versus pure research
- The former is easier to get funding these days
- Look for interdisciplinary and international collaborations

# Values and vision

- We were asked to write down five most important values to us
- Vision: where I am now, and where I want to be
- Value-vision congruence

# Prof Melissa Brown's talk

- Staff management can be tricky.
- "People who followed their passions are the one who succeeded" ~ Jordan Williams

# Prof Jenny Martin’s talk

- Her advice:
  - Be strategic about what you do and what you do not do.
  - Ensure support
  - Document everything

# Jan Elsner's StrengthScope

- Key messages:
  - Focus on the positives
  - Positives can co-exist with negatives
  - A strength can be a negative as well
  - Instead of trying to improve on weaknesses, should make good use of the strengths

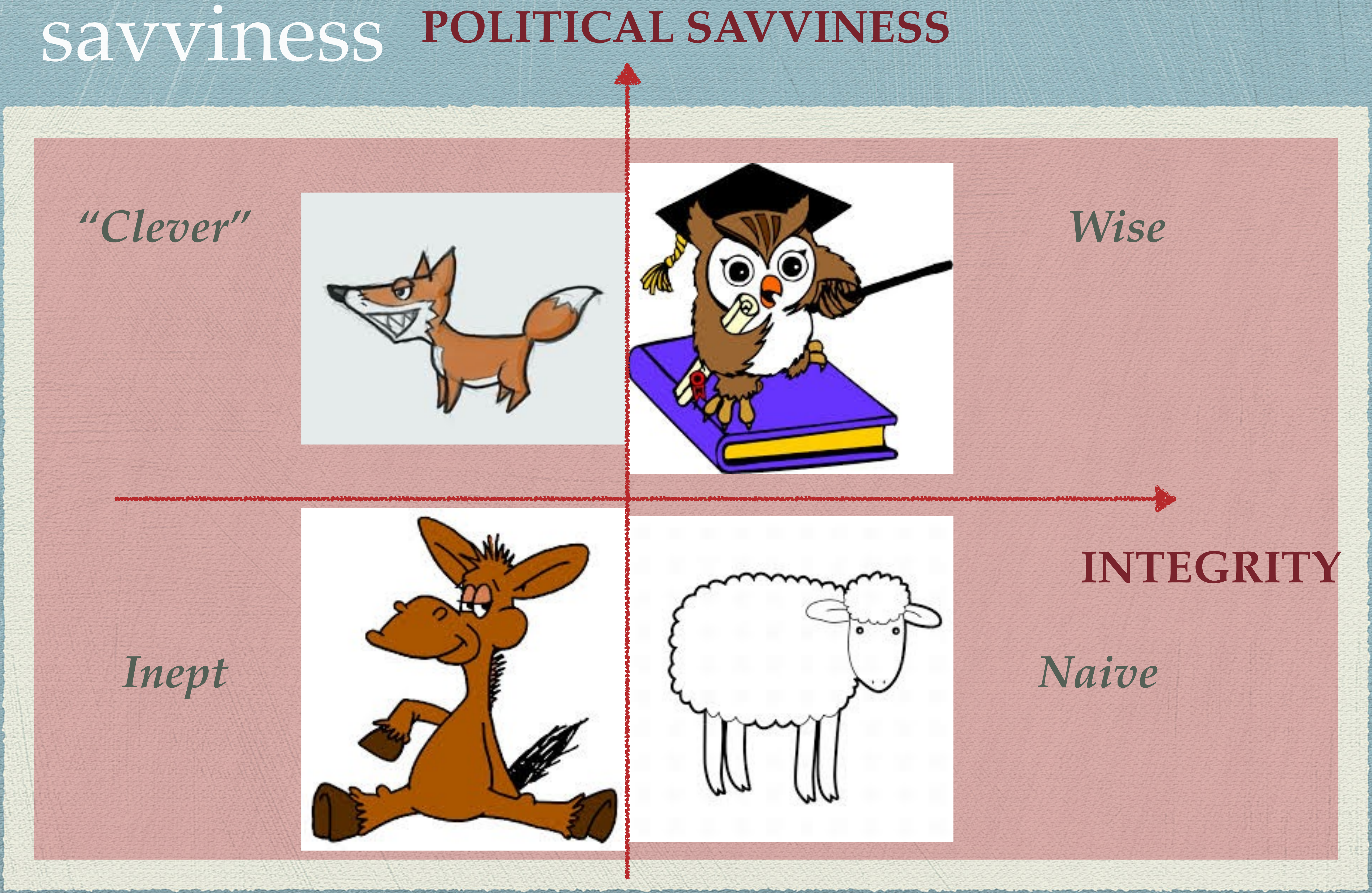
# The council exercise

- An interesting exercise.
- Everyone is good at solving problems when the problems are not their own.
- May be can solve our own problems by pretending we are not “ourselves”.

# Dr Ronit Kark's "network building"

- We were asked to draw our "network" on a piece of paper
- Strong links and weak links
- Networking is essential, not only for ourselves, but for the benefit of the students too

# A Prof Polly Parker's talk - Political savviness



# Ms. Jennifer Witheriff's talk

- Work-life balance
- Pie chart with "proportions" and "magnitudes"
  - proportions - how important each aspect of life is
  - magnitudes - how much do you want to improve on that

# About me

- PhD University of Melbourne (2001)
- Work experience
  - Post-doc CSIRO ( ~ mid 2002)
  - Post-doc University of Melbourne (~ end 2003)
  - Deakin 2004 ~ 2008 (Lecturer)
  - Deakin 2009 ~ now (Senior lecturer)

# Area of research

- **Combinatorial Optimisation**
    - Optimising w.r.t. one or more objectives
    - Given a set of constraints
    - *In English: Find the best way to do things*

# Health and Medical Computation

- **Radiotherapy** treatment planning (**2 CRGS;**  
  4 refereed journal articles; 1 ANZIAM best presentation) 

- **Medical imaging** related papers (**1 CRGS;**
  1 refereed journal article [medical journal]) 

- **Kidney exchange program** *work in progress*

- **Motion capture** data analysis (**1 ARC DP;** 
  2 conference papers; 1 technical report)

# Network Design

- **Wireless sensor network** architecture design
  - 3 journal articles; 1 CRGS

- **Telecommunications** network design

  - 6 journal articles; 1 ARC DP

# Routing and Logistics

- **Aircraft Rotation** (3 refereed journal articles; 1 top-10 downloaded papers; 1 student prize)

- **Machine Scheduling** (1 technical report)
- **Robotics Routing** (1 refereed conference article)
- **Vehicle Routing** (1 refereed journal article)

# Research Collaborations

- **Dr Andreas Ernst**, Computational Informatics, CSIRO
- **Dr Kerem Atartunali**, Univeristy of Strathclyde, Scotland
- **Prof Alex Schlaefer**, Institute of Medical Technology, Hamburg University of Technology
- Radiotherapy team, **Andrew Love Cancer Centre**, Barwon Health

## Presentation 4

**Dr Rebecca Lester** is a Senior Lecturer in the School of Life and Environmental Sciences. Rebecca completed a PhD at Monash University in 2007 in aquatic ecology and has since worked as a research fellow at Flinders University and CSIRO, before joining Deakin in 2011.

Rebecca's research focuses on the sustainable management of aquatic ecosystems, developing a scientific basis and tools to improve management of freshwater and estuarine ecosystems. This includes a focus on ecological modelling of those ecosystems, to predict the likely outcome from competing management scenarios including under climate change, the development of robust indicators and ecological restoration projects.

Current research projects include developing methods for predicting response to climate change in data-poor ecosystems, assessing ecological function in semi-arid aquatic ecosystems and red-listing threatened ecosystems.

Rebecca was also one of the three Deakin staff members nominated to attend a "Women in Research Leadership" course at the University of Queensland and highly recommends the course.

The course placed a strong emphasis on developing an individual leadership style, beginning with an understanding of yourself. Rebecca made the following points.

- Focus on strengths rather than eliminating weaknesses
- Consider your own values and the vision you have for the future – is there a clash?
- Leading using your own values and vision is not only more satisfying for you but also for your team.
- Satisfaction and dissatisfaction are not opposites but on different spectra. It is possible to have both of these things existing at the same time

The slide presentation from **Dr Rebecca Lester** which follows, gives more detail from the "Women in Research Leadership" course and also includes readings that were provided to participants before the course

# Women in Research Leadership: Personal experiences

**Rebecca Lester**

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# WIRL format

- Four-day intensive program
- Small group of academic women
  – specific to universities
- Facilitated by women in academia
  – guest presentations by women at UQ

# Objectives

- Increase awareness of the behaviours and attitudes that women often display that limit their leadership potential
- Identify personal values, strengths and a vision that together support and guide your leadership journey
- Increase political competence and awareness of the often subtle barriers and obstacles that women experience
- Meet and learn from high profile speakers and commentators from the tertiary education sector to improve understanding of leadership in context

# Objectives

- Hear personal stories of high achieving women researchers who have overcome significant hurdles to reach their goals
- Engage with presenters and guests in professional discussion to improve understanding of key imperatives for leadership and management in context.
- Develop groups to encourage peer mentoring and professional networks to gain a heightened understanding of the value of collaboration with peers and support networks.
- Formulate, prioritise and present a personal development plan.

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# Program

- Setting the context
  - Turning Points
- Women's challenges in leadership
- Values & vision
- Leadership through storytelling
- Recognising & building on strengths
- Talent, leadership & culture
- Personal leadership challenges
- Developmental networks
- Incorporating creativity
- Political saavy
- Building personal resilience
- Guest presentations
  - Australian context for research
  - Business of research
  - Strategies for women

# Program

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  - Strategies for women

# Values & vision

- What are your personal values?
  - consciously living the values
  - purposefully living the values
  - practising self-acceptance, self-responsibility, self-assertiveness & personal integrity

# Values & vision

- A vision is a simple, positive picture of an ideal future that you are committed to creating
  - visual
  - integrated & whole
  - touch the heart/ennoble the spirit
  - a dream that beckons
  - a reality that has not yet come about

# Leading using your values & vision

- Creating a leadership style based on your values & vision
  - Creates authenticity & empowerment
  - Enables team members to understand motivation
  - Creates predictability & transparency
  - Is more satisfying for a leader

# Recognising strengths

- There is no consistent formula for excellence
  - person- & context-specific
  - involves a unique set of characteristics & often a crisis point
- Focusing on eliminating negatives does not result in excellence
  - focus on positives & what goes right, rather than what goes wrong
- Understand & develop strengths
  - strengths are "underlying qualities that **energise us**, contribute to our **personal growth** and lead to **peak performance.**" (Brewerton & Brook, 2006)
  - find strengths personally & in your team

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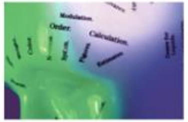
# Evidence

- Studies show
  - increases in employee engagement
  - greater productivity
  - higher customer loyalty and employee retention
  - higher performance

# Identifying strengths

## Compassion

You demonstrate a deep and genuine concern for the well-being and welfare of others



## Critical thinking

You approach problems and arguments by breaking them down systematically and evaluating them objectively

## Detail orientation

You pay attention to detail in order to produce high quality output, no matter what the pressures

## Efficiency

You take a well-ordered and methodical approach to tasks to achieve planned outcomes

## Empathy

You readily identify with other people's situations and can see things clearly from their perspective

## Enthusiasm

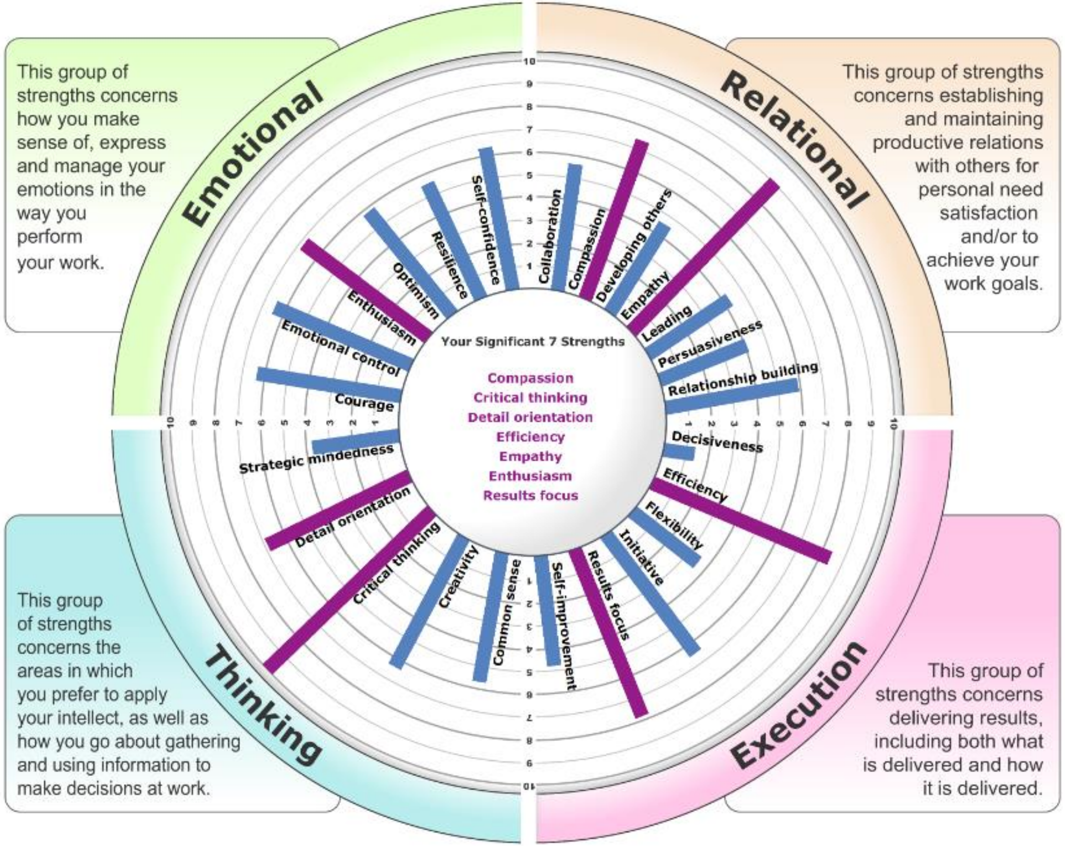
You demonstrate strong passion and energy when communicating goals, beliefs, interests or ideas you feel strongly about


## Results focus

You maintain a strong sense of focus on results, driving tasks and projects to completion

Source: Strengthscope

# Identifying strengths




Source: Strengthscope

# Acknowledgments


- Polly Parker, UQ & Jan Elsner, Positive Leadership Pty Ltd
- Other presenters at UQ
- SEBE for funding & time to attend
- WIRL participants


Photo: Sabrina Wong

# Women, research and universities: excellence without gender bias

July 2012

LERU
LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

Universiteit van Amsterdam • Universitat de Barcelona • University of Cambridge
University of Edinburgh • Albert-Ludwigs-Universität Freiburg • Université de Genève
Universität Heidelberg • Helsingin yliopisto (University of Helsinki) • Universiteit Leiden
KU Leuven • Imperial College London • University College London • Lunds universitet
Università degli Studi di Milano • Ludwig-Maximilians-Universität München • University of Oxford
Université Pierre et Marie Curie, Paris • Université Paris-Sud 11 • Université de Strasbourg
Universiteit Utrecht • Universität Zürich

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Katrien Maes, Chief Policy Officer of LERU
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Simone Buitendijk, Vice-Rector at the Universiteit Leiden
Ingalill Rahm Hallberg, Former Vice-Rector at Lunds universitet
Brigitte Mantilleri, Head of the Unit for Gender and Equality at the Université de Genève

The paper has benefited from extensive discussions in and comments from the LERU Gender Working Group. We also thank the LERU Research Policy Committee, the Rectors, LERU Communities and individuals who have provided valuable input for the paper.

# Women, research and universities: excellence without gender bias

## Executive summary

A powerful and internationally competitive research base is essential to ensure Europe's vitality; it in turn is dependent on Europe's capacity to attract and retain highly skilled and creative researchers. LERU (2010) has previously shown how universities and others can create and enhance attractive employment conditions, career perspectives and support for researchers- men and women. The present paper focuses on women in academia because more women than men drop out of research careers, resulting in an underrepresentation of women in leading positions, a loss of talent for society and a lack of diversity in the workplace, each of which presents a potential threat to the search for excellence in research.

While progress has been, and is being, made, in reducing gender inequality, change may come about slowly and is subject to significant variation according to country, research field and other factors. In examining the factors involved in gender inequality we highlight four well-known and -evidenced challenges regarding women in research. First of all, academia in Europe is still losing a considerable amount of its female research capacity. From the PhD (45% females) onwards, women drop out at successive turns and for various reasons, albeit with discipline-/country-specific exceptions. Only 13% of heads of higher education institutions in Europe are women.

Secondly, women progressing in an academic career may face (un)conscious bias against their qualifications as excellent researchers. Often relatively small or less obvious in individual cases of selection or promotion, at a group level or in the course of a career, the effects of bias become more significant. In other words, many mole hills together may become a large mountain.

Thirdly, there are financial considerations such as gender pay gaps, which manifest themselves in academe as they do in other labour sectors. It is important to note that on the whole women tend to receive less funding through research grants.

Fourthly, a different type of challenge is the lack of an appropriate gender dimension in research design, implemention and organisation. It can result in serious flaws with potentially harmful effects, e.g. in medical research, thus limiting scientific excellence, creativity and benefits to society.

Since there is abundant evidence to document these challenges, this position paper does not dwell on them extensively. Instead we aim to stimulate change: LERU universities commit themselves to undertake action, we examine what LERU and other universities can do to produce structural change and we share the experience of what LERU universities are doing to attract and support women in research careers.

Specifically, the LERU universities have decided to undertake a commitment:

- to promote gender diversity among their academic staff with strong leadership, in conformity with institutional, national and other regulatory frameworks and in partnership with the LERU universities.
- to develop or continue to implement Gender Equality Strategies and/or Action Plans, to share them and to jointly monitor their development and implementation.
- to engage with EU policy makers, funders and other actors to promote the cause of gender equality at universities.

Having analysed the specific challenges that women face in the course of their academic careers, we identify four priority areas in which universities can usefully undertake gender actions.

**A first priority for action is in the area of leadership, vision and strategy. We argue that:**

1. A strong commitment from the university's leadership should underpin all gender-related actions.
2. This commitment should be operationalised by a Gender Strategy (or Action Plan), which is often set within the wider realm of equality and diversity policy.
3. Universities should set up dedicated processes and structures to coordinate the Strategy or Plan and manage gender activities.
4. A commitment to gender should be backed up with the necessary funding. Funding considerations should aim at structural change, enable longer-term planning and consider attractiveness for researchers at all career stages.

**A second action area covers the types of measures universities can take to achieve structural change:**

5. Universities need to select the right mix of measures in accordance with their institutional and regulatory

situations and target these at certain career phases as needed.
6. Measures can be adopted as (usually) gender-specific career development measures and (usually) gender-neutral work-life balance measures.
7. Measures should be aimed at achieving structural change.

**A third imperative is for universities to consider how to implement and ensure effective uptake of measures taking into consideration that:**

8. Successful implementation requires transparency, accountability and monitoring of gender equality at universities.

**A final action area aims to address the lack of a gender dimension in research. We recommend that:**

9. Universities should actively promote and support a gender dimension in research, taking into account the specificities of particular research fields.

Universities need to be able to decide which mix of policy decisions, measures and processes best fulfills their needs in view of the institutions' overall strategies and national or other gender and diversity agendas. Since these vary widely across Europe, it is impossible to have identical goals or measures across all universities, even within such a similar group as LERU universities. One-size-fits-all solutions are in most cases inappropriate and unlikely to be successful. The appendix of this paper contains a wealth of examples of and references to LERU universities' policies and initiatives, which we share as a source of good practice and inspiration for universities and other interested parties.

Since universities' actions are in many cases regulated or influenced by governments and research funders, it is clear that our recommendations have implications for other actors and are in some cases dependent on their actions. Our recommendations to universities, funders, governments and publishers can be summarised as follows:

**Universities should:**

- Commit at the top and throughout the institution to gender equality.
- Develop or implement a Gender Strategy and/or Action Plan with the support of all divisions and levels within the university. It can be embedded in a broader Equality Strategy and should be managed professionally, possibly through a dedicated structure such as a Gender Equality Office.
- Aim to ensure sufficient funding for all gender equality activity. Funding structures should enable long-term planning of gender equality activity to achieve structural change.
- Select the right mix of gender-specific career development measures and gender-neutral work-life balance measures.
- Pay attention to transparency, accountability and monitoring to ensure successful implementation and improvement where needed.
- Promote and support a gender dimension in research, taking into account the specificities of particular research fields.

**Funders of research should:**

- Develop their own gender strategies or action plans.
- Consult regularly with universities on gender-related funding issues.
- Ensure selection boards are gender-sensitive.
- Promote or demand a gender dimension in research projects.
- Monitor the results of funding gender actions.
- Provide longer funding periods that make research careers more attractive.

**Governments should:**

- Consult regularly with universities about how to best attract and retain women in research careers.
- Avoid overly prescriptive or regulatory approaches, working instead with positive incentives.
- Collect, disseminate and learn from national and international good practice.
- Establish effective mechanisms for collecting gender-disaggregated statistics.
- Develop or maintain monitoring of gender policies, which requires gender-sensitive statistics on resource assignation, distribution of time and space, access to information, and other areas.
- Establish specific measures to evaluate and monitor actions aimed at achieving effective parity and equality in universities.

**Academic publishers should:**

- Ensure that an appropriate gender dimension in research is embedded in their science policies.

## Introduction - what and why of this paper

1. There has been a growing recognition that research acts as a powerful engine for developed countries' economic progress and innovative dynamism, that research universities in particular fulfil a crucial role in building or maintaining a country's research base and that the researchers trained and employed by these universities are a vital asset to modern societies. It follows that for research universities themselves attracting highly talented people from all over the world to train and work with them has become of utmost importance (LERU, 2010). However, academia in Europe is underutilising a significant part of its intellectual prowess and research capacity, namely that of women. LERU wishes to contribute the views of some of Europe's leading research universities on women in research careers. Our views are based on the understanding that there are both good economic as well as value-based arguments to underpin universities' gender actions, i.e. society cannot afford such a loss of talent and gender equality is an aspect of diversity and social justice. Importantly, we want to make the case that gender equality enhances the quality of and contributes to excellence in research.

2. In the paper we first take stock of the most important and well-documented evidence of gender inequalities and bias hindering women's research careers and of problems with the gender dimension in research itself. We then briefly consider the European research policy context on gender equality before turning our attention to four areas in which we suggest that university actions are crucial to eliminate gender inequalities and to advance women's careers in academia. We illustrate our proposals with examples of good practice from LERU universities. We also make a commitment as LERU universities to promote the cause of gender equality within our institutions, by working together within the network and by engaging as a network with other organisations, and we encourage other universities to consider our recommendations. Since the proposals we put forward are not an exclusive domain of competence for universities, we formulate recommendations for other stakeholders as well, including research funders and governments.

## Women in research careers and in science - what we already know

3. There is no dearth of studies giving evidence about gender inequalities and gender bias both in terms of women's careers in research and in terms of gender issues in the design and execution of research itself. Below we give a brief description of some of the most important elements of evidence-based gender inequality relevant to our paper. To be clear, progress has been, and is being, made. However, while inequality is being reduced, change is on average slow, patchy and subject to significant variation according to country, research field and other factors. Moreover, to measure or evidence change properly can be a complex and frustrating task. Nevertheless, the wealth of examples about new policies and changing practices at the LERU universities given at the end of this paper are testimony to the positive and substantial efforts being made.

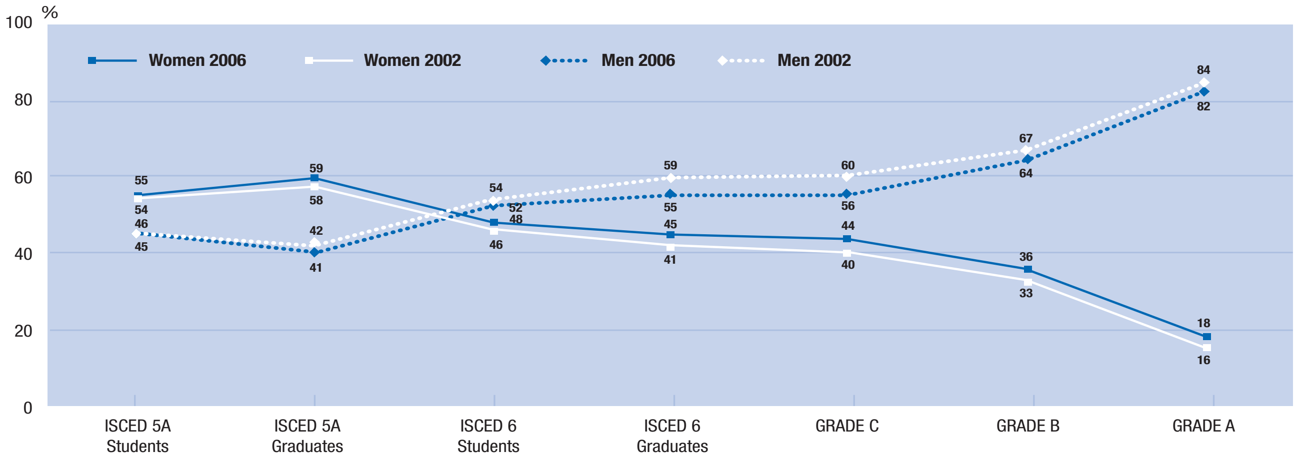
## Fact 1: The pipeline does leak.

**From the PhD onwards women drop out at various turns and for various reasons.**

4. Academia in Europe is still losing a considerable amount of its female intellectual capacity. Whereas the ratio between men and women is relatively balanced up to the doctorate[1], there is a significant decrease afterwards. According to the 2009 She Figures (EC, 2009a, p.72) women obtain 45% of PhD degrees, are in 44% of grade C positions, in 36% of grade B positions and in 18% of grade A positions, as illustrated in the graph below[2]. In addition, women represent only 13% of heads of institutions in the higher education sector. For all grade A academics at EU-27 level, women account for 23% among 35 to 44 year olds, 21% among 45 to 54 year olds, and 18% among those aged over 55 (EC, 2009a, p.73). The "leaky pipeline" thus begins in earnest after the PhD is completed and continues to play a role at every phase of a woman's career in research, albeit with slightly different causes and with particular characteristics along the way. This situation represents a large and unacceptable loss of human research capacity which needs targeted action to correct.

1 Before the doctoral phase, there are on average more women than men in BA and MA education, creating a "scissors effect" as illustrated in the graph.

2 With some variation among the European countries (cf. *She figures 2009 - Statistics and Indicators on Gender Equality in Science*, pp. 133-141), grade A academics are full professors, grade B academics are associate professors and senior researchers, grade C academics are assistant professors and post-docs.




Source: Education Statistics (Eurostat); WiS database (DG Research); Higher Education Authority for Ireland (Grade A)

***Definition of grades:***
*A: The single highest grade/post at which research is normally conducted.*
*B: Researchers working in positions not as senior as top position (A) but more senior than newly qualified PhD holders.*
*C: The first grade/post into which a newly qualified PhD graduate would normally be recruited.*
*ISCED 5A: Tertiary programmes to provide sufficient qualifications to enter into advanced research programmes & professions with high skills requirements.*
*ISCED 6: Tertiary programmes which lead to an advanced research qualification (PhD).*

5. There are important country- and research-field-specific variations. It may be the case, for example, that in the STEM disciplines (science, technology, engineering and mathematics) the pipeline (after the PhD) is relatively less leaky but the main problem is situated at the entrance point, which is a problem of convincing girls to undertake these studies and embark on a research career. In the humanities and social sciences on the other hand, it may be the case that the challenge is not so much one of attraction but of retention, so that this particular pipeline is relatively more leaky[3].

6. Clearly there is room for improvement. Given the excellent grades and high graduation rates of women students before and at the university, it is a huge waste not to use women's capabilities subsequently and in a sustained fashion all the way up to the top positions.

## Fact 2: Many mole hills become one mountain.

**Bias against women exists at many levels of their academic careers.**

7. Women on their way to the top in academia face biases against their qualifications as excellent researchers and scholars. Since most of these biases are relatively small, they are often not obvious in individual cases of selection or promotion. At an aggregated level and at a group level, however, they become easily apparent. In other words, many mole hills together become a large mountain.

8. Although there is evidence that male and female researchers do equally well under comparable circumstances and given equivalent resources, there are differences caused by the type of institution, teaching load (which is traditionally higher for women than for men), funding, and research assistance (Ceci and Williams, 2010). All these factors have an impact on research productivity and are thereby decisive for career prospects.

9. Many studies have been carried out into women's less-well represented position in science top leadership (NRC, 2010; EC, 2009c). A major factor is the definition of 'capable' in searches for academic leaders: the less transparent the definition is, the more likely men are chosen over women. Research shows that the lower the percentage of women on selection committees is and the less transparent the criteria for selection, the less likely women are to be appointed (EC, 2009c; Zinovyeva and Bagues, 2010).

3 In fields where female students are seriously overrepresented, universities may need to reflect on how to attract and retain more male students/researchers.

10. The large body of available experimental and observational research in this area shows that women are on average considered less capable science leaders than men. Therefore, they need to perform better to be judged equally qualified to men. Additionally, research has shown that qualitative assessment can be heavily gender biased. For example, recommendation letter writers tend to use stronger language of praise when describing men, rather than women (Sandström and Hällsten, 2008). A recent MIT report (2011, p.14) also points to bias against women appearing during search and hiring procedures stating that for women "the proportion [of a letter] devoted to intellectual brilliance compared to temperament is much less than for men". The report goes on to say "it is essential to describe clearly the need to eliminate bias, while at the same time emphasising that the same high standards of excellence apply to the hiring and promotion of men and women" (MIT, 2011, p.15).

11. Evidence suggests that academic assessment systems have traditionally ignored factors particularly affecting women. For instance, men tend to produce more publications and assessment protocols tend to value quantity over quality (EC, 2004; Trix and Psenka, 2003; Wenneras and Wold, 1997). On the other hand, the recently revamped system evaluating UK research, now called REF, explicitly allows for discounts in the number of publications relative to the time available, to cover circumstances such as career breaks, maternity and disability[4].

12. Recent empirical research based on professorial appointments shows that many mechanisms prevalent in recruitment and appointment practices of professors are disadvantageous to the careers of academic women (Van den Brink, 2011; Van den Brink and Benschop, 2011). Those mechanisms include "gate keeping"[5], academic networks that are predominantly male and the way in which scientific excellence is defined. The work by Van den Brink et al. challenges the view that the assessment of academic excellence and meritocracy are gender neutral and shows that gender bias exists in many types or phases of an academic career.

## Fact 3: Money talks.

**Gender pay gaps manifest themselves in academe as they do in other labour sectors and women receive less funding through research grants.**

13. The EU gender pay gap figures for public and private enterprise reveal slow progress in the EU-27, from a 17% pay gap in the group of 15 to 34 year olds, 28% among 35 to 44 year olds, to 38% among 45 to 54 year olds and a 37% pay gap in the group of 55 to 64 year olds (EC, 2009a, p.72). Even though the pay gap is becoming smaller at a faster speed for the younger generation, it still demonstrably exists, although all European countries have adopted laws for equal treatment and introduced monitoring of the implementation of these laws at institutions. There is no reason to assume that gender pay gaps at universities differ significantly from the prevalent comparable labour market. A report on gender pay gaps in Sweden, for example, reveals an unadjusted overall pay gap of 14.3% and 10.7% for state-run areas (which include higher education)[6].

14. In the European Research Council (ERC) frontier research funding programme women have so far received 26% of all grants in the starting grants competitions (2-12 years post-PhD), and 12% in the advanced grants (no "academic age" requirement) competitions covering a total of over 1,700 grantees in the first six calls. It is important to point out that these figures do not fully match the percentages of female applicants, which amount to 30% and 14%, respectively for the starting and advanced grants (EC, 2011c, p. 33), i.e. more women's than men's applications are unsuccessful. We welcome the ERC's intention to encourage "more top female researchers to apply for ERC grants" (ibidem) as a necessary step. According to the EC's FP7 2008 monitoring report, 35.4% of Marie Curie fellows were women and 20.7% of principal investigators in FP7 projects were women (EC, 2009b). For a national comparison, the Swiss funding council FNS for example awards between 30 and 40% of grants (depending on the type) to women, in Germany women receive on average 20.6% of grants (with a 21% applicant rate) from the DFG, with

4 The REF or Research Excellence Framework is the successor to the Research Assessment Exercise (RAE). See http://www.ref.ac.uk/

5 A gatekeeper is a person who controls access to research opportunities and makes important decisions, for example in relation to research funding or recruitment and promotion. Women tend to be underrepresented as gatekeepers in research (EC, 2011d).

6 Adjusted for age and other variables there is a 5.8% pay gap for state-run areas.

a range from 12.2 to 36.1% depending on the type of grant. Although the gap between women's application and success rates varies depending on the type of grant, research field and other factors, it is clear that in many cases there is room for improvement in both.

## Fact 4: There is a proven need for a gender dimension in research.

**An appropriate gender dimension in research design, implemention and organisation promotes creativity and excellence.**

**15.** Besides the three issues evidenced above, we also need to consider the way in which research itself is designed and carried out. Western science is not as neutral with respect to gender as it often appears to be. Many studies have shown that gender inequalities have influenced the outcomes of research on a large scale, particularly (but not only) in life sciences, which still often neglect women in research design (Institute of Medicine, 2010; Klinge, 2010; Wajcman, 2007; Bührer and Schraudner, 2006; Faulkner, 2006; Schiebinger, 1993; Harding, 1991)[7]. As a corollary, medical treatments for women are less evidence-based than for men (genSET, 2010; Buitendijk et al., 2010). 79% of animal studies published in the Journal of Pain over the past ten years included males only, with a mere 8% of studies on females only, and another 4% explicitly designed to test for sex differences (the rest did not specify) (EC, 2011d). A similar problem exists in AIDS research, where the majority of randomised clinical trials are being carried out on men, even though AIDS increasingly is a disease that affects women.

**16.** Editors of some peer-reviewed journals in the life sciences require analysis of sex and gender effects when selecting papers for publication (Heidari, 2012). The US Journal of the National Cancer Institute does it as a matter of "commitment to sound, scientific research": "where appropriate, clinical and epidemiological studies should be analysed to see if there is an effect of sex or any of the major ethnic groups". The Lancet (2011) recently encouraged researchers to take gender and ethnicity into account, making the point that "what women can do for medicine is one thing; what medicine can do for women is also important".

**17.** Next to research design, there is also the matter of research implementation, for which all the available evidence suggests that gender diverse teams function better in any field of science and scholarship. Clearly, the lack of an appropriate gender dimension in research limits scientific creativity, excellence and benefits to society. Gendered innovations aim to make research more responsive to the needs of the whole of society[8]. They aim to create gender excellence in research through building inclusive scholarly communities in which men and women contribute equally at all levels of decision making, policy and defining and carrying out research (Schiebinger and Schraudner, 2011).

## The EU research policy context

**18.** At the EU level the gender and women in research agenda has received recent attention because of its inclusion in the Commission's Communication on the "Innovation Union" (EC, 2010a), which describes one of the EU's initiatives to deliver the Europe 2020 Strategy for growth and jobs (the successor to the Lisbon Strategy)[9]. Of the 34 commitments laid out in the initiative, the first one states that "by the end of 2011, Member States should have strategies in place to train enough researchers to meet their national R&D targets and to promote attractive employment conditions in public research institutions. Gender and dual career considerations should be fully taken into account in these strategies". Member States were asked to submit their strategies to the Commission, with the latter taking stock of them and then suggesting specific actions. The EC is expected to announce concrete research careers and gender proposals in 2012 in the context of its efforts to deliver a more successful European Research Area (ERA)[10].

**19.** Through the Framework Programmes for research (FP) the EU supports actions in pursuit of cultural and

7 Part of the problem is that preclinical research uses primarily male animals.

8 See http://genderedinnovations.stanford.edu/what-is-gendered-innovations.html

9 More information on the Innovation Union is available at http://ec.europa.eu/research/innovation-union/index_en.cfm.

10 More information on ERA is given at http://ec.europa.eu/research/era/index_en.htm.

structural change in the way gender and diversity are managed in universities and research organisations. According to an EC report (2010b) the FPs have had varying success at making inroads for women in science. As the Commission is currently developing its next funding programme (called Horizon 2020, due to start in 2014), LERU is pleased to see that in the first proposals the EC is planning to include specific and cross-cutting gender actions aimed at removing barriers preventing women from pursuing successful scientific careers, at rectifying imbalances between women and men and at integrating a gender dimension in research and innovation programming, content and evaluation (EC, 2011a, 2011b).

**20.** Other EU-level reports, analyses and recommendations on women in science have been produced. For example, the EU-funded genSET project[11] has released a report (genSET, 2010) which includes a set of 13 recommendations focused on knowledge making, on human capital, on practices and processes and on regulation and compliance. Many of these recommendations are in line with LERU's views and recommendations formulated in this paper. Also ESF (2009) has produced recommendations on gender. The ERC Scientific Council adopted a Gender Equality Plan in December 2010 (EC, 2010c).

## Women and research careers: what universities can do to bring about change

**21.** In this section, we discuss four priority areas in which universities can most usefully take gender action. In the text we refer to good practice examples from LERU universities, all of which are listed in the appendix, and we formulate recommendations in each area. The four action areas fall under the headings of 1) commitment at the top, 2) fit-for-purpose HR management and implementation measures, 3) conditions to ensure successful implementation, and 4) the gender dimension in science.

**22.** It should be noted that one-size-fits-all solutions are inappropriate and unlikely to be successful. Universities need to be able to decide which mix of policy decisions, measures and processes best fulfills their needs in view of the institutions' overall strategies and national or other gender and diversity agendas. Since these vary widely across Europe, it is impossible to have identical goals or measures across all universities, even within such a similar group as LERU universities. The crucial element is that universities commit to a gender action plan, identify the most appropriate ways in which to accomplish the goals set out in the plan and devise effective processes that enable long-term planning (including budgetary planning), implementation and monitoring.

**23.** Since universities' actions are in many cases regulated or influenced by governments and research funders, it

### LERU universities' commitment

- The Rectors of LERU universities have committed themselves to promote gender diversity of their academic staff with strong leadership, in conformity with institutional, national and other regulatory frameworks and in partnership with the LERU universities.
- The LERU universities are willing to develop or continue to implement Gender Equality Strategies, to share them and to jointly monitor their development and implementation. Such monitoring may take the form of a regular comparison, benchmarking and mutual learning exercise among the LERU universities, looking for example at the effectiveness of the measures that universities take to implement the Strategies and the adequacy of the processes that are followed.
- LERU as a network is committed to engage with EU policy makers, funders and other actors to promote the cause of gender equality at universities.

11 See http://www.genderinscience.org/.

is clear that our recommendations have implications for other actors and are in some cases dependent on their actions. Therefore we also make recommendations to other stakeholders at the end of the paper.

## University action area 1

### Leadership

**24.** Progress on gender equality at universities is critically dependent on visible commitment from the top. It is crucial that the ultimate responsibility for achieving change is steadfastly shouldered by the university's highest leadership and that those responsible for implementing policy throughout the university have direct access to and leverage with the university rector and/or vice-rector with a specific responsibility for gender/equality.

### A Gender Strategy

**25.** Most, if not all, LERU universities, have a gender equality policy, which is often part of a broader equality and diversity policy. It is important that the university leadership commits to operationalising its gender equality policy, for instance by developing a Gender Strategy (or Action Plan) in line with institutional practice. Sections I and II of the appendix contain more information on and links to LERU universities' institutional commitment and Gender Strategies. A Gender Strategy should be developed with key stakeholders, widely communicated, and embedded in operational practice. It may be mandated, recommended or endorsed by national or other authorities. A university's Gender Strategy should include:

- measurable or quantifiable goals to be reached within specific time limits and leading to improvements along the entire career spectrum, not only in leading positions,
- a clear plan for their implementation, and
- a transparent monitoring system.

**26.** It is important that Gender Strategies be co-designed, decided and monitored by the units responsible for their implementation, e.g. divisions, faculties and departments. Such units have a decisive role to play in making structure and development plans successful, covering for example recruitment of professorships.

**27.** In evaluating Gender Strategies and their implementation, universities should pay special attention to the relation between equality measures and the level of research quality, to be measured for instance by high-profile publications and research grants. The results of this evaluation must have consequences for future strategic planning, including the possibility of targeted research.

**28.** All university panels, committees and boards, as well as research teams, should be gender diverse[12].

**29.** Awareness, understanding and appreciation of gender mainstreaming should be present and well-integrated across all levels of the university, for example through training opportunities or by other means.

### Institutional structure

**30.** The responsibility for gender equality can be organised in different ways within the university depending on its structure and needs. One option, adopted by

## University action area 1

- A strong commitment from the university's leadership should underpin all gender-related actions.
- This commitment should be operationalised by a Gender Strategy (or Action Plan), which is often set within the wider realm of equality and diversity policy.
- Universities should set up dedicated processes and structures to coordinate the Strategy and manage gender activities.
- A commitment to gender should be backed up with the necessary funding. Funding considerations should aim at structural change, enable longer-term planning and consider attractiveness for researchers at all career stages.

12 30-40% female representation is often mentioned as a tipping point for change, although it is impossible to make this a rule applying in all cases.

most LERU universities, is to set up a dedicated structure, such as a Gender Equality (or Equal Opportunity) Office, which can support the university leadership, heads of divisions, research team leaders, and women with professional advice and management. A few universities do not have a specific gender/diversity office but rather embed equality within all university management structures, attributing specialist responsibility to some areas, e.g. HR or student policy, and general responsibility to all managers at all levels. At those LERU universities which have well-established Equality Officers and Offices, functions have usually grown from the level of assisting individual staff members in matters of work-life balance and discrimination at the work place to encompass also the structural levels of gender mainstreaming and Gender Equality Strategies. Universities are increasingly treating gender as a dimension of diversity and both are usually assigned to the functions of Equal Opportunity Office(r)s. It is important that Equal Opportunity Office(r)s are directly involved in the implementation and monitoring of Equal Opportunity Strategies, whereas the university leadership takes the responsibility for their conception and evaluation. Links to Gender Equality Offices at LERU universities are given in section III of the appendix.

31. LERU recommends that universities carefully examine their internal structures and processes for implementing Gender Strategies, ensuring that Equal Opportunity Offices, for example, are appropriately resourced for the long term, adequately staffed and have a high enough institutional profile to fulfil the roles assigned to them. It is also imperative to reserve resources for incentives in the realm of gender equality, to be awarded by university commissions with participation of Equal Opportunity Officer(s).

**Funding**

32. The acquisition of research funding is a central aspect of a research career. In early-career stages, the small number of permanent positions at universities often means that external research funding determines whether an academic career can be further pursued or not, until the researcher obtains a permanent position. In general, acquired funding is also regarded as an indicator of someone's scientific reputation and value in the scientific community, which may be particularly important in appointment and promotion procedures.

33. There is not enough funding available to the university sector as a whole to maintain and promote the required numbers of researchers. There are critical bottlenecks in available support for mid-career research positions in particular, and the systemic nature of the funding challenge for university research careers is evident at the national and European levels. Periods of uncertainty between projects, on/off teaching contracts and other measures that amount to "financial gymnastics" for the individual researcher are a fact of academic life for a decade or more after obtaining the doctoral title in many national systems (LERU, 2010). This is where the need for an equality-oriented examination of the structures governing research and other academic funding on the European level comes in. Specifically, better career prospects for the mid-career stage following the PhD are needed.

34. It is essential to generate more research applications from female researchers, especially at the stage of post-doc or equivalent positions. One option is for universities to make available flexible funding for a short period of time in order to stimulate (early-stage) female researchers to apply for grants. Such funding can be open specifically to female applicants as long as women continue to be underrepresented amongst applicants for external funding. If this is not an option, because of legislation or institutional governance, universities might focus on coaching and support programmes and on ensuring a sufficient involvement of women in selection committees.

35. It should be kept in mind that in making funding decisions universities are driven by their wish to provide attractive careers for researchers in the face of global competition for talent from within and outside of academia. This should take into account different needs at different stages of research careers.

36. To sum up, universities should strive to make available funding to sustain their commitment to gender equality and the development of gender equality actions with a long horizon.

37. A few funding aspects are highlighted in section IV of the appendix and many good practice examples in the other sections are linked to the issue of funding.

### University action area 2

38. There are two types of measures which are of crucial importance to help women embark on and successfully negotiate the maze of an academic career: 1) (usually) gender-specific career development measures, and 2) (usually) gender-neutral measures to achieve good work-life balance conditions that benefit all researchers/all staff. Each of these are briefly discussed below; in sections V and VI of the appendix more details and links to webpages illustrating current practice at LERU universities are given.

**Gender-specific career development measures**

39. In terms of supporting measures for female researchers, there are various types of effective measures. One example are funding programmes to award stipends for so-called 'protected time' freeing grantees from certain responsibilities and allowing them to focus on research in order to achieve a specific scholarly goal (e.g. a high impact publication or a competitive research grant).

40. Mentoring and training programmes can be offered in various formats to suit the needs of particular cohorts or individuals.

41. In addition, it may be useful in certain cases to allow gender mainstreaming as a secondary criterion, which would be considered if by the primary criterion of quality the percentage of female grantees were significantly below the percentage of female applicants. In such cases a renewed discussion of the criteria for quality can help raise or reinforce awareness about possible bias. This type of awareness with committees and with young female researchers can by itself be effective in eliminating unconscious bias and in changing attitudes without resorting to targets or quotas and without compromising excellence.

42. At the middle stages of their careers women scholars often publish less than their male colleagues due to maternity leave for instance. In order to assess scholarly achievements appropriately, publication quantity should be weighed against quality. Universities can decide, for example, to consider only a subset of best publications in evaluations. Ideally, assessment procedures should be gender-neutral, but this is not always practicable. For example, for leading positions other characteristics of CVs (e.g. career breaks and international experience) are evaluated as well, some of which (most prominently career breaks) cannot be judged properly without reference to gender.

43. Universities may offer incentives such as support grants to prepare applications for research funding; this can be particularly helpful for prestigious grants such as the ERC and similar national funding agencies. In addition, there should be (if possible, discipline-specific) administrative help to assist with the preparation of projects and project management on a gender-neutral basis, but beneficial to those female researchers who have less experience in these matters.

**Gender-neutral work-life balance measures**

44. A second category of measures are gender-neutral measures to achieve good work-life balance conditions that benefit all researchers/all staff, such as provisions for flexible working hours while children are small, dual-career options, supporting measures during maternity or parental leaves, child-care options, and infrastructural and financial measures to support researchers with children who plan an international research trip. In addition to child care, elder care is often a consideration for mid-career researchers.

45. Dual career programmes, which offer or help find jobs for partners of scholars either at the university or through connections with business or industry, can be

### University action area 2

- Universities need to select the right mix of measures in accordance with their institutional and regulatory situations and target these at certain career phases as needed.
- Measures can be adopted as (usually) gender-specific career development measures and (usually) gender-neutral work-life balance measures.
- Measures should be aimed at achieving structural change.

helpful towards a better work-life balance. It is crucial that such measures are well designed, well implemented and well monitored so that they bring actual benefit to women scholars.

**46.** Working conditions are favourable to work-life balance if meetings and extracurricular obligations outside of regular working hours are kept to a minimum and the option of flexible working hours and working spaces is offered under fully transparent conditions.

**47.** Career breaks hamper researchers most on their way to top positions. It is therefore important to undertake clear planning during and beyond important career breaks such as maternity/parental leave and to involve the home institution as an active partner in this planning. In addition, it proves helpful to offer flexible funding for assistance to the researcher on return from maternity/parental leave and thus ensure that the research is continued.

**48.** Sufficient child care provisions are essential for combining career and family obligations. Next to regular child care provisions, flexible hours should be introduced as needed. Also flexible ad-hoc care (e.g. when the usual care-taker is ill) can be of great help, as well as special assistance offered to visiting scholars in order to help adjust their children to the host culture.

**49.** International mobility and visibility are decisive criteria for higher university positions. It is important that infrastructural and financial measures be put in place to financially support researchers who plan an international research trip or conference and require child-minding assistance or financial help for children travelling.

**50.** It should be stressed that child/elder care and assistance for family-related breaks are gender-neutral measures intended to improve work-life balance for both men and women. Gender-neutral family policies that benefit all academic staff can encourage men and women to share caring responsibilities. Responding to changing societal circumstances, universities can play their part by actively involving staff in questions of work-life balance and family-friendly working conditions, which will in turn have a positive effect on gender equality.

**51.** The exact mix of career development and work-life balance measures will depend on the institution's Gender Strategy and/or Action Plan and on its regulatory framework. Moreover, it should be noted that different measures are useful at different stages of a researcher's career. Some of the measures above are particularly important in the early career phases (e.g. stages 1 and 2 in the LERU framework for research careers in LERU (2010)), while at more advanced career stages, the institutional organisation becomes increasingly relevant. For example, the few women holding prominent positions often spend a disproportionate amount of time participating in committees and panels. If such involvement constrains their research and/or teaching too much, there should be support mechanisms to avoid disadvantaging them against male colleagues[13].

**52.** In the MIT report (2011) mentioned above the School of Engineering recommends a system of "yearly monitoring of teaching, committees and service of all faculty" (p.26) in order to avoid overburdening women. Clearly, there should be a reasonable gender balance in terms of research, teaching and service duties that make up most academics' job responsibilities.

### University action area 3

**53.** Transparency, accountability and monitoring are framework conditions to ensure successful implementation of gender equality policies and strategies. Good practice from LERU universities is provided in sections I, VII and VIII of the appendix.

## University action area 3

- Successful implementation requires transparency, accountability and monitoring of gender equality at universities.

13 This is number nine of the 13 recommendations made by genSET (cf. http://www.genderinscience.org/downloads/genSET_Leaflet_with_recommendations.pdf)

**Transparency**

54. To successfully implement Gender Strategies, it is very important for universities to strive for full transparency. Measures taken and processes followed should be clearly and openly defined, described and communicated. This includes, for instance, open and gender-transparent procedures for recruiting researchers, gender transparency in appointing members of boards, panels and committees across all layers of the university and gender transparency about the division of resources within the university.

55. University positions and other resources should be advertised well in advance and all relevant criteria should be mentioned at the outset. It must be clear by which criteria decisions will be made and criteria should be decided independently of individual candidates. As stated above, evaluation criteria for filling positions should be designed with a stronger focus on quality and innovative potential than on quantity. Although we would wish to maintain that there is a level of creativity and excellence which does not depend on gender, there are many secondary indicators of quality which are gender-specific and should be assessed as such. In addition, special effort is needed to find sufficient numbers of qualified female candidates who should be personally encouraged to apply for positions or explicitly nominated for academic prizes.

**Accountability**

56. As stated in the section above, responsibility for gender action at universities starts at the top, but should also be distributed throughout the organisation's multiple layers and structures. It is imperative that those who are responsible at a certain level have both the power and the accountability to ensure that actions reach the desired objectives. Gender equality offices can help to ensure that appropriate levels of accountability are built in. For example, gender equality officers can be present in board, committee and panel meetings where gender aspects are relevant to make sure that gender-related processes are followed.

**Monitoring**

57. Monitoring has been shown to be an effective measure to ensure successful implementation of gender equality policies and strategies. Universities should have gender-specific statistics about the division of all resources and the developments should be monitored and acted upon. It is important to disaggregate gender ratio figures by research fields and to investigate and address the causes of such imbalances. Gender-specific pay-gaps (where they exist) should be monitored, the causes investigated and acted upon if there are inequalities, with consequences for future policies, the responsibility for which lies with university management.

### University action area 4

58. Researchers participating in the evaluation of research, whether it takes place within the university or externally, for instance in their capacity as reviewers on research funding boards or as editors for journals and other publications, should be aware of the need for a gender dimension in certain research fields.

59. It is essential to take into consideration the specificities of different research fields in this regard. Gender-responsive science is important in a wide range of research areas, from law, to social sciences, history or even geography. In life sciences it is of utmost importance because of direct consequences of research for medical treatment (cf. paragraph 15).

60. Universities can help by raising awareness among all the researchers they employ by various means, from publications to workshops and so on. Awareness raising and communication play an important part in helping to ensure an appropriate gender dimension in research and innovation. Some good practice is given in sections IX and X of the appendix.

61. LERU recommends that gendered-sensitive research should be an integral part of universities' Gender Strategies.

### University action area 4: a gender dimension in research

- Universities should actively promote and support a gender dimension in science, taking into account the specificities of particular research fields.

## What other stakeholders can do to bring about change

**62.** Not only universities, but other stakeholders as well should make a firm commitment to gender action.

### Research funders

**63.** Research funders can develop their own gender action plans stipulating goals, implementation schemes and monitoring actions. Since most of Europe's researchers are trained at and employed by universities, research funders should regularly consult with universities about how to best attract and retain women in research careers. The existing gender and work-life-balance financial measures offered to grantees by research funders should be monitored concerning their accessibility and effectiveness and if needed revised.

**64.** In particular, it is crucial that funders' selection boards are gender-sensitive in their composition and trained to eliminate possible hidden or unconscious gender bias.

**65.** Moreover, research funders can promote or demand a gender dimension as a criterion for funding. This can happen by ensuring gendered research is part of the research design if applicable in the life, social sciences and the humanities, or by promoting or demanding appropriate gender action plans as part of the implementation strategy for projects, all of which should respond to particular needs or be appropriate for the circumstances[14]. Gendered research should be encouraged in all funding programmes without jeopardising any criteria for excellence.

**66.** Finally, funding schemes should be sustainable, providing longer funding periods, thus adding a degree of planning and stability to benefit both the individual researcher and the university that employs her (or him).

**67.** Finally, it needs to be kept in mind that research field- or discipline-related issues play a role as well. Women are relatively overrepresented in the less generously funded social sciences and humanities (SSH) areas and underrepresented in the physical and life sciences and engineering fields, which tend to have more grant opportunities and larger grants. These factors aggravate funding challenges for women researchers[15].

**68.** LERU welcomes the European Commission's commitment to include specific and cross-cutting actions in the new EU funding programme Horizon 2020 aimed at removing barriers preventing women from pursuing successful scientific careers, at rectifying imbalances between women and men and at integrating a gender dimension in research and innovation programming, content and evaluation (EC, 2011a, 2011b). It is very important to LERU universities that both the application and success rates of women in fields where women are underrepresented are increased in H2020, that gendered statistics are collected and communicated in H2020 and that the impact of H2020 gender actions is monitored. LERU is ready to discuss with the Commission how the suggestions above can be taken up in H2020.

### Governments and policy makers

**69.** Governments at the national or regional level usually determine overall research and gender policies and may employ university staff as civil servants. In developing or implementing gender policies they should regularly consult with universities about how to best attract and retain women in research careers.

**70.** In defining the general policy framework, governments should respect the autonomy of universities, avoid taking overly prescriptive and regulatory approaches and work as much as possible with positive incentives that are aimed at supporting excellent people and producing high quality research. Governments can collect, disseminate and learn from examples of good practice, nationally and especially internationally.

**71.** LERU welcomes the inclusion of gender in the EU's

14 In the UK, for example, the Chief Medical Officer, Professor Dame Sally C Davies, announced her intention in 2011 that all medical schools wishing to apply for NIHR Biomedical Research Centres and Units funding should have achieved an Athena Swan for women in science Silver Award. See http://www.athenaswan.org.uk. See also the Royal Society of Edinburgh report *Tapping all our talents*, http://www.rse.org.uk/cms/files/advice-papers/inquiry/women_in_stem/tapping_talents.pdf

15 For example, in the ERC 2011 Starting Grant competition, SSH represented 18.6% of selected proposals (vs 35.2% life sciences, 46.2% physical sciences and engineering) and the success rate is lower (9.3% in SSH vs 11.73% in LS and 13.13% in PE. The figures are similar in the 2011 Advanced

plans to achieve a true European Research Area (ERA) and has thus responded positively in the LERU response to the Commission's consultation on the future of ERA (LERU, 2011). Adamant to do our part in making tangible progress on ERA, LERU is committed to reach an agreement with EU policy makers on a number of deliverables in the area of attractive research careers for women and men.

**Academic publishers**

**72.** Publishers of academic journals, books, etc. should take care to adopt gender-responsive science policies when considering the publication of research results.

**73.** Publishers of academic journals, books, etc. should ensure a more gender-balanced composition of editorial boards and reviewers. These (gender) diverse teams should lead to more diverse ideas and thus increase scientific excellence. It should be kept in mind that adopting policies which promote a gender dimension in research is possible without jeopardising the criteria of excellence.

## Conclusion

**74.** Universities play an important role in the transformation of societies as they contribute to social, economic, cultural and political change. Gender is a self-evident aspect of societal diversity and is as such a major source of creativity, exploration, discovery and innovation acting as an important factor in quality. From a larger societal perspective, a balanced gender representation contributes to excellence in research, positively influences research outcomes and impact, and promotes the acceptance of scientific insights, thereby reaffirming the credibility of universities and strengthening their societal role.

**75.** Universities are home to the majority of aspiring and practising researchers and as such play a crucial role in ensuring that research careers are attractive to women and men. Taking into account what we already know about persistent gender inequalities and gender bias impacting negatively on women's careers in research (paragraphs 3-17), universities have a distinct responsibility to make sure that they attract female students and scholars into their communities and that they can offer choices and support that will help women remain in an academic research career. Universities that are successful in achieving a gender-balanced work force will be well placed to face the challenges of the 21st century. Those that aren't successful risk losing scientific prowess as well as societal acceptance.

**76.** In this paper we have proposed four areas for action which we believe are crucial for universities to consider in order to eliminate gender inequalities and to advance women's careers in academia (paragraphs 21-63). These action areas call for:

- A strong commitment from the university leadership to gender equality and well-funded, long-horizon operalisation;
- Implementation of a gender/diversity strategy through a strategic choice of gender-specific career development measures and gender-neutral work-life balance measures aimed at structural change;
- A commitment to transparency, accountability and monitoring of gender equality in search of continual improvement;
- The promotion of a gender dimension in research across the university.

We make a collective commitment as LERU universities to promote the cause of gender equality within our institutions, by working together within the network and by engaging as a network with other organisations, and we encourage other universities to consider our recommendations. We have illustrated our arguments with examples of good practice showing what LERU universities are already doing to affect change (in appendix).

**77.** Responsibility to gender equality cannot be borne by universities and research institutions alone. Research funders in the public and private domain, local and EU governments and policy-making bodies each share an important part of the responsibility as they define frameworks and regulations. They must work actively, individually and collectively, to ensure that Europe continues to attract, train and retain talented women (and men) into research.

## Summary of recommendations

**Universities should:**

- Commit at the top and throughout the institution to gender equality.
- Develop or implement a Gender Strategy (or actions on gender within a broader Equality Strategy) with the support of all divisions and levels within the university and managed professionally, for instance, through a dedicated structure such as a Gender Equality Office.
- Aim to ensure sufficient funding for all gender equality activity. Funding structures should enable long-term planning of gender equality activity to achieve structural change.
- Select the right mix of gender-specific career development measures and gender-neutral work-life balance measures.
- Pay attention to transparency, accountability and monitoring to ensure successful implementation and improvement where needed.
- Promote and support a gender dimension in research, taking into account the specificities of particular research fields.

**Funders of research should:**

- Develop their own gender strategies or action plans.
- Consult regularly with universities on gender-related funding issues.
- Ensure selection boards are gender-sensitive.
- Promote or demand a gender dimension in research projects.
- Monitor the results of funding gender actions.
- Provide longer funding periods that make research careers more attractive.

**Governments should:**

- Consult regularly with universities about how to best attract and retain women in research careers.
- Avoid overly prescriptive or regulatory approaches, working instead with positive incentives.
- Collect, disseminate and learn from national and international good practice.
- Establish effective mechanisms for collecting gender-disaggregated statistics.
- Develop or maintain monitoring of gender policies, which requires gender-sensitive statistics on resource assignation, distribution of time and space, access to information, and other areas.
- Establish specific measures to evaluate and monitor actions aimed at achieving effective parity and equality in universities.

**Academic publishers should:**

- Ensure that an appropriate gender dimension in research is embedded in their science policies.

# Appendix: New policies and changing practices at LERU universities

## I. Leadership commitment, institutional policy/organisation and accountability

Most to all LERU universities have a gender equality policy, equality commissions or officers who report directly to the highest leadership. See for example:

Gender equality policy:
Oxford University - http://www.admin.ox.ac.uk/eop/gender

Charter 'Talent to the Top' at the Universiteit Leiden:
http://medewerkers.leidenuniv.nl/p-en-o/diversiteit/talent-naar-de-top.html

Gender equality champion and gender equality group at the University of Cambridge:
http://www.admin.cam.ac.uk/offices/hr/equality/cambridge/champions/
http://www.admin.cam.ac.uk/offices/hr/equality/cambridge/gender/

Gender equality champions on senior management and the governing body at University College London:
http://www.ucl.ac.uk/hr/equalities/corporate/champions.php

Committees and review groups at Imperial College - http://www3.imperial.ac.uk/hr/equality/committees

The University of Oxford has a Pro-Vice Chancellor (Personnel and Equality) reporting directly to the Vice Chancellor, and has recently established a high level 'Equality and Diversity Panel' to advise and support its decision-making bodies.The University of Edinburgh has a Vice-Principal Equality and Diversity reporting directly to the Principal on gender equality matters, and has included the promotion of equality in its Strategic Plan 2008-12. A Strategic Theme of "Promoting Equality, Diversity, Sustainability and Social Responsibility" directs its approach to achieving its strategic goals and there are specific targets relating to gender equality.

In 2008 the Rectorate of the Albert-Ludwigs-Universität Freiburg declared equal opportunity and diversity as central strategic tasks for the university. This resulted in (1) a new governance structure that integrates all relevant strategic and operational actors and units, (2) internal and external strategic and data benchmarking, (3) the optimisation and diversification of work conditions and support services in order to increase competitiveness, (4) the establishment of transparent, structured, and formalised procedures. These measures are based on the "Research-Oriented Equal Opportunity Standards" of the German Research Foundation (DFG). The 2011 progress report concerning their implementation can be found at: http://www.gleichstellung.uni-freiburg.de/dokumente/dfg-progress-report-2011-en.pdf

The Université de Genève has included the principle of equality both in its "Strategic Plan Vision for 2020" as in its "Objectives Convention". A rule of preference is also included in the university's HR regulations. There is a grievance procedure for employees with who feel this rule has been violated. This right, which has existed for many years, underlies the work of the Delegation for Equality. The Delegation is composed of five professors and chaired by a vice-rector, who follow each nomination procedure at professorial level to assure equality is respected. A report is made based on the procedure and sent to the Rectorate. The Equality Office is responsible for organising the functioning of the Delegation. The Equality Commission is brought to the level of the faculties by the equality commission for the faculties.

At the KU Leuven a Vice-Rector Diversity is appointed to administer diversity policy throughout the university, together with the staff members of the Diversity Office. A Diversity Board, with representatives from the Executive Board, the faculties, central services, members of the Diversity Office and experts, is also appointed to debate and decide on diversity issues, including gender. Diversity Teams are implemented in all faculties and central services. Diversity is one of the main priorities of the KU Leuven. http://www.kuleuven.be/diversiteit/beleid/index.html

At the Université de Strasbourg the Equality-Diversity Office (la mission Egalités-Diversité) is directly linked with the university's first vice president. The mission interacts with the governing board, the board of trustees, the university's services and the university's faculties to analyse given gender issues and to introduce gender action plans for teaching and research staff, as well as administrative and technical staff. In addition to the mission's interactions with the university leadership and board of trustees, university staff can directly submit a case of gender inequality to the Equality-Diversity Office, which can lead to a change in the university's regulations decided by the board of trustees. http://www.unistra.fr/index.php?id=2971

At the Université Paris-Sud gender- and diversity-equality issues are discussed and dealt with by the Technical Committee. It is composed of University staff representatives, members of administration offices, and it is chaired by the President of the University.
http://www.u-psud.fr/fr/l_universite/organisation_generale/comites-et-commissions/ct.html

Often the central equality commission has (sub)commissions in all faculties. This is the case, for example, at the Universitat de Barcelona, where the faculty commissions are composed of teaching and research staff, administrative staff and students, who are appointed by the governing boards of each faculty. The commission chairs are, in turn, members of the university's equality commission chaired by the person responsible for the equality office which identifies, for example, the key equality policies and objectives to be implemented. The function of the faculty commissions is to apply certain aspects of the equality plan and assess its effective implementation in their respective centres. Since the establishment of these commissions, the number of initiatives and the dissemination of activities have multiplied raising awareness on gender issues in the whole university community. http://www.ub.edu/genere/

Gender equality officers can be present in all meetings of boards, committees and panels where gender aspects are relevant to make sure that gender-related processes are followed. At LMU München, for example, the participation of a women's representative in appointment negotiations is determined by Bavarian law At many LERU uni-versities (Heidelberg, LMU, etc.) the university women's representative has voting power in the university executive board concerning decisions on gender equality.

The Universität Zürich has a Code of Conduct Gender Policy, which contains the official gender policy of the university board. The Code commits the Universität Zürich to the balanced representation of both genders in all functions and committees at the university. Coupled with the Code is an annual monitoring report (see below "Monitoring"), containing gender statistics on all personnel categories and degrees awarded. Moreover, the university Board instigates a biannual evaluation of the Code's implementation. http://www.uzh.ch/about/basics/genderpolicy_en.html

The UK LERU universities are members of the Athena SWAN Charter for women in Science, Engineering and Technology (SET). This scheme recognises universities and departments with Gold, Silver and Bronze awards for developing and implementing good policies. See for example:
http://www.admin.cam.ac.uk/offices/hr/equality/wiseti/swan/
http://www.ed.ac.uk/equality-diversity/innovation-development/athena-swan
http://www3.imperial.ac.uk/equality/staffnetworksandcommittees/academicopportunitiescommittee/athenaswan
http://www.ucl.ac.uk/hr/equalities/gender/athena_swan.php
http://www.admin.ox.ac.uk/eop/gender/athenaswan/

The University of Oxford, for example, has set up web pages dedicated to the Athena initiative and all its science and medical sciences departments have made a strategic commitment to achieving an Athena Silver award.

L'Università degli Studi di Milano has crash courses on equal opportunities and gender stereotypes in science for top management (targeting the Faculty of Agriculture and Faculty of Medicine).

LMU München has implemented a workshop series on issues concerning gender mainstreaming and diversity management. The first event on "women in science" was attended by the university governing board, deans and LMU scientists. Future events will focus on other aspects of equality in order to raise awareness among the university's members.

Since 2008 the Universitat de Barcelona has included in its Els Juliols summer courses a special edition on Women's Summer University (UED), which provides training in gender-related studies. These courses, jointly organised by the City Council of Cornella Llobregat, are open to both students and the general public.

At the Universität Heidelberg a gender element is applied to all topics in the training programmes which are open to all staff. Gender is an independent topic as well as part of trainings with regard to rhetoric or financial responsibility.

## II. Gender Strategies

Many LERU universities have or are developing Gender Strategies or Plans. Sometimes they are embedded in diversity strategies (e.g. Cambridge, Edinburgh). In some universities faculties develop their own plans for eliminating gender bias which are binding and signed by the Deans. See, for example:

- Universitat de Barcelona - http://www.ub.edu/genere/docs/pla_igualtat_en.pdf
- University of Cambridge - http://www.admin.cam.ac.uk/offices/hr/equality/cambridge/scheme/
- University of Edinburgh - http://www.ed.ac.uk/schools-departments/equality-diversity/about/strategy-action-plan
- Albert-Ludwigs-Universität Freiburg - http://www.gleichstellung.uni-freiburg.de/dokumente/equal-opportunity-plan.pdf An encompassing Equal Opportunity Plan was adopted in 2009, with goals and measures to be fulfilled by 2014 at the central university as well as the faculty level. The Plan was complemented and substantiated in 2011 by the new Code of Practice for Professional Appointments, which systematically includes gender equality aspects and incentives in appointment processes:
- Universität Heidelberg - http://www.uni-heidelberg.de/gleichstellungsbeauftragte/aktivitaeten/gleichstellungskonzept.html
- University of Oxford - http://www.admin.ox.ac.uk/eop/gender

The Université de Strasbourg organises staff training on gender and stereotype issues in order to familiarise teaching and research staff, as well as administrative and technical staff with the university gender action plan.

The Gender Equality Action Observatory on Careers from a Gender Perspective at the Università degli Studi di Milano was included as "gold practice" in the Guidelines for Gender Equality Programmes in Science resulting from the Project PRAGES - Practising Gender Equality in Science (2008-2009).

## III. Gender Equality (Diversity) Offices - role, organisation, management issues

Many (but not all) LERU universities have chosen to set up a Gender Equality (or Equal Opportunity) Office, which can support the university leadership, heads of divisions, research team leaders, and women with professional advice and management. See for example:

- Universitat de Barcelona: http://www.ub.edu/genere/index.html
- University of Cambridge: http://www.admin.cam.ac.uk/offices/hr/equality/
- Universität Heidelberg: http://www.uni-heidelberg.de/gleichstellungsbeauftragte/index.html
- Universiteit Leiden: http://medewerkers.leidenuniv.nl/p-en-o/diversiteit/talent-naar-de-top.html
- KU Leuven: http://www.kuleuven.be/diversiteit/
- Imperial College London: http://www3.imperial.ac.uk/hr/equality and http://www3.imperial.ac.uk/hr/equality/academicwomen
- University College London: http://www.ucl.ac.uk/hr/equalities/gender/index.php
- University of Oxford: http://www.admin.ox.ac.uk/eop
- Université de Strasbourg: http://www.unistra.fr/index.php?id=2971
- Universität Zürich: http://www.gleichstellung.uzh.ch/index_en.html

**IV. Funding**

At the Université de Genève a 'Scholarship of Excellence' programme was set up to value excellence among female researchers. In its fourth edition in 2012, three scholarships are usually awarded every year giving outstanding women researchers the opportunity to be financially independent for three years. This time allows them to build up strong scientific CVs and to be ready to apply for a position as assistant professor for example.

The Universität Heidelberg implemented an AID FUND to provide one-off funding for research and qualification ventures threatened by individual emergency or hardship. With this fund the University has created a gender-equity-back-up offering quick support to bridge financial gaps in order to complete research or qualification projects.

To increase the proportion of women in higher positions and the importance they can have as role models, SEK 1 million has been earmarked at Lunds universitet for a visiting chair in the name of Hedda Andersson. Funding is linked to the chair for activities and human resources. In addition, a maximum of SEK 3,5 million has been earmarked for co-financing of visiting professors of the underrepresented gender on the basis of applications from the faculties. The co-financing is for up to a maximum of SEK 500 000.

L'Università degli Studi di Milano has been awarded an EU-funded FP7 project called STAGES - Structural Transformations to Achieve Gender Equality in Science. Starting in 2012 five research institutes and universities from Italy, Germany, Denmark, Romania and the Netherlands will each implement a self-tailored action plan including activities such as awareness raising initiatives in high level institutional bodies; training modules on gender equality for internal decision makers; mentoring programmes for young women scientists; actions to enhance the visibility of women scientists; updated management and research assessment standards; course content development; leadership development; work-life balance measures; gender quotas in committees; promotion and retention policies.

In the “Excellence Initiative” funding competition of the German Federal Government, the applying universities had to demonstrate their efforts for gender equality and present coherent plans to support female scientists as a so far under-represented group. Concepts had to be developed for all three funding lines - Graduate Schools, Excellence Clusters and Institutional Strategies - and were used as evaluation criteria. More information on the Excellence Initiative:
http://www.wissenschaftsrat.de/1/fields-of-activity/excellence-initiative/?PH

**V. Career development measures**

>> **Appointments and career tracks:** At the Universiteit van Amsterdam, the Faculty of Science started a special recruitment programme called the MacGillavry Fellowship for talented female scientists in 2010: every three years five women are selected and offered personal tenure tracks.

The composition of academic staff recruitment committees is closely examined. At the Université de Strasbourg and Université Paris-Sud, for example, the percentage of women sitting on the jury should tend to reach parity, or at least, should not be lower than the local and national percentage recorded for the discipline. Juries consisting of 100% or 90% of one sex are not allowed. The board of trustees assisted by the equality office is responsible to ensure compliance.

Many LERU universities are re-designing academic career tracks to provide their researchers with more integrated and coherent career paths. In some cases, recognised career pathways are being developed for specialists and research managers as an alternative to the classic academic track of independent research leadership roles (see LERU (2010)).

Some countries have influential and well-developed national schemes. For example, the German Professorinnen-Programm (Female Professors Programme) has been administered by the federal and state governments since 2008. In order to sustainably increase the percentage of women in top academic positions, the programme provides initial funding for first-time appointments of female scientists to (regular) professorships. Decisive for the selection is the positive evaluation of a coherent gender equality concept by the applicant universities. Further information (in German): https://www.bmbf.de/de/das-professorinnenprogramm-236.html

The Universität Heidelberg offers a Concierge Service which is specifically designed to meet the needs of academics’ everyday life. It was introduced to simplify the daily routine of scientists, visiting researchers, and staff. The Concierge Service saves time by economically delegating time-consuming obligations, such as household duties, which are often hard to combine with professional ones.

>> **Time for research:** Several LERU universities have measures in place to give young female scholars so-called ‘protected time’ in order to complete a research project. For example:

The Universität Heidelberg has a protected time programme available on a competitive basis for female post-docs in order to enable them to reach the next stage in their career, prepare a project etc. The so-called “Olympia Morata Programme” offers half a position for two years with the possibility of extension for another year. So far, 72% of the participants got an external professorship (internal professorships are ruled out by the legal regulations) and all the remaining ones have a permanent position. This programme is accompanied by a Mentoring and Training Programme.

At the Universität Zürich the protected time programme is available on a competitive basis to post-docs for up to six months. Originally introduced for women postdocs by the Office for Gender Equality, the measure has been integrated into the general strategy for the promotion and support for young researchers. The protected time funding is used to finance a replacement at the grantee’s institute. The grantee’s university salary continues unchanged during the protected time.

A sabbatical leave without teaching commitments is possible for research active academics returning from maternity, adoption, extended career or long term sickness leave. This leave enables staff to more quickly re-establish their research activity. For example, at UCL it is one term, at the Université de Strasbourg it can be six months or a year (following national regulation).

>> **Time for service:** Lunds Universitet, for example, is developing a model aiming to reimburse women who take on duties on committees, boards or funding bodies to manage the gender balance in these groups. The reimbursement is meant to be used to bring in extra staff in the research group so that a woman's career is not hampered by too many obligations in administrative or decision making bodies.

>> **Grant awarding:** Gender as a secondary consideration for grants has been used at the Universität Heidelberg since 2008. Interestingly, the first, entirely quality-based evaluation has on all occasions so far yielded a gender-fair output and no adjustment was needed. Probably, the fact of gender mainstreaming as a possible criterion was sufficient to produce a change of attitude.

Early-stage researchers (e.g. post-docs) at l'Università degli Studi di Milano can get help with applying for and managing European grants (Faculty of Agriculture).

>> **Coaching and mentoring programmes for women:** Many LERU universities have such programmes, among them:

The Humanities Faculty of Humanities at the Universiteit van Amsterdam runs a successful coaching programme for female scientists. The programme focused on career development, on personal views and attitudes, on how to combine work and family demands etc.

The University of Cambridge has a scheme partnering female lecturers and others applying for promotion with senior academics who provide assistance with guidance, insight and advice.
http://www.admin.cam.ac.uk/offices/hr/equality/wiseti/mentoring/

The Universität Heidelberg has a training programme for female scholars towards leading careers in academia called "Towards a Professorship". It offers training modules in management, research-project preparation and leadership etc. to be chosen depending on the individual interests and needs of the trainees.

KU Leuven offers "A Career in Academia" training to stimulate and guide youg researchers, especially women, in their academic career. Post-doc researchers can, after completing the training course, participate in a mentor-mentee project at the KU Leuven.

The University of Oxford has introduced a high profile mentoring programme 'Ad Feminam' for mentoring women into senior leadership positions in the University. The mentors are both male and female and are all senior members of staff.

The Springboard Women's Development Programme at the Imperial College London is an award winning international programme (more than 200,000 participants in 26 countries) which allows women to identify the clear, practical and realistic steps they want to take, and allows them to develop the skills and self-confidence to take those steps. During the programme participants review topics such as qualities, strengths, networking, goals, assertiveness, dealing with pressure and managing image and visibility.
http://www3.imperial.ac.uk/staffdevelopment/postdocs1/workshops/springboard.

A similar springboard programme exists at the Universities of Cambridge and Oxford:
Cambridge: http://www.admin.cam.ac.uk/offices/hr/cppd/researchers/

Oxford now provides a generic programme; a programme targeted at Dphils and early career researchers in STEM; and a programme for undergraduates. http://www.admin.cam.ac.uk/offices/hr/cppd/researchers/
http://www.learning.ox.ac.uk/support/women/programmes/

The mentoring programme at LMU München offers career support to excellent young female scientists on their way to a professorship. Experienced female professors of all faculties provide strategic, scientific and personal advice and serve as role models. At the same time, the mentees profit from networking and peer mentoring within the group, and can take advantage of seminars on career-related topics as well as scholarships for child care and travel costs to conferences.

Universiteit Utrecht has a mentoring and coaching programme in which female scholars in a starting position are invited to address issues related to their way up in academia. Male professors are their individual mentors to support their search for making the best effort (mostly there is debate about: “doing things right or doing the right things”). But these mentors learn even more than their mentees: hurdles that ambitious women have to take. And an external coach empowers these female scholars afterwards.

Universität Zürich provides a complementary set of mentoring programs, ranging from the well-known one-to-one set-up to group-mentoring formats. In addition, a special programme has been developed for women post-docs in order to equip them for the appointment procedure and to prepare them for what lies ahead.

**VI. Work-life balance measures**

**>> Maternity/paternity leave:**

Eligible employees at the University of Cambridge can apply for up to 52 weeks of paid and unpaid maternity leave. http://www.admin.cam.ac.uk/offices/hr/policy/maternity/policy.html

Within the programme “Clearing Service Academia and Family” the Universität Heidelberg offers assistance to staff going on maternity/parental leave which includes an advisory session together with the head of the department or institute where the researcher is employed; the career plan beyond the maternity/parental leave is agreed upon by the researcher and the department/institute. In addition, flexible funding can be offered if the research plan shows necessity of continued practical work, e.g. in a laboratory.

In some doctoral and post-doc tracks at the KU Leuven it is possible for women who gave birth to extend their funding until the end of the academic year. This “bridging” measure introduced by the Flemish government via the Fund for Scientific Research (FWO) gives women the opportunity after returning from a maternity leave to stay on at the university until the next application deadline for new funding. In this manner gaps in the academic career can be avoided. Academic staff on maternity leave receives financial support from the KU Leuven on top of their allowance to match normal wages.

The University of Oxford has one of the most generous maternity schemes in higher education. Female academics are eligible for 26 weeks’ leave on full pay, followed by 13 weeks on statutory maternity pay and 13 weeks unpaid leave - a year in total.
http://www.admin.ox.ac.uk/eop/parentsandcarersinformation/informationforparents/#d.en.68869

At LMU München the department of a pregnant post-doc researcher can apply for funds to bridge the time until the beginning of her maternity leave. That can support and relieve scientists who, for safety reasons, cannot continue working at their labs even before the legal timeout.

At the Université de Strasbourg a national measure is complemented to ensure an equal reduction of teaching duties for the pregnant teacher (50% for a first or second child, 80% for a third or more child), whatever faculty the mother works for, and whatever period of the year the birth takes place. The paternity leave offers to the willing father a reduction of teaching duties (6% for a single child birth, 10% for twins) in the birth year.

>> **Child care provisions:** These are regularly offered at LERU universities. For example, the Family Service for Employees at LMU München, in cooperation with the company "pme Familienservice," helps parents find day-care services or supervision for children. The university pays consultancy and agency fees; employees only have to carry the cost of the child care. Additionally, LMU offers flexible ad-hoc support if parents need child care in unforeseen situations. The costs for this service are covered by LMU.

The Kinderhaus at the Universität Heidelberg comprises a number of creches and daycare facilities offering university staff a variety of care places for children, flexible opening hours (ten in total) and year-round opening, geared to typical work routines at the university. In addition to this Heidelberg offers a flexible back-up service for child care, including provisions for a so-called childrens' hotel, which can be booked on a daily basis.

The University of Oxford has one of the most generous and comprehensive approaches to childcare provision in the UK higher education sector. The University offers 444 full-time equivalent discounted childcare places for eligible members of staff (and students) at 12 nurseries located in and around Oxford.

At the Université Paris-Sud, the Science Faculty in Orsay offers a day-care service for employee's children during school holidays and on Wednesdays (school day-off in France).

The Foundation for Childcare in the Zurich University Area is a joint undertaking of the Universität Zürich and the ETH Federal Institute of Technology Zurich. It has been providing child-care facilities for staff and students of the two institutions since 2002 and thus makes a central contribution to work-life balance. http://www.kihz.ethz.ch/index_EN

>> **Dual career programmes:** Many LERU universities have such programmes. At LMU München, for example, the Dual Career Service assists partners of newly appointed LMU professors from Germany and abroad as well as partners of junior academics from abroad by opening up professional perspectives in Munich. As an additional service, it offers information on private matters such as house hunting and childcare.

**VII. Transparency**

**Pay gap:** The University of Cambridge has conducted regular Equal Pay Reviews since 2008 and these are now conducted every two years. In 2010 the University also identified a number of Key Performance Indicators to highlight key themes in equal pay at the University of Cambridge; these are also now included within reviews. http://www.admin.cam.ac.uk/offices/hr/reward/pay/equal.html

The University of Edinburgh openly publishes its Equal Pay Audits and undertakes a specific report on professorial staff as part of the annual process of reviewing professorial salaries: http://www.ed.ac.uk/schools-departments/equality-diversity/monitoring-statistics/equal-pay-reports.

The president of LMU München informs the university women's representative once a year about the average financial situation of newly appointed male and female professors at LMU, thereby striving for transparency and trying to eliminate the gender pay gap.

**VIII. Monitoring**

LERU universities generally monitor gender statistics and trends and report on them regularly. For example:

The University of Cambridge assesses data annually to develop its equality and diversity profiling; this includes assessing representation on gender grounds. The annual data reports are available at http://www.admin.cam.ac.uk/offices/hr/equality/reports/

The University of Edinburgh has an Equality and Diversity Monitoring Research Committee (EDMARC), which provides annual monitoring reports on staff and students. Its latest report providing analyses of student and staff data by the key equality dimensions of gender, age, disability and ethnicity can be found at http://www.ed.ac.uk/schools-departments/equality-diversity/monitoring-statistics/edmarc.

Aside from regular Progress Reports on the implementation of DFG Research-Oriented Equal Opportunity Standards (see above under I. of this Appendix), the AL-Universität Freiburg successfully passed a voluntary external Quality Audit in the area of gender and diversity in 2012. This QA was performed by the Evaluationsagentur Baden-Württemberg (evalag) and headed by Prof. Weiler (Stanford University).

The Universiteit Leiden provides annual monitoring reports on gender in equality of staff, separately for each faculty and for the university as a whole. The university Board makes agreements with faculties on progress of gender equality at the top. The annual reports help to monitor these agreements.

The University of Oxford monitors gender statistics and trends annually and reports on those trends to its central committees. http://www.admin.ox.ac.uk/eop/

The Equality/Diversity Office at the Université de Strasbourg each year collects the female/male distribution of staff and the results are published in the university's internal magazine. Giving to all university actors data about the female to male ratio in their faculty or unit increases collective awareness, in particular concerning bottlenecks for career development. http://www.unistra.fr/fileadmin/upload/unistra/universite/savoirs/SAVOIR_S__14_web.pdf

The Universität Zürich publishes an annual gender equality monitoring report, which provides information for reflection on the implementation of the Code of Conduct Gender Policy (see "Leadership commitment and institutional policy/organisation"). Information is provided separately for each faculty and for the Universität Zürich as a whole.

**IX. Gender in science**

The Université de Strasbourg encourages staff to participate in a national census, registering research teams that include the gender dimension in their research. This census is mastered by the CNRS.
http://www.cnrs.fr/mpdf/spip.php?article179

The UK LERU universities' efforts are to a large extent driven by the Athena SWAN scheme (see section I of this appendix).

**X. Awareness raising, communication, networking and visibility**

At the University of Cambridge, WiSETI has since 1999 promoted and supported women from undergraduate level to professor, in the Science (including Clinical Sciences), Technology, Engineering and Mathematics (STEM) subject areas. The project aims to redress an underrepresentation of women in employment and career progression in these disciplines at the University. Its activities include activities seminars for early career female researchers, PhDs and post-docs, lectures, a CV mentoring scheme for women wishing to apply for promotion, and supporting good practice in science through Athena SWAN. http://www.admin.cam.ac.uk/offices/hr/equality/wiseti/

The University of Cambridge also supports a new Women's Network, which has grown from the previous Women's Forum. These networks have organised significant consultation and engagement opportunities, many with the backing of the University's Vice Chancellor. Information on some of these activities can be found at http://www.admin.cam.ac.uk/offices/hr/equality/networks/women/#introduction

The University of Edinburgh holds an annual International Women's Day lecture to celebrate inspirational women. http://www.ed.ac.uk/schools-departments/equality-diversity/innovation-development/international-womens-day

The equality office of the Université de Genève organises numerous conferences open to university students, employees but also to the public, for example, the awareness campaign in 2012, which was called "Excellentes, vous avez dit excellentes?"

At the Universität Heidelberg the discussion forum *Kompetenzzuwachs durch Chancengleichheit* (enhancing gender equity) focuses on the content of contemporary reports on gender studies, recommendations and position papers from experts and academic associations. Participating members are the managing directors of academic institutions, personnel officers and members of research projects, staff members  and other interested parties.

The KU Leuven has a multidisciplinary platform, the Leuven University Centre for Interdisciplinary Research on Diversity and Equality (LUCIDE).  Key members of this platform as well as the mission and goals of Lucide are listed on the website http://www.kuleuven.be/lucide/about-lucide.

L'Università degli Studi di Milano is planning a international event called "Week of Women and Science" in cooperation with EXPO 2015 to be held in Milan in 2015, in connection with STAGES - Structural Transformations to Achieve Gender Equality in Science - European Project FP7.

The Universität Zürich (Faculty of Science) organises the yearly Dorothy Crowfoot Hodgkin Symposium, which aims to highlight excellent women scientists. http://www.oci.uzh.ch/static/diversa/dch/2011/

All faculties at the Universität Zürich have published folders presenting women professors in words and depicting them in their working environments. This project enhances the women professors' visibility and takes account of their function as role models.

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## About LERU

LERU was founded in 2002 as an association of research-intensive universities sharing the values of high-quality teaching in an environment of internationally competitive research. The League is committed to: education through an awareness of the frontiers of human understanding; the creation of new knowledge through basic research, which is the ultimate source of innovation in society; the promotion of research across a broad front, which creates a unique capacity to reconfigure activities in response to new opportunities and problems. The purpose of the League is to advocate these values, to influence policy in Europe and to develop best practice through mutual exchange of experience.

## LERU publications

LERU publishes its views on research and higher education in several types of publications, including position papers, advice papers, briefing papers and notes.

Position papers make high-level policy statements on a wide range of research and higher education issues. Looking across the horizon, they provide sharp and thought-provoking analyses on matters that are of interest not only to universities, but also to policy makers, governments, businesses and to society at large.

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# 12. Enlisting others in your development as a leader

**Dawn E. Chandler and Kathy E. Kram**



## INTRODUCTION

> You learn more quickly under the guidance of experienced teachers. You waste a lot of time going down blind alleys if you have no one to lead you.
> (W. Somerset Maugham, *The Razor's Edge*, 1944)

John Lee and Joe Anderson mutually left Joe's yearly performance review discussion frustrated. Joe had been hired by XYZ Corporation two years prior. At the time, he had been identified as a high-potential candidate who John envisioned taking on a key leadership role in the fourth year of his employment. Unfortunately, John mused, Joe had not yet developed the competencies that were critical to success in the role for which he was targeted. While John needed to have an in-depth conversation with Joe about Joe's efforts to develop his leadership capability over the past two years, his intuition hinted at the key reason for Joe's slow progress. One of Joe's comments in particular suggested the reason: when John asked why Joe didn't try to seek him out with any degree of frequency for advice, Joe stated, 'I've always prided myself on my self-sufficiency and I felt that I would be signaling incompetence if I asked for your help with anything'.

By comparison, Joe's counterpart, Ben Levine, who had seemed to have less natural leadership capability when he was hired in the same role as Joe two years prior, had impressed John and other senior leaders alike; he would be going up for promotion within the next six months. Contrary to Joe, Ben had sought John out on a number of occasions for best practices in his and Joe's position. Why has Ben, a person who seemed to have less natural leadership capability than Joe, excelled in his position while Joe has stagnated? This chapter seeks to explain the difference, specifically by highlighting the importance of engaging others in one's leadership development.

Leadership is implicitly a relational process. Typically, when people think of leadership, they think about the relationships a leader has with his or her followers. Scholars and practitioners have focused much attention on this feature of leadership. Within the scholarly world, for example, studies have shown that leaders articulate challenging goals, foster teamwork, and inspire followers to achieve established goals (Podsakoff et al., 1990; Schaubroeck et al., 2007). Practitioners regularly note that leaders transform organizations and achieve outstanding performance by mobilizing individuals and teams to work toward a shared vision (Kouzes and Posner, 2007; George, 2007).

Less attention, however, has been paid to the role that relationships play in enhancing a person's ability to lead. In fact, relationships are integral to the process of a person's development as a leader, as evidenced, for example, by studies on the value of 360-degree feedback (Atwater et al., 2000; Smither et al., 2003). A person who fails to engage relationships to foster his or her growth misses significant learning opportunities. To help fill this gap in our understanding of leadership development through relationships, this chapter will highlight and explain how growth-enhancing relationships can accelerate leadership learning. In addition, when individuals make an effort to assess what they need to learn as well as who might be available to assist in that learning, there is an opportunity to create a 'portfolio' of growth-enhancing relationships, which scholars now refer to as a 'developmental network' (Higgins and Kram, 2001). Whereas a mentor was once considered essential to realizing one's leadership potential, it is now clear that a single mentor relationship is not as effective in fostering leadership development as a small group of developers who are responsive to an individual's current development needs (Kram, 1996; Higgins, 2000; Ragins and Kram, 2007).

In their ground-breaking study of senior executives, Morgan McCall and his colleagues discovered that relationships with others were critical to these individuals learning what they needed to learn to advance to positions of greater responsibility and authority (McCall et al., 1988). They illustrated with their sample of 166 senior executives from private, public and non-profit organizations that without exception, relationships with mentors and peers at critical points in their careers were essential to learning from their experiences in challenging assignments. Without people who invited these individuals to reflect on these challenges, individuals were much less likely to learn the lessons that would enable them to be successful and to advance their careers. Concurrently and since then, many researchers have delineated how such relationships actually enhance learning and development (Ragins and Kram, 2007). Perhaps most noteworthy is the reconceptualization of mentoring from a single dyadic relationship that is focused on the junior person's development to a network of developers who are enlisted by the individual to enhance his or her learning and development (Higgins and Kram, 2001; Higgins et al., 2007; de Janasz and Sullivan, 2004).

The mentoring literature is now ripe with types of developmental relationships that offer career and psychosocial functional support – including hierarchical mentoring, peer mentoring, peer coaching, boss-subordinate, and outside work relationships based in family and community settings. Career functional support includes the provision of visibility within an organization, challenging assignments, coaching and protection. Psychosocial support includes the provision of counseling, acceptance and confirmation, and friendship (Kram, 1985). The literature abounds with studies supporting positive protégé outcomes associated with participation in a developmental relationship (see Allen et al., 2004 for a fairly recent meta-analysis on protégé benefits of mentoring).

In this chapter, we draw on the mentoring and leadership literature to understand how a person can foster a responsive network and guide his or her 'developers' (Higgins and Kram, 2001) to aid his/her leadership growth. In particular, we draw on two areas of recent mentoring research – a contingency theory of developmental networks (Higgins, 2007) and Relational Savvy (Chandler, 2009; Chandler et al., 2009) – to explain how an individual can self-manage his or her leadership development.

We present a three-phase process through which individuals can proactively engage relationships that can guide their development as leaders. As a starting point, we apply prior work on the career competency 'Knowing Why', which refers to understanding one's career motivations, strengths and weaknesses and career goals (DeFillippi and Arthur, 1994; Eby et al., 2003; London, 1993) and how these shape an individual's actions and preferences in the work context. Self-awareness around needed leadership competencies and goals, as well as strengths and weaknesses around one's leadership capability enable an individual to achieve alignment with professional opportunities as they are presented. Self-awareness acts as a catalyst for self-initiation and management of a responsive network that can heighten leadership capabilities (see Figure 12.1 for the model). This phase is marked by careful consideration of who one is and what one wants as the pillars of the second and third phases. It is consistent with research on career self-management, which in part involves collecting information about one's interests and existing capabilities (or lack thereof) and identification of a career goal (e.g., Noe, 1996).

Prior research shows that the career competency, 'Knowing How', which refers to career- and job-related knowledge that one gains over time, aids one's career success (for example, it helps one's internal and external marketability). Here, we apply this idea to the notion of 'Relational Know How' to refer to one's capability to initiate and nurture a response developmental network. Once a person is equipped with self-knowledge gained from the first phase, a person must consider his relative 'Relational Savvy'

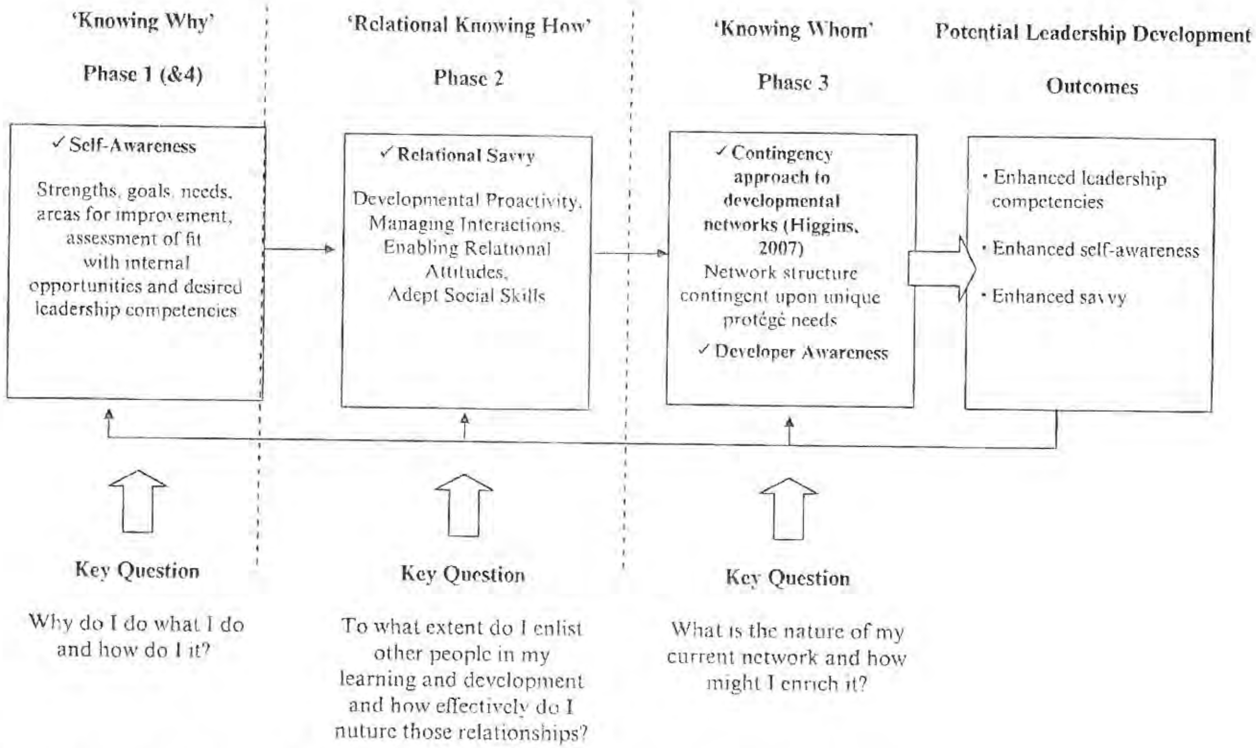


*Figure 12.1 A self-managed approach to enlisting others in one's leadership development*

– Developmental Proactivity, Managing Others, Enabling Relational Attitudes, Adept Social Skills.

A third career competency, 'Knowing Whom', which relates to investments in career contacts and networks, has also been explored as relevant to career success: (DeFillippi and Arthur, 1994; Eby et al., 2003). In this chapter, we focus on developmental networks, a personal board of directors who take an action to help a focal person's career, as critical to one's leadership development (e.g., Higgins, 2000). During the third phase, a person considers their current developmental network and whether they are well positioned through their network to receive the types of support needed to uniquely aid their leadership development. If relationships are to be a vehicle for a person's leadership development, they must be aware of their relative ability to foster a network that can assist them. The ideal developmental network for that person should be based on their developmental needs and could be comprised of senior, lateral and junior individuals in the person's employing organization as well as individuals outside of the organization, including from their community, family and friend network (Higgins and Kram, 2001). Taken together, these three phases help one prepare to enlist others effectively in their development. At the end of the third phase, they are ready to begin taking action to foster relationships that enhance their developmental network, and to readily engage their developers to facilitate ongoing learning and growth. Figure 12.1 shows the phases and a key question/s that one needs to consider at each of them.[1]

Throughout the remainder of the chapter, we elaborate on each of these phases of self-managed leadership development through developmental networks and we elaborate on the case study of Joe and Ben to enrich the discussion.

## PHASE 1: 'KNOWING WHY': DEVELOPING SELF-AWARENESS

Individuals who effectively lead others have an accurate understanding of their personal values. Commitment to a set of clear values enables them to articulate and tirelessly work toward a compelling vision that others want to follow. Leadership research has demonstrated that understanding one's personal drivers and how these shape one's behaviors is critical to effectively setting direction, inspiring others and enabling others to work towards valued ends (Kouzes and Posner, 2007; Goleman, 1998; Goleman et al., 2002; Boyatzis and McKee, 2005). In addition, only with an accurate understanding of one's strengths and weaknesses, can individuals proactively develop the leadership competencies that they may lack. Without this self-awareness, critical blind spots could result in derailment (McCall et al., 1988; Bunker et al., 2002).

This discussion suggests that a starting point for enlisting others in one's leadership development is gaining a better understanding of oneself. In essence, one needs to 'Know Why'; one needs to take stock of the personal values that are the cornerstone of one's leadership philosophy and style, and of one's existing strengths and weaknesses in relation to his ability to lead.

An excellent example of the importance of having *both* the clarity of personal values as well as an accurate assessment of one's strengths and weaknesses is found in examining the founder and CEO of the now extinct airline, People's Express. Don Burr had a compelling and exciting vision for a new airline that would change the way business is done in the industry. Indeed, his principles were adapted by several airlines that followed his. However, within three years of its launch, Burr lost sight of his vision and a lack of self-awareness led him to expand the firm too rapidly into areas that diluted the organization's primary focus. Because he was not reassessing his strengths and weaknesses regularly, he failed to see that his needs for power and his (later) self-described hubris led him to grow the firm without adequate infrastructure, and to ignore attempts to give him feedback regarding his strategic mistakes along the way. Ultimately, the fledgling airline was purchased by a former competitor, many loyal employees left as soon as they could, and the once spirited and enterprising organization was no longer.

Both Joe and Ben, introduced at the outset of this chapter, were fortunate to have been given opportunities to develop their self-awareness. The organization they work for is known for its developmental culture; learning and self-development is valued and encouraged, and a variety of tools are accessible to those who want to make use of them. In fact, their boss, John, has insisted that all of his direct reports participate in leadership assessment activities periodically because he knows from experience how these foster both motivation and direction for self-development. It appears that leaders who embrace this kind of reflective work for themselves are inclined to encourage it in their employees. They appreciate how enabling others to develop themselves will enhance the organization's performance as well.

How does one go about developing accurate self-awareness? There are a variety of assessment instruments that are now regularly offered to professionals and managers to help individuals enhance their self-knowledge. These are accessible through HR departments within organizations, offered by external training organizations (such as the Center for Creative

Leadership, Greensboro, North Carolina), and in graduate and undergraduate management schools. Simply put, systematic reflection with the guidance of structured instruments and/or a professional coach or teacher can lead individuals to understand what they value and how their preferences translate to an appropriate role at work (McKee et al., 2008).

Similarly, with the aid of 360-feedback instruments (e.g., Atwater et al., 2000), individuals receive data on how others perceive them at work. This provides an opportunity to develop an accurate picture of one's strengths and weaknesses as they relate to critical leadership competencies. Without this self-awareness, there is little foundation and rationale for improving one's leadership capability. While there are a number of frameworks available for this kind of feedback process, the key is to make use of a validated instrument and to seize opportunities for coaching from others to develop a thorough understanding of what the data suggest as appropriate next steps in one's development.

Finally, performance appraisal discussions can enhance self-awareness when the relationship is such that feedback is provided honestly and constructively. A manager can contribute to the self-awareness of an employee by providing examples of instances where the employee's behavior was not effective or optimal, and also be helpful in identifying alternative approaches and encouraging new behavior going forward.

Given that Joe and Ben worked for the same individual, it is likely that they have had similar opportunities to make use of an array of assessment tools in order to identify their strengths and weaknesses. John suspects that Joe's self-sufficiency has got in the way of Joe's learning and ongoing development. Indeed, while Joe can recite on which leadership skills he scored high and low, his recitation seems devoid of a recognition that he possesses some skills but lacks others. Further, it seems that he has not figured out how to develop new approaches that would make him more skillful in his current role at work. Nor does he seem motivated to take action to address these limitations in his effectiveness. He may be lacking in adaptability and learning tactics that would enable him to benefit from the feedback that he has received (Hall, 2002).

In contrast, Ben actively solicited additional feedback and coaching from John when he learned that he was perceived as being too autocratic in the way he managed his subordinates. His style was perceived as thwarting creativity and innovation, and this had caused several individuals to take positions in other parts of the organization. During the initial 360-degree feedback discussion, Ben asked probing questions about his strengths and weaknesses that suggested he was earnestly attempting to understand himself and how to improve. He also expressed an enthusiasm for having gained a better understanding of his leadership capability. As a result of his response to the process, John arranged a follow-up assessment six months later that suggested that his subordinates were noticing a welcomed change and enjoying their work significantly more as a result of being given more autonomy and room to tackle new challenges. At the same time, Ben experienced the benefits of delegating effectively; he now had more time to think strategically and to work on other aspects of leading his department to yet better performance.

In the end, clarity of personal values and accurate self-assessment of leadership strengths and weaknesses are necessary for self-development, but not sufficient. Without the establishment of clear, realistic and consistent goals, efforts to enhance one's capabilities will be, at best, undermined by trying to do too much at once, other demands at work, or simply a lack of focus and necessary encouragement to experiment with new behaviors at work. Joe did not establish development goals at all, while Ben decided with input and support from John, that he would practice new behaviors that would enable his direct reports to take more responsibility for the design and outcomes of their efforts, and that he would invite feedback from his department and his boss on a regular basis to assess his own progress. See Table 12.1 for a comparison between Joe and Ben in terms of their effectiveness with the process of enlisting others in their leadership development.

There are many supervisors and organizations that do not encourage the kind of self-inquiry that is essential to developing one's leadership capability. What can be done to foster self-awareness of the sort we are advocating in such a context? In addition to seeking outside opportunities as mentioned earlier, there is also the opportunity to seek feedback from subordinates and peers as well as internal HR practitioners who are willing to provide feedback and coaching (Kram et al., 2002). Indeed, we now know that relationships at work characterized by trust, open communication, mutual learning and caring can be sources of self-insight, skill development and enhanced performance (Dutton and Ragins, 2007). In addition, individuals who have strong developmental networks – comprised of supportive mentors and peers – are likely to experience greater career success and satisfaction than those who do not (e.g., Ragins and Kram, 2007; Higgins, 2002).

## PHASE 2: 'KNOWING HOW': DETERMINING YOUR RELATIONAL KNOW-HOW

The process of 'Knowing Why' is a critical starting point in the process of becoming an effective leader because it provides a basic roadmap of an

*Table 12.1 Joe and Ben: a comparison of two strategies for enlisting others in one's development*

| | Joe | Ben |
|---|---|---|
| Step 1: Knowing Why | ***Low Knowing Why***<br>• Does not use assessment tools or performance appraisals as an opportunity to 'know why'<br>• Lacks clarity about his goals, needs, strengths and weaknesses | ***High Knowing Why***<br>• Uses assessment tools and performance appraisals as an opportunity to 'know why'<br>• Has relative clarity about his goals, needs, strengths and weaknesses |
| Step 2: Relational Knowing How | ***Average to Low Relational Savvy***<br>**D1: Developmental Proactivity**<br>• Not highly proactive<br>• Seeks opportunities for support primarily within his immediate work environment<br>• Misses opportunities when solicited by potential developers (e.g., Joe and John)<br>**D2: Managing Interactions**<br>• Prepared<br>• Uses traditional self-disclosure<br>• Low follow-up<br>**D3: Hindering Attitudes**<br>**D4: Average Social Skills** | ***High Relational Savvy***<br>**D1: Developmental Proactivity**<br>• Highly proactive<br>• Seeks opportunities for support within *and beyond* his immediate work environment<br>• Responds to opportunities when solicited by potential developers (e.g., Ben and John)<br>**D2: Managing Interactions**<br>• Prepared<br>• Uses strategic self-disclosure<br>• High follow-up<br>**D3: Enabling Attitudes**<br>**D4: Adept Social Skills** |
| Step 3: Knowing Whom | **Current Developmental Network:**<br>Not well positioned to help<br>**Developer Awareness:** Low | **Current Developmental Network:**<br>Moderately positioned to help<br>**Developer Awareness:** Moderate |

individual's current reasons for pursuing a particular job or career (values and interests) as well as the capabilities and developmental needs that will shape the journey ahead. With this self-awareness in place, meaningful goals can be established which will serve as key landmarks and guide their progress in moving towards enhanced effectiveness at work. Without the process of 'Knowing Why', an individual might well try to proceed proactively without any clearly articulated intent, thus following on a journey in which they are vaguely attempting to become 'a leader'. This lack of knowledge and direction will predictably dilute any efforts to enlist others in one's development since such requests are likely to be unfocused and difficult to respond to.

Once 'Knowing Why' knowledge is attained in phase 1, the next task is to consider one's ability to initiate and foster a responsive developmental network to aid leadership development. That is, in order to enlist others in one's development, an individual must now take stock of his or her Relational Savvy, or 'relational knowhow'. Specifically, there are four key skills sets that represent one's savvy: Developmental Proactivity; Managing Interactions; Enabling Relational Attitudes; and Adept Social Skills, each of which will be discussed in turn.



### Relational Savvy Dimension 1: Developmental Proactivity (DP)

Some questions that one needs to ask in relation to one's DP are: (1) to what extent do I tend to seek out others to support my career growth? (2) Do I seek out support broadly, for example, with senior employees beyond my immediate boss, with industry professionals outside of my organization, with friends and family, or do I focus on people with whom I immediately interact? (3) To what extent do I initiate developmental relationships with others?

Relationally savvy people are proactive in initiating developmental relationships with a wide range of people and in gaining support from others, whether by asking for feedback, help, advice or information (Chandler, 2009; Chandler et al., 2009). The notion of Developmental Proactivity is consistent with research on self-initiation and career self-management that shows that individuals who make greater efforts to enact development-seeking behaviors and networking reap greater amounts and types of support (e.g., Higgins et al., 2007; Blickle et al., 2009). Compared with individuals who are not developmentally proactive, they are responsive to others' interest in helping them. Their efforts to work with other people to aid their development do not necessarily result in significant time spent on the part of their developers. In fact, they have a tendency to routinely seek out 'mentoring episodes' (Fletcher and Ragins, 2007), which could be even single conversations with people that enable them to better handle their responsibilities, create effective work routines, motivate others, and/or create a vision for an organizational unit.

Based on his interactions with Joe and Ben, John, their supervisor, had a sense that Joe was not as high on Developmental Proactivity as was Ben. An additional conversation with Joe confirmed that Joe typically relied on himself for leadership challenges and growth rather than reaching out to others, even for minor issues. The few people whom Joe identified as 'developers' were peers in the organization, and Joe didn't have in-depth conversations with them but rather would have occasional 'water cooler chats' about relatively minor issues he confronted. Those relationships had developed naturally over time rather through intentional efforts by Joe to deepen them. Interestingly, John could remember having told Joe at the time of his hire that he was available as Joe's supervisor to be a sounding board and a mentor; Joe had not taken him up on this offer. In essence, Joe was unresponsive to an opportunity for leadership development.

Ben, on the other hand, had intentionally initiated several developmental relationships both within his immediate environment and beyond it. For example, he joined a professional industry group that met on a quarterly basis and took it upon himself to form a group of five peers that met informally every two months to discuss professional and leadership challenges and opportunities. He became particularly close with two members, both of whom had previously been in positions similar to Ben's current one. When Ben felt his subordinate team's motivation slipping, the two developers were instrumental in helping Ben strategize a plan to reignite their engagement.

By way of comparison to Joe, Ben sought out John's assistance on an appropriately regular basis. For example, about six months after having been hired, Ben asked John to lunch and 'picked his brain' about John's leadership development over time. John mentioned that early on, a subordinate told him that it seemed that while he heard his subordinates, he didn't truly listen to them. Thus, subordinates found his attempts to demonstrate empathy for their concerns and his interest in their ideas to be disingenuous. Armed with the knowledge that he needed to work on his emotional intelligence (e.g., Goleman, 1995), John made efforts to improve, and his 360-degree feedback suggested that indeed he had. Ben, taking this information to heart, began to meet informally with each of his subordinates to ensure that he built trusting, respectful relationships with them. Ben had been responsive to John's offer to act as an advisor.

While Joe had occasionally reached out to a few peers, thus showing lackluster Developmental Proactivity, Ben frequently sought out leadership and career-enhancing support from a wide range of people, demonstrating that he was more Developmentally Proactive by comparison. In order to better enlist others in his development as a leader, Joe needs to recognize that his level of Developmental Proactivity is hindering his development. His unexamined commitment to self-sufficiency and total self-reliance is preventing him from using a key vehicle for growth: relationships.

## Relational Savvy Dimension 2: Managing Interactions

Some questions that a person needs to ask about their relative ability to 'manage interactions' with current and potential developers include: when I ask someone to help me, am I 'prepared' (Preparedness) to best help that person help me? Do I self-disclose information about myself – vulnerable information or otherwise – haphazardly or with an intent to further the relationship (Strategic Self-Disclosure)? Do I follow up with developers on a regular basis (Follow Up)? Do I find ways to make a relationship mutually beneficial (Mutuality Behaviors)?

Managing interactions with potential and current developers is critical in that the way a person behaves with another person influences the level of interpersonal comfort, liking and trust between them (Dutton and Ragins, 2007). Above are four features of how one manages interactions that a focal person needs to consider in initiating and nurturing developmental relationships.

Whether one is prepared for a meeting in which one seeks to gain developmental support is important because it signals that one cares about that person's time and investment, and it also allows the interaction to go smoothly. To show the downside of being unprepared, imagine a meeting in which a person who needs support with deciphering sophisticated financial data arrives without all of the relevant data. Not only will they not be able to gain all the needed assistance, they have also signaled a lack of conscientiousness and care for that potential or existing developer's time. Being prepared goes beyond having all relevant materials present for a meeting; it also involves having analyzed a situation well enough that a person has both a sense of the challenge at hand and some possible solutions generated. To liken this to Developmental Proactivity, highly savvy people seek out help, but they do so after they have attempted to solve problems and gain as much information as possible prior to doing so. Having generated their own solutions, the focal person can be a partner with their developer.

It turns out that both Joe and Ben are highly prepared for meetings with potential and existing developers. The key difference between them is that Ben has more meetings/mentoring episodes than Joe does (that is, Ben is more proactive in making those meetings happen). Because Joe prides himself on self-sufficiency, he tends to analyze situations carefully and tries to solve his own leadership problems with self-designed solutions. Ben does too, but more because he wants to have collaborative meetings rather than one in which he defers to another person.

Savvy people recognize that relationships are formed and nurtured on the basis of trust, authenticity and liking (Dutton and Ragins, 2007).

Consequently, they are aware of the value of disclosing information to others as a signal of trust, a way to find common ground, and a means to provide a deeper understanding of who they are. They are willing to allow themselves to be vulnerable for the purpose of creating a bond with someone else. Conveying information about oneself as a means to deepen a relationship is called 'Strategic Self-Disclosure'. That information need not be a deep, dark secret, but rather just information about oneself that is not readily available during a 'water cooler' or other type of polite conversation. As a comparison, people who aren't as Savvy either fail to disclose any information that would deepen a relationship or do so without any recognition of or intent to foster a more meaningful relationship.

Joe tends to discuss subjects like the outcome of a football game or a political event that may be interesting conversationally but don't serve to allow people to really get to know him in any way beyond a superficial one. Ben, on the other hand, had the following to say about connecting with others: 'Well, I don't think it's necessary to give someone my whole life story, but I really believe that it's important to allow yourself to be vulnerable with another human being if you want a valuable relationship to flourish. So there have been times when I've disclosed something about myself that involves information about me that matters.'

As an example of this, Ben experienced a naturally-developed, informal peer relationship with a person who was in a similar position within the organization when, at a casual lunch, Ben mentioned that he found himself struggling to celebrate the achievements of his team in a meaningful way (in leadership parlance, this situation involves a leader's ability to 'encourage the heart') (Kouzes and Posner, 2007). The peer appreciated his disclosure of sensitive, meaningful information, offered some solutions, and mentioned having difficulty affecting change in her group. Ben's strategic self-disclosure suggested that he trusted her and she likewise disclosed sensitive information signaling that she, too, was interested in a deeper professional relationship.

When people help others, they want to know that their assistance was valuable. In particular, many senior-ranking individuals, having reached a stage in their adult development in which they want to give back (e.g., Levinson et al., 1978; Levinson and Levinson, 1996; Erikson, 1950), will be interested in remaining abreast of how their advice has benefited someone. Savvy people are excellent at following up with those who have helped them, existing developer or otherwise. Following up with someone may involve a quick note to convey that the focal person did heed that person's advice and it had the intended effect. The follow-up could be a simple thank you and an update about one's current situation in light of the advice, information or feedback. Less Savvy people, on the other hand, may act on others' advice/assistance and then fail to loop back with the latter, leaving the latter with a sense of wonder about whether their help mattered.

Because Joe's 'water cooler' mentoring episodes (Fletcher and Ragins, 2007) have sprung up informally, he hasn't felt the need to go out of his way to keep others 'in the loop' about his leadership development progress. Rather, he may or may not remember to mention his peers' assistance and how it has helped him when he sees them at the water cooler again. While his peers don't seem to mind now, they may be bothered if they offer him assistance of real value at some point and he fails to follow up with them about how he used the assistance to his benefit. Ben, however, is conscientious about emailing or calling developers or others who have helped him.

Finally, an important component of managing interactions with others involves acting in ways that benefit the other party in the relationship. In this way, a relationship involves 'co-learning' or is generally mutually beneficial for both people (Kram and Hall, 1996). Savvy people are highly proactive about helping others in general and they also take action to assist their existing developers. They don't consider relationships one-sided in which one person gives while the other person takes. They realize that they, too, can offer someone assistance, even in relationships in which they are the relative junior person.

One might ask, how can I help someone who is senior to myself given they've already progressed beyond my career path to date? If nothing else, that senior person may actually be interested in helping others or in leaving a legacy (e.g., Levinson et al., 1978; Levinson and Levinson, 1996; Kram, 1985); thus, by virtue of helping someone else, that person's needs are fulfilled. At times, there are creative ways that a person can help someone senior. Let's use Ben as an example. When Ben started with XYZ company, he recognized that some of his seniors lacked computer proficiency (e.g., PowerPoint, Access; Project) in several programs in which he was particularly adept. Therefore, he offered to help fine-tune their work completed on those programs and to teach them some lesser-known tools in the programs. They were both impressed and pleased that he benefited them. Thus, while they were already providing developmental support due to his Developmental Proactivity, they were more willing to help him gain visibility and sponsor him for challenging leadership assignments. By realizing that he had something to offer, Ben made the relationships two-way streets. Joe has assisted some of his peers in various ways, but he's so focused on completing his existing responsibilities and managing his leadership development through his own means – for example, crafting a honed vision for his group and reading about leadership – that he tends to be more isolated.

**Relational Savvy Dimension 3: Enabling Relational Attitudes**

Here, one should ask whether one's beliefs, attitudes and assumptions about people's interest in providing assistance as well as one's relative preference for working with others are hindering or enabling one to reach out to others for development. One specific question a person should ask is: do I believe that others want to help me? Savvy people tend to hold 'enabling attitudes'; these perceptions involve a sense that others want to and are willing to help, as well as a preference for working with others rather than alone. For example, a Savvy person typically has an attitude that people are willing to help as long as it doesn't consume too much of their time. Less Savvy people often hold at least some hindering attitudes, which entail thinking that others are bothered or annoyed when asked for help, and/or a preference for working together. As one can probably intuit, enabling attitudes are likely to be correlated with greater Developmental Proactivity – if one believes that others are receptive to helping, then one is more likely to ask for it. Conversely, hindering attitudes are likely to be correlated with less DP.

Interestingly, Joe's comment at the end of his performance evaluation session with John – 'I've always prided myself on my self-sufficiency and I felt that I would be signaling incompetence if I asked for your help with anything' – belies a hindering attitude that John holds: reaching out to others for help signals incompetence. Joe may actually recognize the need for others' assistance and be interested in pursuing it, but he hesitates out of concern that doing so will reflect poorly on his ability. Joe does tend, however, to prefer to work alone, which may prevent him from naturally gravitating towards others in his developmental efforts. Ben, by comparison, believes that asking for help flatters the other person and gives them an opportunity to demonstrate competence in a particular arena. Likewise, Ben enjoys working with others; therefore, he seeks out social support for his development.

**Relational Savvy Dimension 4: Adept Social Skills**

People with outstanding social skills are 'Savvier' because people are attracted to being around them and providing them with support. John's (the supervisor's) earlier admission about his lack of listening skills during his early career with XYZ reflects his social skills. One's ability to empathize, listen, communicate with others, and read others' emotional cues (e.g., Kram, 1996; Goleman, 1995; Cherniss, 2007; Mayer and Salovey, 1997; Salovey and Mayer, 1990) are all key social skills that influence whether others are attracted to and want to interact with a focal person.

While Joe possesses good listening skills and can empathize with others, he has difficulty understanding his subordinates' emotional cues, or expressions. During a recent team meeting, Joe unveiled his vision for a key project and, in hearing no overt resistance when he asked for their feedback and input about it, assumed that everyone was firmly behind it. What he failed to notice was that one longtime XYZ employee and his most skilled subordinate demonstrated facial and bodily cues that signaled she was not wholeheartedly in support of the vision. Later, Joe became angry when he heard that this employee has spoken with others about what she perceived to be the vision's weaknesses. Had Joe been more attuned to his subordinate's cues in the moment, he could have encouraged an open discussion about areas in which she perceived the vision as needing refinement. If Joe had been able to detect these cues, he would have been better able to inspire others around his vision, a key leadership behavior (Kouzes and Posner, 1995). Ben, by comparison, possesses all of the above social skills and can be considered adept.

Taking stock of one's relational savvy is important because it reflects one's 'Relational Knowing How', or know-how related to initiating and cultivating rich developmental relationships. One needs to consider areas where one may be 'low' in Savvy so that one can enhance those skills – or in the case of Enabling Relational Attitudes, reconsider one's attitudes, beliefs and/or assumptions – or at least be aware of them as obstacles.

## PHASE 3: KNOWING WHOM: CONSIDERING WHO SHOULD BE IN YOUR DEVELOPMENTAL NETWORK

As noted earlier in the chapter, it used to be that people could rely heavily on a single, omniscient mentor to provide all of the support needed for leadership and career development; this is no longer the case (e.g., Higgins and Kram, 2001). Now, people rely on developmental networks, potentially comprised of individuals from various spheres – for example, family, the community, a professional organization – who provide varying types and amounts of developmental support (Higgins and Kram, 2001). This evolution occurred due to a confluence of trends including globalization, demographic shifts and organizational downsizing. At the heart of the shift is the fact that people no longer stay in a single organization for extended periods but rather transition between organizations over their careers.

The third phase of the process of enlisting others in one's leadership development centers on identifying what one's developmental network should look like in order to attain the desired future. Notice that this phase, Knowing Whom, builds upon one's level of Knowing Why because one's network considerations are based on where one wants to be in terms of a leadership 'destination' (in keeping with the roadmap metaphor). One can think of a developmental network as one's personal board of directors who aid career and leadership growth (e.g., Higgins, 2000; 2007). As goals and skills evolve over time, one's developmental network will necessarily have to be reassessed and modified to be most responsive to new goals and/or new development needs. To provide the reader with an understanding of how to conceive of what one's developmental network looks like, they are 'measured' on two main dimensions: *strength of tie* and *diversity* (e.g., Higgins and Kram, 2001; Granovetter, 1973). In layman's terms, the strength of tie refers to how strong a relationship between a protégé and a developer is in terms of closeness and interpersonal liking. While not introduced as a means to demonstrate stronger and weaker ties, Higgins (2007) and Thomas and Kram (1988) identified four types of developmental relationships offering various amounts and types of support: an ally (low amounts of career and psychosocial support); a sponsor (high amount of career support, low amount of psychosocial support); a friend (high amount of psychosocial support, low amount of career support); and a mentor (high amounts of both career and psychosocial support). An ally, by comparison with the other three types, is the 'weakest' tie relatively; the mentor is the strongest among them. Given that research suggests that motivation to assist a protégé is associated with how strong the tie is (stronger ties involving greater motivation to help), individuals should consider how strong their ties are.

The diversity of a network refers to the extent to which the information a focal person receives is redundant or non-redundant (e.g., Higgins and Kram, 2001). Developmental networks have measured diversity in two ways, the first of which is to consider the types of social spheres from which the relationships stem; as noted earlier, some of the spheres include one's network of family or friends, the organization (from various ranks), the local community, or a professional industry group. The second way to measure diversity is to consider the extent to which one's developers know each other. A 'denser' network occurs when developers in one's network tend to know each other; one that is not as dense involves developers who don't know each other. Diversity matters because research suggests that highly diverse – 'differentiated' – networks carry greater access to a wide range of information (e.g., Brass, 1995) than those that are less diverse by comparison.

Some studies have been conducted that examine outcomes associated with particular aspects of a focal individual's network. For example, diverse networks have been shown to be associated with greater likelihood of career change (e.g., Higgins, 2001); high-status networks have been found to be associated with enhanced likelihood of career advancement and with job commitment (Higgins and Thomas, 2001); and 'entrepreneurial networks' (those with strong ties and diversity) are associated with self-efficacy and clarity of identity (Higgins, 2002).

While a reader's initial response to the above information may be to assume that the best network to initiate and cultivate is a highly-differentiated, strong-tie network, research suggests that a 'one size fits all' approach is not appropriate; rather, the best network for any given person is contingent upon his or her developmental needs and the context in which he or she works (Higgins, 2007).

To highlight why this is the case, consider a person who wants to keep his professional and personal worlds as distinct entities. While he may have a positive, nurturing relationship with his supervisor that involves a high amount of career assistance but a low amount of psychosocial assistance (a developer who provides this combination of support is considered a 'sponsor'), he may not want the relationship to involve discussions about his personal affairs leading to higher psychosocial support and thus evolving that relationship to the strongest tie, that of a mentor status (a mentor, the 'strongest' tie, involves the provision of high amounts of psychosocial and career support). This example above, first offered by Higgins (2007), highlights that a network comprised of developers who are all mentors is not necessarily the most appropriate structure for everyone. Rather the structure of the network should vary based on that particular person's needs and the context in which he or she works. This approach is consistent with a needs-based perspective on mentoring (e.g., Mezias and Scandura, 2005), which emphasizes the notion that an individual should be central to enacting a self-authored, 'protean' career (Hall, 1996).

The above discussion suggests that a person starts with his or her needs and goals (providing further rationale for addressing the 'Knowing Why' phase early in the process) and considers whether his or her existing network can meet the desired destination. They should start by asking who is taking an active interest in and action to advance their career (Higgins and Kram, 2001) as a means to identify their developers. They should evaluate the network's relative overall structure as a way to understand what kind of support they are receiving and then assess whether the support they are receiving is of the right type and amount. It may be that their existing network is not currently assisting them in the right way in light of their leadership goals, but only because they are not interacting with their developers to allow additional support.

Crucial to the process of 'Knowing Why' is an awareness of one's existing developers and potential developers; we term this 'Developer Awareness'. Consistent with the notion of managing one's boss (Gabarro and Kotter, 1980 [1993]), one needs to recognize the importance of a current or potential developer's needs, motivations, goals, strengths and weaknesses. By being aware, a focal person is better positioned to help the targeted others – current developers or potential ones – and interact with them more effectively. For example, a person should look for cues from others that they are motivated to help people – potentially by virtue of their adult development stage (e.g., Levinson et al., 1978) – and thus a potential developer. People can consider their broader social network and assess relationships that can evolve into developmental ones. In both cases, people should consider whether that person can provide the type and/or amount of support someone needs to develop toward desirable ends. Through Developer Awareness and an assessment of one's existing network, one can begin considering what actions would be most likely to foster a responsive, appropriate relationship.

To return to the case of Joe and Ben, Joe had a dense, homogeneous, weak tie network. Essentially, his few developers were peers at his level in the organization who knew each other (and therefore provided redundant support) and were allies (providing low levels of career and psychosocial support). While Joe lacked a clear understanding of himself in numerous ways in relation to leadership, he was aware that he wanted to climb XYZ's hierarchy. At XYZ, however, it was important to have the support of high-status individuals in order to provide the visibility and exposure to challenging assignments. His network did not contain a single high-ranking or high-status individual, thus undermining his potential to secure his goal for career advancement.

Ben had a network that was moderately positioned to aid his leadership development. His network was relatively diverse in that it spanned hierarchical levels within the organization – he identified a strong peer developer (a friend), John (a sponsor), and a senior ranking executive (a sponsor) – as well as outside of it. He also had two peer developmental relationships (friends) with the professional association. While he had a fairly broad network, it did not fully meet his particular needs. For one, Ben was considering making a career change. XYZ company was underperforming vis-à-vis other companies in the industry and it wasn't known for its strength in leadership development. Unfortunately, neither of his two industry peers had significant ties to help him learn more about career opportunities beyond XYZ, nor could he confide in his internal developers about opportunities. Also, interestingly, while Ben had a fairly diverse developmental network, he failed to realize that his father, who had significant executive experience, could potentially be a mentor to him. Their interactions usually centered on sports discussions and never moved into the career realm.

Interestingly, neither employee identified a subordinate developer in their networks. While it may initially seem counterintuitive that a junior employee could aid a senior employee's leadership capability, consider how valuable information about the impact that either one of them is having on their subordinates would be. For example, Ben could receive meaningful feedback from a candid discussion with a subordinate that could help him understand whether his vision for the group was supported, whether he was indeed inspiring and motivating his employees, as well as whether he was serving as a coach and mentor to others; the last two points both affect whether this subordinates would perceive him as an effective leader.

## WHAT HAPPENS NEXT?

After someone has sequenced through the three phases, what comes next? At this point, they are ready to take action. The three phases enable them to have the knowledge they need to begin to enlist others in their development. Each phase is important because it offers a different lens through which to view one's current ability to do so. In the event that one does not 'know why', one cannot self-author one's leadership development; rather, one will probably take action toward no specific, relevant end, if one takes action at all. This is consistent with Hall's work (1996, 2002) on the meta-competencies of self-awareness and adaptability; without self-awareness, adaptation is aimless. With respect to the chapter's focal characters, Joe needs to begin the process of considering who he is and what he wants. Until then, he will be unable to enlist people in his development in a meaningful way. Ben, on the other hand, is well-positioned in his 'knowing why' to move forward.

If one is lacking on one of the Relational Savvy dimensions, they are less capable of initiating and nurturing developmental relationships. Thus, as they gain an understanding of their respective Relational Savvy, they can either take action to enhance their Savvy or act with greater awareness of their strengths and relative limitations in enlisting others. Interestingly, one's current developers can probably help strengthen one's Relational Savvy, either by providing role modeling, one of the key mentoring functions, or coaching, another career-related function (Kram, 1985).

Joe's biggest challenge at this point may be in moving beyond his beliefs and attitudes about whether others are willing to assist him. Until he revisits the belief, for example, that enlisting others in his development suggests a lack of competence, it seems unlikely that he will be developmentally proactive. Here again, on the other hand, Ben is well equipped to foster a well-positioned network given he possesses the requisite skills and attitudes.

As a final phase, 'Knowing Whom' is critical to locating the right people for one's network and positioning oneself to gain the right support overall. Someone who undertakes the first two phases yet neglects the third will know where they want to go and have the know-how to enlist others to aid them but won't have an appropriate understanding of who in their environment is willing and able to be a developer (Developer Awareness) or have a deep sense of how their network is currently assisting them. It's important to realize who is in one's personal board of directors and what that board should look like if it is to help move oneself from 'point A to point B'.

At this point, as a starting point, Joe needs to reach out to senior-ranking or high-status individuals in his organization to ensure that he's visible within the organization. He may also determine that he needs leadership coaching (career-related functional support) and thus consider any number of individuals inside (for example, a peer or senior) or outside (for example, someone who teaches a leadership training seminar; an industry support group) the organization. Given Joe's reticence about reaching out for assistance due to his belief that it makes him seem incompetent, he may be most comfortable looking beyond the organization. Not only can this person provide key career-related functional support, he or she can also help Joe gain clarity about his career goals, strengths and weaknesses (interestingly, the Knowing Why component), of course, that is if Joe determines that this person is appropriate to helping him in this way.

Perhaps Ben could take graduate courses at night while maintaining his full-time job at XYZ as a means to locate developers beyond his existing ones who could help him learn about industry opportunities. Should Ben choose to foster a developmental relationship with his father, he will have another source of interpersonal learning. The key for both Ben and Joe is that they closely consider what the existing network offers and whether they are well positioned to receive the support they need to reach their desired leadership ends. If they aren't well positioned via their existing network, they need to scan their social network and the environment to locate potential developers who are suited to help them. As a reminder, it is important for them to consistently keep in mind what they can do to help others, both their current developers and people more generally. Given that growth-enhancing relationships are often characterized by greater levels of closeness, liking and mutuality (Fletcher and Ragins, 2007), it is particularly important for a protégé to ensure that he or she assists others, lest the latter feel that the relationship is a 'one-way street'.

We have presented this model in a linear fashion, suggesting that an individual who wants to enlist a board of directors (Higgins, 2000) should begin at phase one and proceed through each of the second and third stages, respectively. We offered this model to introduce readers to a critical aspect of self-leadership – that of enlisting others in one's development. This model necessarily oversimplifies what actually occurs in practice. In reality, these phases may occur simultaneously, particularly in the event that a person initially enacts all three of them; going forward, that person is sufficiently knowledgeable to consider all of them concurrently. Thus, they can continually evaluate their goals, strengths and weaknesses, consider how to sharpen their Relational Savvy skills and attitudes, and assess whether their developmental network is positioned to help.

We assume that individuals will act on knowledge gained by virtue of cycling through these phases. Thus, at the tail end of the third phase, it is reasonable to assume that they will enlist others in their development by better utilizing the developers in their existing network – toward the ends identified in the 'Knowing Why' phase – and/or by fostering new relationships that offer unique sources of developmental support.

Figure 12.1 shows three outcomes that can occur as the result of enacting this process: enhanced self-awareness, Relational Savvy, and leadership competencies. In fact, it is important to note that enlisting others in one's development can heighten one's 'knowing why' and 'relational know how' in addition to improving one's leadership ability. Developers can act as sounding boards and ask pertinent questions that help someone understand his or her values and goals. Furthermore, as suggested in the early discussion on 'Knowing Why', developers are often part of one's 360-degree feedback and a supervisor is inevitably involved with one's formal performance evaluation, both of which serve as opportunities to gain clarity about the 'why factor'. Developers can heighten one's Relational Savvy in a number of ways, including by providing coaching and feedback about one's capability and by serving as Savvy role models that a focal person can emulate. Finally, by fostering a responsive, contingency-appropriate developmental network, one can gain functional support that actually enables leadership development. As Figure 12.1 shows, there are feedback loops in the process such that 'success begets success': by successfully enacting the three phases, there are positive outcomes that loop back to positively influence later efforts through the phases. Again, in actuality, all three 'phases' may occur simultaneously.

To return to Maugham's quote offered at the beginning of this chapter, this chapter proposes that enlisting teachers to aid one's leadership development will prevent one from wandering aimlessly down blind alleys. Rather than engaging on an isolated journey, we encourage those who aspire to self-managed leadership development to gain the support of a network of developers to help them along the way.

## NOTE

1. We acknowledge at the onset that our model oversimplifies reality: we chose to do so to provide a sequence of actions showing a clear path of action. However, in fact, these stages are likely to be conducted simultaneously rather than linearly. Our model indicates this fact by noting a stage 4 in which a person continues the process after sequencing through it. Thus, we assert that a person who opts to conduct all three phases concurrently will experience the same outcomes as someone who does so sequentially.

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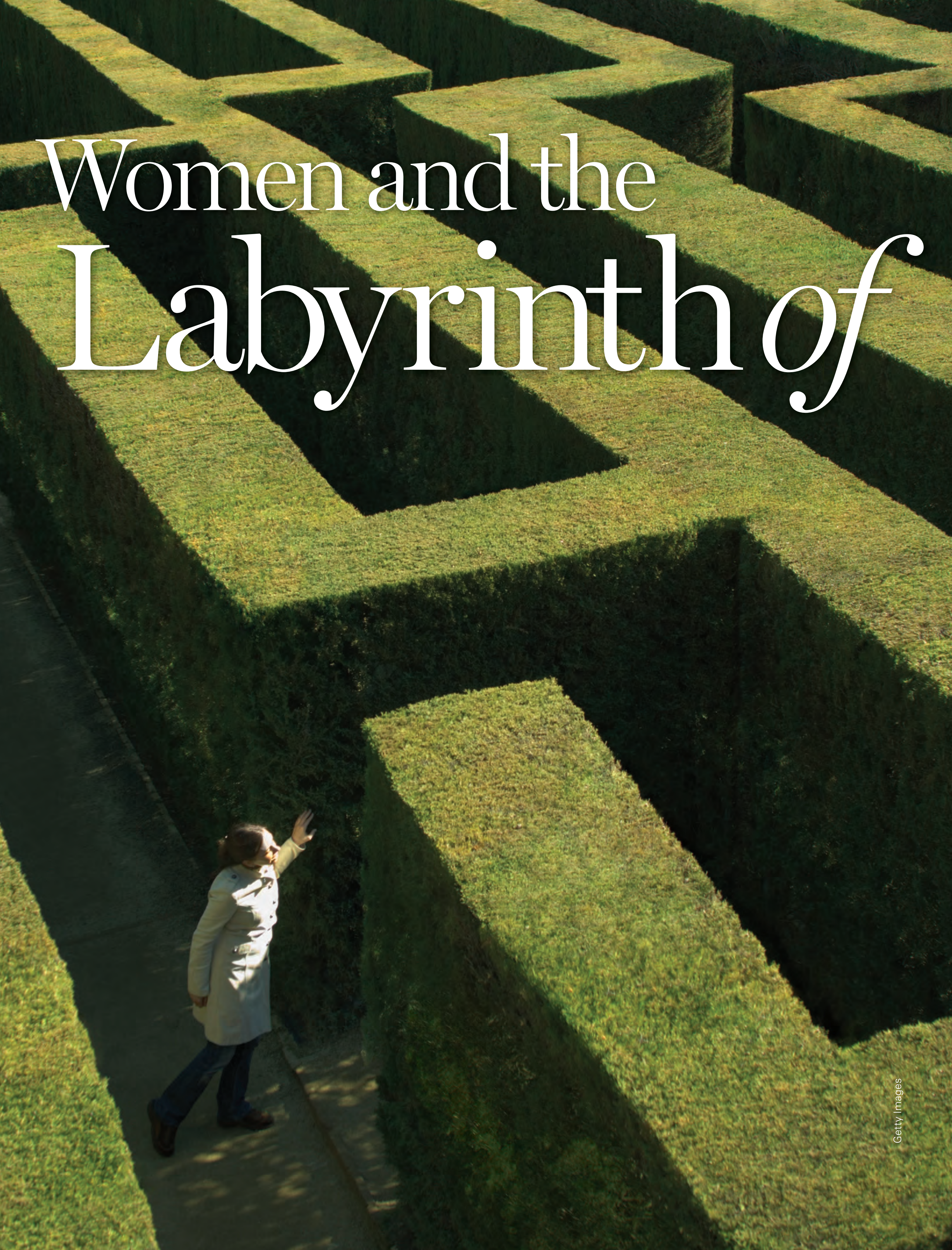
# Women and the Labyrinth of



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# Leadership

*When you put all the pieces together, a new picture emerges for why women don't make it into the C-suite.*

*It's not the glass ceiling, but the sum of many obstacles along the way.*

BY ALICE H. EAGLY AND LINDA L. CARLI

If one has misdiagnosed a problem, then one is unlikely to prescribe an effective cure. This is the situation regarding the scarcity of women in top leadership. Because people with the best of intentions have misread the symptoms, the solutions that managers are investing in are not making enough of a difference.

That there is a problem is not in doubt. Despite years of progress by women in the workforce (they now occupy more than 40% of all managerial positions in the United States), within the C-suite they remain as rare as hens' teeth. Consider the most highly paid executives of *Fortune* 500 companies – those with titles such as chairman, president, chief executive officer, and chief operating officer. Of this group, only 6% are women. Most notably, only 2% of the CEOs are women, and only 15% of the seats on the boards of directors are held by women. The situation is not much different in other industrialized countries. In the 50 largest publicly traded corporations in each nation of the European Union, women make up, on average, 11% of the top executives and 4% of the CEOs and heads of boards. Just seven companies, or 1%, of *Fortune* magazine's Global 500 have female CEOs. What is to blame for the pronounced lack of women in positions of power and authority?

In 1986 the *Wall Street Journal*'s Carol Hymowitz and Timothy Schellhardt gave the world an answer: "Even those few women who rose steadily through the ranks eventually crashed into an invisible barrier. The executive suite seemed within their grasp, but they just couldn't break through the glass ceiling." The metaphor, driven home by the article's accompanying illustration, resonated; it captured the frustration of a goal within sight but somehow unattainable. To be sure, there was a time when the barriers were absolute. Even within the career spans of 1980s-era executives, access to top posts had been explicitly denied. Consider comments made by President Richard Nixon, recorded on White House audiotapes and made public through the Freedom of Information Act. When explaining why he would not appoint a woman to the U.S. Supreme Court, Nixon said, "I don't think a woman should be in any government job whatsoever…mainly because they are erratic. And emotional. Men are erratic and emotional, too, but the point is a woman is more likely to be." In a culture where such opinions were widely held, women had virtually no chance of attaining influential leadership roles.

Times have changed, however, and the glass ceiling metaphor is now more wrong than right. For one thing, it describes an absolute barrier at a specific high level in organizations. The fact that there have been female chief executives, university presidents, state governors, and presidents of nations gives the lie to that charge. At the same time, the metaphor implies that women and men have equal access to entry- and midlevel positions. They do not. The image of a transparent obstruction also suggests that women are being misled about their opportunities, because the impediment is not easy for them to see from a distance. But some impediments are not subtle. Worst of all, by depicting a single, unvarying obstacle, the glass ceiling fails to incorporate the complexity and variety of challenges that women can face in their leadership journeys. In truth, women are not turned away only as they reach the penultimate stage of a distinguished career. They disappear in various numbers at many points leading up to that stage.

Metaphors matter because they are part of the storytelling that can compel change. Believing in the existence of a glass ceiling, people emphasize certain kinds of interventions: top-to-top networking, mentoring to increase board memberships, requirements for diverse candidates in high-profile succession horse races, litigation aimed at punishing discrimination in the C-suite. None of these is counterproductive; all have a role to play. The danger arises when they draw attention and resources away from other kinds of interventions that might attack the problem more potently. If we want to make better progress, it's time to rename the challenge.

## Walls All Around

A better metaphor for what confronts women in their professional endeavors is the labyrinth. It's an image with a long and varied history in ancient Greece, India, Nepal, native North and South America, medieval Europe, and elsewhere. As a contemporary symbol, it conveys the idea of a complex journey toward a goal worth striving for. Passage through a labyrinth is not simple or direct, but requires persistence, awareness of one's progress, and a careful analysis of the puzzles that lie ahead. It is this meaning that we intend to convey. For women who aspire to top leadership, routes exist but are full of twists and turns, both unexpected and expected. Because all labyrinths have a viable route to the center, it is understood that goals are attainable. The metaphor acknowledges obstacles but is not ultimately discouraging.

If we can understand the various barriers that make up this labyrinth, and how some women find their way around them, we can work more effectively to improve the situation. What are the obstructions that women run up against? Let's explore them in turn.

**Vestiges of prejudice**. It is a well-established fact that men as a group still have the benefit of higher wages and faster promotions. In the United States in 2005, for example, women employed full-time earned 81 cents for every dollar that men earned. Is this true because of discrimination or simply because, with fewer family demands placed on them and longer careers on average, men are able to gain superior qualifications? Literally hundreds of correlational studies by economists and sociologists have attempted to find the answer.

One of the most comprehensive of these studies was conducted by the U.S. Government Accountability Office. The study was based on survey data from 1983 through 2000 from a representative sample of Americans. Because the same people responded to the survey repeatedly over the years, the study provided accurate estimates of past work experience, which is important for explaining later wages.

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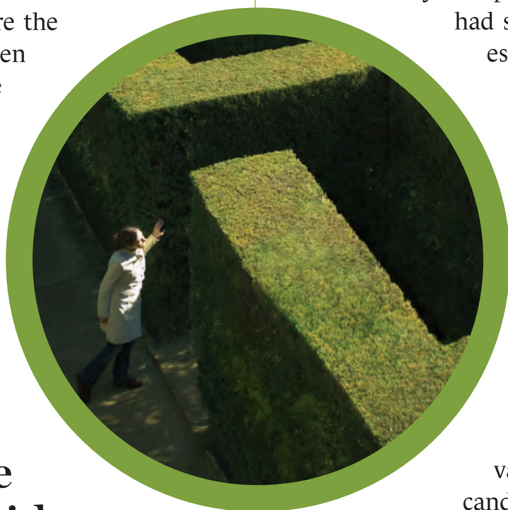
The GAO researchers tested whether individuals' total wages could be predicted by sex and other characteristics. They included part-time and full-time employees in the surveys and took into account all the factors that they could estimate and that might affect earnings, such as education and work experience. Without controls for these variables, the data showed that women earned about 44% less than men, averaged over the entire period from 1983 to 2000. With these controls in place, the gap was only about half as large, but still substantial. The control factors that reduced the wage gap most were the different employment patterns of men and women: Men undertook more hours of paid labor per year than women and had more years of job experience.

Although most variables affected the wages of men and women similarly, there were exceptions. Marriage and parenthood, for instance, were associated with higher wages for men but not for women. In contrast, other characteristics, especially years of education, had a more positive effect on women's wages than on men's. Even after adjusting wages for all of the ways men and women differ, the GAO study, like similar studies, showed that women's wages remained lower than men's. The unexplained gender gap is consistent with the presence of wage discrimination.



**Marriage and parenthood are associated with higher wages for men but not for women.**

Similar methods have been applied to the question of whether discrimination affects promotions. Evidently it does. Promotions come more slowly for women than for men with equivalent qualifications. One illustrative national study followed workers from 1980 to 1992 and found that white men were more likely to attain managerial positions than white women, black men, and black women. Controlling for other characteristics, such as education and hours worked per year, the study showed that white men were ahead of the other groups when entering the labor market and that their advantage in attaining managerial positions grew throughout their careers. Other research has underscored these findings. Even in culturally feminine settings such as nursing, librarianship, elementary education, and social work (all specifically studied by sociologist Christine Williams), men ascend to supervisory and administrative positions more quickly than women.

The findings of correlational studies are supported by experimental research, in which subjects are asked to evaluate hypothetical individuals as managers or job candidates, and all characteristics of these individuals are held constant except for their sex. Such efforts continue the tradition of the Goldberg paradigm, named for a 1968 experiment by Philip Goldberg. His simple, elegant study had student participants evaluate written essays that were identical except for the attached male or female name. The students were unaware that other students had received identical material ascribed to a writer of the other sex. This initial experiment demonstrated an overall gender bias: Women received lower evaluations unless the essay was on a feminine topic. Some 40 years later, unfortunately, experiments continue to reveal the same kind of bias in work settings. Men are advantaged over equivalent women as candidates for jobs traditionally held by men as well as for more gender-integrated jobs. Similarly, male leaders receive somewhat more favorable evaluations than equivalent female leaders, especially in roles usually occupied by men.

Interestingly, however, there is little evidence from either the correlational or the experimental studies that the odds are stacked higher against women with each step up the ladder – that is, that women's promotions become progressively less likely than men's at higher levels within organizations. Instead, a general bias against women appears to operate with approximately equal strength at all levels. The scarcity of female corporate officers is the sum of discrimination that has operated at all ranks, not evidence of a particular obstacle to advancement as women approach the top. The problem, in other words, is not a glass ceiling.

**Resistance to women's leadership.** What's behind the discrimination we've been describing? Essentially, a set of widely shared conscious and unconscious mental associations about women, men, and leaders. Study after study has affirmed that people associate women and men with different traits and link men with more of the traits that connote leadership. Kim Campbell, who briefly served as the prime minister of Canada in 1993, described the tension that results:

> I don't have a traditionally female way of speaking.... I'm quite assertive. If I didn't speak the way I do, I wouldn't have been seen as a leader. But my way

of speaking may have grated on people who were not used to hearing it from a woman. It was the right way for a leader to speak, but it wasn't the right way for a woman to speak. It goes against type.

In the language of psychologists, the clash is between two sets of associations: communal and agentic. Women are associated with communal qualities, which convey a concern for the compassionate treatment of others. They include being especially affectionate, helpful, friendly, kind, and sympathetic, as well as interpersonally sensitive, gentle, and soft-spoken. In contrast, men are associated with agentic qualities, which convey assertion and control. They include being especially aggressive, ambitious, dominant, self-confident, and forceful, as well as self-reliant and individualistic. The agentic traits are also associated in most people's minds with effective leadership – perhaps because a long history of male domination of leadership roles has made it difficult to separate the leader associations from the male associations.

As a result, women leaders find themselves in a double bind. If they are highly communal, they may be criticized for not being agentic enough. But if they are highly agentic, they may be criticized for lacking communion. Either way, they may leave the impression that they don't have "the right stuff" for powerful jobs.

**Verbally intimidating others can undermine a woman's influence, and assertive behavior can reduce her chances of getting a job or advancing in her career.**

Given this double bind, it is hardly surprising that people are more resistant to women's influence than to men's. For example, in meetings at a global retail company, people responded more favorably to men's overt attempts at influence than to women's. In the words of one of this company's female executives, "People often had to speak up to defend their turf, but when women did so, they were vilified. They were labeled 'control freaks'; men acting the same way were called 'passionate.'"

Studies have gauged reactions to men and women engaging in various types of dominant behavior. The findings are quite consistent. Nonverbal dominance, such as staring at others while speaking to them or pointing at people, is a more damaging behavior for women than for men. Verbally intimidating others can undermine a woman's influence, and assertive behavior can reduce her chances of getting a job or advancing in her career. Simply disagreeing can sometimes get women into trouble. Men who disagree or otherwise act dominant get away with it more often than women do.

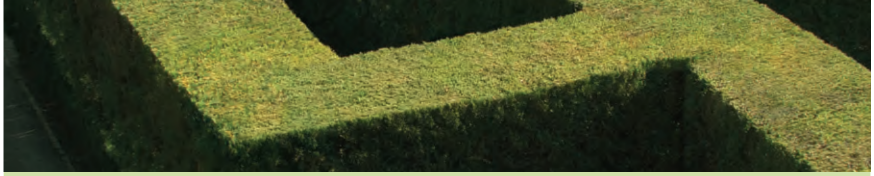
Self-promotion is similarly risky for women. Although it can convey status and competence, it is not at all communal. So while men can use bluster to get themselves noticed, modesty is expected even of highly accomplished women. Linguistics professor Deborah Tannen tells a story from her experience: "This [need for modesty] was evident, for example, at a faculty meeting devoted to promotions, at which a woman professor's success was described: She was extremely well published and well known in the field. A man commented with approval, 'She wears it well.' In other words, she was praised for not acting as successful as she was."

Another way the double bind penalizes women is by denying them the full benefits of being warm and considerate. Because people expect it of women, nice behavior that seems noteworthy in men seems unimpressive in women. For example, in one study, helpful men reaped a lot of approval, but helpful women did not. Likewise, men got away with being unhelpful, but women did not. A different study found that male employees received more promotions when they reported higher levels of helpfulness to coworkers. But female employees' promotions were not related to such altruism.

While one might suppose that men would have a double bind of their own, they in fact have more freedom. Several experiments and organizational studies have assessed reactions to behavior that is warm and friendly versus dominant and assertive. The findings show that men can communicate in a warm or a dominant manner, with no penalty either way. People like men equally well and are equally influenced by them regardless of their warmth.

It all amounts to a clash of assumptions when the average person confronts a woman in management. Perhaps this is why respondents in one study characterized the group "successful female managers" as more deceitful, pushy, selfish, and abrasive than "successful male managers." In the absence of any evidence to the contrary, people suspect that such highly effective women must not be very likable or nice.

**Issues of leadership style.** In response to the challenges presented by the double bind, female leaders often struggle to cultivate an appropriate and effective leadership style – one that reconciles the communal qualities people prefer in women with the agentic qualities people think leaders need to succeed. Here, for instance, is how Marietta Nien-hwa Cheng described her transition to the role of symphony conductor:



> I used to speak more softly, with a higher pitch. Sometimes my vocal cadences went up instead of down. I realized that these mannerisms lack the sense of authority. I strengthened my voice. The pitch has dropped….I have stopped trying to be everyone's friend. Leadership is not synonymous with socializing.

It's difficult to pull off such a transformation while maintaining a sense of authenticity as a leader. Sometimes the whole effort can backfire. In the words of another female leader, "I think that there is a real penalty for a woman who behaves like a man. The men don't like her and the women don't either." Women leaders worry a lot about these things, complicating the labyrinth that they negotiate. For example, Catalyst's study of *Fortune* 1000 female executives found that 96% of them rated as critical or fairly important that they develop "a style with which male managers are comfortable."

Does a distinct "female" leadership style exist? There seems to be a popular consensus that it does. Consider, for example, journalist Michael Sokolove's profile of Mike Krzyzewski, head coach of the highly successful Duke University men's basketball team. As Sokolove put it, "So what is the secret to Krzyzewski's success? For starters, he coaches the way a woman would. Really." Sokolove proceeded to describe Krzyzewski's mentoring, interpersonally sensitive, and highly effective coaching style.

More scientifically, a recent meta-analysis integrated the results of 45 studies addressing the question. To compare leadership skills, the researchers adopted a framework introduced by leadership scholar James MacGregor Burns that distinguishes between transformational leadership and transactional leadership. Transformational leaders establish themselves as role models by gaining followers' trust and confidence. They state future goals, develop plans to achieve those goals, and innovate, even when their organizations are generally successful. Such leaders mentor and empower followers, encouraging them to develop their full potential and thus to contribute more effectively to their organizations. By contrast, transactional leaders establish give-and-take relationships that appeal to subordinates' self-interest. Such leaders manage in the conventional manner of clarifying subordinates' responsibilities, rewarding them for meeting objectives, and correcting them for failing to meet objectives. Although transformational and transactional leadership styles are different, most leaders adopt at least some behaviors of both types. The researchers also allowed for a third category, called the laissez-faire style – a sort of nonleadership that concerns itself with none of the above, despite rank authority.

The meta-analysis found that, in general, female leaders were somewhat more transformational than male leaders, especially when it came to giving support and encouragement to subordinates. They also engaged in more of the rewarding behaviors that are one aspect of transactional leadership. Meanwhile, men exceeded women on the aspects of transactional leadership involving corrective and disciplinary actions that are either active (timely) or passive (belated). Men were also more likely than women to be laissez-faire leaders, who take little responsibility for managing. These findings add up to a startling conclusion, given that most leadership research has found the transformational style (along with the rewards and positive incentives associated with the transactional style) to be more suited to

## Is It Only a Question of Time?

**IT IS A COMMON PERCEPTION** that women will steadily gain greater access to leadership roles, including elite positions. For example, university students who are queried about the future power of men and women say that women's power will increase. Polls have shown that most Americans expect a woman to be elected president or vice president within their lifetimes. Both groups are extrapolating women's recent gains into the future, as if our society were on a continuous march toward gender equality.

But social change does not proceed without struggle and conflict. As women gain greater equality, a portion of people react against it. They long for traditional roles. In fact, signs of a pause in progress toward gender equality have appeared on many fronts. A review of longitudinal studies reveals several areas in which a sharp upward trend in the 1970s and 1980s has been followed by a slowing and flattening in recent years (for instance, in the percentage of managers who are women). The pause is also evident in some attitudinal data – like the percentage of people who approve of female bosses and who believe that women are at least as well suited as men for politics.

Social scientists have proposed various theories to explain this pause. Some, such as social psychologist Cecilia Ridgeway, believe that social change is activating "people's deep seated interests in maintaining clear cultural understandings of gender difference." Others believe progress has reached its limit given the continuing organization of family life by gender, coupled with employer policies that favor those who are not hampered by primary responsibility for child rearing.

It may simply be that women are collectively catching their breath before pressing for more change. In the past century, feminist activism arose when women came to view themselves as collectively subjected to illegitimate and unfair treatment. But recent polls show less conviction about the presence of discrimination, and feminism does not have the cultural relevance it once had. The lessening of activism on behalf of all women puts pressure on each woman to find her own way.

leading the modern organization. The research tells us not only that men and women do have somewhat different leadership styles, but also that women's approaches are the more generally effective – while men's often are only somewhat effective or actually hinder effectiveness.

Another part of this picture, based on a separate meta-analysis, is that women adopt a more participative and collaborative style than men typically favor. The reason for this difference is unlikely to be genetic. Rather, it may be that collaboration can get results without seeming particularly masculine. As women navigate their way through the double bind, they seek ways to project authority without relying on the autocratic behaviors that people find so jarring in women. A viable path is to bring others into decision making and to lead as an encouraging teacher and positive role model. (However, if there is not a critical mass of other women to affirm the legitimacy of a participative style, female leaders usually conform to whatever style is typical of the men – and that is sometimes autocratic.)

**Demands of family life.** For many women, the most fateful turns in the labyrinth are the ones taken under pressure of family responsibilities. Women continue to be the ones who interrupt their careers, take more days off, and work part-time. As a result, they have fewer years of job experience and fewer hours of employment per year, which slows their career progress and reduces their earnings.

In one study of Chicago lawyers, researchers sought to understand why women were much less likely than men to hold the leadership positions in large law firms – the positions that are most highly paid and that confer (arguably) the highest prestige. They found that women were no less likely than men to begin their careers at such firms but were more likely to leave them for positions in the public sector or corporate positions. The reasons for their departures were concentrated in work/family trade-offs. Among the relatively few women who did become partner in a firm, 60% had no children, and the minority who had children generally had delayed childbearing until attaining partner status.

There is no question that, while men increasingly share housework and child rearing, the bulk of domestic work still falls on women's shoulders. We know this from time-diary studies, in which people record what they are doing during each hour of a 24-hour day. So, for example, in the United States married women devoted 19 hours per week on average to housework in 2005, while married men contributed 11 hours. That's a huge improvement over 1965 numbers, when women spent a whopping 34 hours per week to men's five, but it is still a major inequity. And the situation looks worse when child care hours are added.

**Mothers provide more child care hours than they did in earlier generations – despite the fact that fathers are putting in a lot more time than in the past.**

Although it is common knowledge that mothers provide more child care than fathers, few people realize that mothers provide more than they did in earlier generations – despite the fact that fathers are putting in a lot more time than in the past. National studies have compared mothers and fathers on the amount of their primary child care, which consists of close interaction not combined with housekeeping or other activities. Married mothers increased their hours per week from 10.6 in 1965 to 12.9 in 2000, and married fathers increased theirs from 2.6 to 6.5. Thus, though husbands have taken on more domestic work, the work/family conflict has not eased for women; the gain has been offset by escalating pressures for intensive parenting and the increasing time demands of most high-level careers.

Even women who have found a way to relieve pressures from the home front by sharing child care with husbands, other family members, or paid workers may not enjoy the full workplace benefit of having done so. Decision makers often assume that mothers have domestic responsibilities that make it inappropriate to promote them to demanding positions. As one participant in a study of the federal workforce explained, "I mean, there were 2 or 3 names [of women] in the hat, and they said, 'I don't want to talk about her because she has children who are still home in these [evening] hours.' Now they don't pose that thing about men on the list, many of whom also have children in that age group."

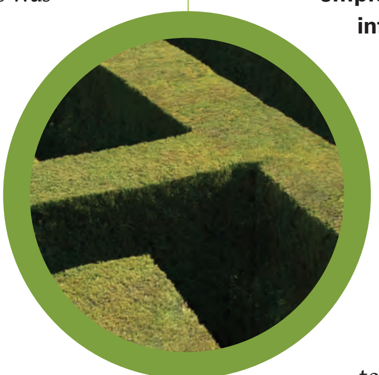
**Underinvestment in social capital.** Perhaps the most destructive result of the work/family balancing act so many women must perform is that it leaves very little time for socializing with colleagues and building professional networks. The social capital that accrues from such "nonessential" parts of work turns out to be quite essential indeed. One study yielded the following description of managers who advanced rapidly in hierarchies: Fast-track managers "spent relatively more time and effort socializing, politicking, and interacting with outsiders than did their less successful counterparts…[and] did not give much time or attention to the traditional management activities of planning, decision making, and controlling or to the human resource management activities of motivating/reinforcing, staffing, training/developing, and managing conflict." This suggests that social capital is even more necessary to managers' advancement than skillful performance of traditional managerial tasks.

Even given sufficient time, women can find it difficult to engage in and benefit from informal networking if they are a small minority. In such settings, the influential networks are composed entirely or almost entirely of men. Breaking into those male networks can be hard, especially when men center their networks on masculine activities. The recent gender discrimination lawsuit against Wal-Mart provides examples of this. For instance, an executive retreat took the form of a quail-hunting expedition at Sam Walton's ranch in Texas. Middle managers' meetings included visits to strip clubs and Hooters restaurants, and a sales conference attended by thousands of store managers featured a football theme. One executive received feedback that she probably would not advance in the company because she didn't hunt or fish.

## Management Interventions That Work

Taking the measure of the labyrinth that confronts women leaders, we see that it begins with prejudices that benefit men and penalize women, continues with particular resistance to women's leadership, includes questions of leadership style and authenticity, and – most dramatically for many women – features the challenge of balancing work and family responsibilities. It becomes clear that a woman's situation as she reaches her peak career years is the result of many turns at many challenging junctures. Only a few individual women have made the right combination of moves to land at the center of power – but as for the rest, there is usually no single turning point where their progress was diverted and the prize was lost.

What's to be done in the face of such a multifaceted problem? A solution that is often proposed is for governments to implement and enforce antidiscrimination legislation and thereby require organizations to eliminate inequitable practices. However, analysis of discrimination cases that have gone to court has shown that legal remedies can be elusive when gender inequality results from norms embedded in organizational structure and culture. The more effective approach is for organizations to appreciate the subtlety and complexity of the problem and to attack its many roots simultaneously. More specifically, if a company wants to see more women arrive in its executive suite, it should do the following:



One study suggests that social capital is even more necessary to managers' advancement than skillful performance of traditional managerial tasks.

**Increase people's awareness of the psychological drivers of prejudice toward female leaders, and work to dispel those perceptions.** Raising awareness of ingrained bias has been the aim of many diversity-training initiatives, and no doubt they have been more helpful than harmful. There is the danger they will be undermined, however, if their lessons are not underscored by what managers say and do in the course of day-to-day work.

**Change the long-hours norm.** Especially in the context of knowledge work, it can be hard to assess individuals' relative contributions, and managers may resort to "hours spent at work" as the prime indicator of someone's worth to the organization. To the extent an organization can shift the focus to objective measures of productivity, women with family demands on their time but highly productive work habits will receive the rewards and encouragement they deserve.

**Reduce the subjectivity of performance evaluation.** Greater objectivity in evaluations also combats the effects of lingering prejudice in both hiring and promotion. To ensure fairness, criteria should be explicit and evaluation processes designed to limit the influence of decision makers' conscious and unconscious biases.

**Use open-recruitment tools, such as advertising and employment agencies, rather than relying on informal social networks and referrals to fill positions.** Recruitment from within organizations also should be transparent, with postings of open positions in appropriate venues. Research has shown that such personnel practices increase the numbers of women in managerial roles.

**Ensure a critical mass of women in executive positions – not just one or two women – to head off the problems that come with tokenism.** Token women tend to be pegged into narrow stereotypical roles such as "seductress," "mother," "pet," or "iron maiden." (Or more colorfully, as one woman banker put it, "When you start out in banking, you are a slut or a geisha.") Pigeonholing like this limits women's options and makes it difficult for them to rise to positions of responsibility. When women are not a small minority, their identities as women become less salient, and colleagues are more likely to react to them in terms of their individual competencies.

**Avoid having a sole female member of any team.** Top management tends to divide its small population of women managers among many projects in the interests of introducing diversity to them all. But several studies have found that, so outnumbered, the women tend to be ignored by the men. A female vice president of a manufacturing company described how, when she or another woman ventures an idea in a meeting, it tends to be overlooked: "It immediately gets lost in the conversation. Then two minutes later, a man makes the same suggestion, and it's 'Wow! What a great idea!' And you sit there and think, 'What just happened?'" As women reach positions of higher power and authority, they increasingly find themselves in gender-imbalanced groups – and some find themselves, for the first time, seriously marginalized. This is part of the reason that the glass ceiling metaphor resonates with so many. But in fact, the problem can be present at any level.

**Help shore up social capital**. As we've discussed, the call of family responsibilities is mainly to blame for women's underinvestment in networking. When time is scarce, this social activity is the first thing to go by the wayside. Organizations can help women appreciate why it deserves more attention. In particular, women gain from strong and supportive mentoring relationships and connections with powerful networks. When a well-placed individual who possesses greater legitimacy (often a man) takes an interest in a woman's career, her efforts to build social capital can proceed far more efficiently.

**Prepare women for line management with appropriately demanding assignments**. Women, like men, must have the benefit of developmental job experiences if they are to qualify for promotions. But, as one woman executive wrote, "Women have been shunted off into support areas for the last 30 years, rather than being in the business of doing business, so the pool of women trained to assume leadership positions in any large company is very small." Her point was that women should be taught in business school to insist on line jobs when they enter the workforce. One company that has taken up the challenge has been Procter & Gamble. According to a report by Claudia Deutsch in the *New York Times,* the company was experiencing an executive attrition rate that was twice as high for women as for men. Some of the women reported having to change companies to land jobs that provided challenging work. P&G's subsequent efforts to bring more women into line management both improved its overall retention of women and increased the number of women in senior management.

**Establish family-friendly human resources practices.** These may include flextime, job sharing, telecommuting, elder care provisions, adoption benefits, dependent child care options, and employee-sponsored on-site child care. Such support can allow women to stay in their jobs during the most demanding years of child rearing, build social capital, keep up to date in their fields, and eventually compete for higher positions. A study of 72 large U.S. firms showed (controlling for other variables) that family-friendly HR practices in place in 1994 increased the proportion of women in senior management over the subsequent five years.

**Allow employees who have significant parental responsibility more time to prove themselves worthy of promotion**. This recommendation is particularly directed to organizations, many of them professional services firms, that have established "up or out" career progressions. People not ready for promotion at the same time as the top performers in their cohort aren't simply left in place – they're asked to leave. But many parents (most often mothers), while fully capable of reaching that level of achievement, need extra time – perhaps a year or two – to get there. Forcing them off the promotion path not only reduces the number of women reaching top management positions, but also constitutes a failure by the firm to capitalize on its early investment in them.

**When the eye can take in the whole of the puzzle – the starting position, the goal, and the maze of walls – solutions begin to suggest themselves.**

**Welcome women back**. It makes sense to give high-performing women who step away from the workforce an opportunity to return to responsible positions when their circumstances change. Some companies have established "alumni" programs, often because they see former employees as potential sources of new business. A few companies have gone further to activate these networks for other purposes, as well. (Procter & Gamble taps alumni for innovation purposes; Booz Allen sees its alumni ranks as a source of subcontractors.) Keeping lines of communication open can convey the message that a return may be possible.

**Encourage male participation in family-friendly benefits**. Dangers lurk in family-friendly benefits that are used only by women. Exercising options such as generous parental leave and part-time work slows down women's careers. More profoundly, having many more women than men take such benefits can harm the careers of women in general because of the expectation that they may well exercise those options. Any effort toward greater family friendliness should actively recruit male participation to avoid inadvertently making it harder for women to gain access to essential managerial roles.

Managers can be forgiven if they find the foregoing list a tall order. It's a wide-ranging set of interventions and still far from exhaustive. The point, however, is just that: Organizations will succeed in filling half their top management slots with women – and women who are the true performance equals of their male counterparts – only by attacking all the reasons they are absent today. Glass ceiling–inspired programs and projects can do just so much if the leakage of talented women is happening on every lower floor of the building. Individually, each of these interventions has been shown to make a difference. Collectively, we believe, they can make all the difference.

### The View from Above

Imagine visiting a formal garden and finding within it a high hedgerow. At a point along its vertical face, you spot a rectangle – a neatly pruned and inviting doorway. Are you aware as you step through that you are entering a labyrinth? And, three doorways later, as the reality of the puzzle settles in, do you have any idea how to proceed? This is the situation in which many women find themselves in their career endeavors. Ground-level perplexity and frustration make every move uncertain.

Labyrinths become infinitely more tractable when seen from above. When the eye can take in the whole of the puzzle – the starting position, the goal, and the maze of walls – solutions begin to suggest themselves. This has been the goal of our research. Our hope is that women, equipped with a map of the barriers they will confront on their path to professional achievement, will make more informed choices. We hope that managers, too, will understand where their efforts can facilitate the progress of women. If women are to achieve equality, women and men will have to share leadership equally. With a greater understanding of what stands in the way of gender-balanced leadership, we draw nearer to attaining it in our time.

For a list of the sources the authors consulted, view the article at www.hbr.org.

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To order, see page 151.


P.C. Vey

"You've blurred the boundary between working from home and being unemployed."

Harvard Business Review
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*You may have more to gain by developing your gifts and leveraging your natural skills than by trying to repair your weaknesses. Here is a systematic way to discover who you are at your very best.*

# How to Play to Your Strengths

by Laura Morgan Roberts, Gretchen Spreitzer, Jane Dutton, Robert Quinn, Emily Heaphy, and Brianna Barker

Reprint R0501G

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# How to Play to Your Strengths

by Laura Morgan Roberts, Gretchen Spreitzer, Jane Dutton, Robert Quinn, Emily Heaphy, and Brianna Barker

Most feedback accentuates the negative. During formal employee evaluations, discussions invariably focus on "opportunities for improvement," even if the overall evaluation is laudatory. Informally, the sting of criticism lasts longer than the balm of praise. Multiple studies have shown that people pay keen attention to negative information. For example, when asked to recall important emotional events, people remember four negative memories for every positive one. No wonder most executives give and receive performance reviews with all the enthusiasm of a child on the way to the dentist.

Traditional, corrective feedback has its place, of course; every organization must filter out failing employees and ensure that everyone performs at an expected level of competence. Unfortunately, feedback that ferrets out flaws can lead otherwise talented managers to overinvest in shoring up or papering over their perceived weaknesses, or forcing themselves onto an ill-fitting template. Ironically, such a focus on problem areas prevents companies from reaping the best performance from its people. After all, it's a rare baseball player who is equally good at every position. Why should a natural third baseman labor to develop his skills as a right fielder?

The alternative, as the Gallup Organization researchers Marcus Buckingham, Donald Clifton, and others have suggested, is to foster excellence in the third baseman by identifying and harnessing his unique strengths. It is a paradox of human psychology that while people remember criticism, they respond to praise. The former makes them defensive and therefore unlikely to change, while the latter produces confidence and the desire to perform better. Managers who build up their strengths can reach their highest potential. This positive approach does not pretend to ignore or deny the problems that traditional feedback mechanisms identify. Rather, it offers a separate and unique feedback experience that counterbalances negative input. It allows managers to tap into strengths they may or may not be aware of and so contribute more to their organizations.

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During the past few years, we have developed a powerful tool to help people understand and leverage their individual talents. Called the Reflected Best Self (RBS) exercise, our method allows managers to develop a sense of their "personal best" in order to increase their future potential. The RBS exercise is but one example of new approaches springing from an area of research called positive organizational scholarship (POS). Just as psychologists know that people respond better to praise than to criticism, organizational behavior scholars are finding that when companies focus on positive attributes such as resilience and trust, they can reap impressive bottom-line returns. (For more on this research, see the sidebar "The Positive Organization.") Thousands of executives, as well as tomorrow's leaders enrolled in business schools around the world, have completed the RBS exercise.

In this article, we will walk you through the RBS exercise step-by-step and describe the insights and results it can yield. Before we proceed, however, a few caveats are in order. First, understand that the tool is not designed to stroke your ego; its purpose is to assist you in developing a plan for more effective action. (Without such a plan, you'll keep running in place.) Second, the lessons generated from the RBS exercise can elude you if you don't pay sincere attention to them. If you are too burdened by time pressures and job demands, you may just file the information away and forget about it. To be effective, the exercise requires commitment, diligence, and follow-through. It may even be helpful to have a coach keep you on task. Third, it's important to conduct the RBS exercise at a different time of year than the traditional performance review so that negative feedback from traditional mechanisms doesn't interfere with the results of the exercise.

Used correctly, the RBS exercise can help you tap into unrecognized and unexplored areas of potential. Armed with a constructive, systematic process for gathering and analyzing data about your best self, you can burnish your performance at work.

## Step 1
## Identify Respondents and Ask for Feedback

The first task in the exercise is to collect feedback from a variety of people inside and outside work. By gathering input from a variety of sources—family members, past and present colleagues, friends, teachers, and so on—you can develop a much broader and richer understanding of yourself than you can from a standard performance evaluation.

As we describe the process of the Reflected Best Self exercise, we will highlight the experience of Robert Duggan (not his real name), whose self-discovery process is typical of the managers we've observed. Having retired from a successful career in the military at a fairly young age and earned an MBA from a top business school, Robert accepted a midlevel management position at an IT services firm. Despite strong credentials and leadership experience, Robert remained stuck in the same position year after year. His performance evaluations were generally good but not strong enough to put him on the high-potential track. Disengaged, frustrated, and disheartened, Robert grew increasingly stressed and disillusioned with his company. His workday felt more and more like an episode of *Survivor*.

Seeking to improve his performance, Robert enrolled in an executive education program and took the RBS exercise. As part of the exercise, Robert gathered feedback from 11 individuals from his past and present who knew him well. He selected a diverse but balanced group—his wife and two other family members, two friends from his MBA program, two colleagues from his time in the army, and four current colleagues.

Robert then asked these individuals to provide information about his strengths, accompanied by specific examples of moments when Robert used those strengths in ways that were meaningful to them, to their families or teams, or to their organizations. Many people—Robert among them—feel uncomfortable asking for exclusively positive feedback, particularly from colleagues. Accustomed to hearing about their strengths and weaknesses simultaneously, many executives imagine any positive feedback will be unrealistic, even false. Some also worry that respondents might construe the request as presumptuous or egotistical. But once managers accept that the exercise will help them improve their performance, they tend to dive in.

Within ten days, Robert received e-mail responses from all 11 people describing specific instances when he had made important contributions—including pushing for high quality under a tight deadline, being inclusive in communicating with a diverse group, and digging for critical information. The answers he received surprised him. As a military veteran and a technical person holding an MBA, Robert rarely yielded to his emotions. But in reading story after story from his respondents, Robert found himself deeply moved—as if he were listening to appreciative speeches at a party thrown in his honor. The stories were also surprisingly convincing. He had more strengths than he knew. (For more on Step 1, refer to the exhibit "Gathering Feedback.")

### Step 2
### Recognize Patterns

In this step, Robert searched for common themes among the feedback, adding to the examples with observations of his own, then organizing all the input into a table. (To view parts of Robert's table, see the exhibit "Finding Common Themes.") Like many who participate in the RBS exercise, Robert expected that, given the diversity of respondents, the comments he received would be inconsistent or even competing. Instead, he was struck by their uniformity. The comments from his wife and family members were similar to those from his army buddies and work colleagues. Everyone took note of Robert's courage under pressure, high ethical standards, perseverance, curiosity, adaptability, respect for diversity, and team-building skills. Robert suddenly realized that even his small, unconscious behaviors had made a huge impression on others. In many cases, he had forgotten about the specific examples cited until he read the feedback, because his behavior in those situations had felt like second nature to him.

The RBS exercise confirmed Robert's sense of himself, but for those who are unaware of their strengths, the exercise can be truly illuminating. Edward, for example, was a recently minted MBA executive in an automotive firm. His colleagues and subordinates were older and more experienced than he, and he felt uncomfortable disagreeing with them. But he learned through the RBS exercise that his peers appreciated his candid alternative views and respected the diplomatic and respectful manner with which he made his assertions. As a result, Edward grew bolder in making the case for his ideas, knowing that his boss and colleagues listened to him, learned from him, and appreciated what he had to say.

Other times, the RBS exercise sheds a more nuanced light on the skills one takes for granted. Beth, for example, was a lawyer who negotiated on behalf of nonprofit organizations. Throughout her life, Beth had been told she was a good listener, but her exercise respondents noted that the interactive, empathetic, and insightful manner in which she listened made her particularly effective. The specificity of the feedback encouraged Beth to take the lead in future negotiations that required delicate and diplomatic communications.

For naturally analytical people, the analysis portion of the exercise serves both to integrate the feedback and develop a larger picture of their capabilities. Janet, an engineer, thought she could study her feedback as she would a technical drawing of a suspension bridge. She

## The Positive Organization

Positive organizational scholarship (POS) is an area of organizational behavior research that focuses on the positive dynamics (such as strength, resilience, vitality, trust, and so on) that lead to positive effects (like improved productivity and performance) in individuals and organizations. The word "positive" refers to the discipline's affirmative bias, "organizational" focuses on the processes and conditions that occur in group contexts, and "scholarship" reflects the rigor, theory, scientific procedures, and precise definition in which the approach is grounded.

The premise of POS research is that by understanding the drivers of positive behavior in the workplace, organizations can rise to new levels of achievement. For example, research by Marcial Losada and Emily Heaphy at the University of Michigan suggests that when individuals or teams hear five positive comments to every negative one, they unleash a level of positive energy that fuels higher levels of individual and group performance. Kim Cameron, a POS researcher, has demonstrated how this positive approach has helped the workers at Rocky Flats, a nuclear site in Colorado, tackle difficult and dangerous work in record time. Begun in 1995 and estimated to take 70 years and $36 billion, the Rocky Flats cleanup project is now slated for completion in ten years, with a price tag of less than $7 billion. Kaiser-Hill, the company in charge of the cleanup, replaced a culture of denial with one that fostered employee flexibility and celebrated achievements. The result was that employees developed new procedures that were fast, smart, and safe.

POS does not adopt one particular theory or framework but draws from the full spectrum of organizational theories to explain and predict high performance. To that end, a core part of the POS mission is to create cases, tools, and assessments that can help organizations improve their practices. The Reflected Best Self exercise is just one example of the kinds of practice tools available from POS. (For more information about POS, see the University of Michigan's Web site at www.bus.umich.edu/positive/.)

saw her "reflected best self" as something to interrogate and improve. But as she read the remarks from family, friends, and colleagues, she saw herself in a broader and more human context. Over time, the stories she read about her enthusiasm and love of design helped her rethink her career path toward more managerial roles in which she might lead and motivate others.

### Step 3
### Compose Your Self-Portrait

The next step is to write a description of yourself that summarizes and distills the accumulated information. The description should weave themes from the feedback together with your self-observations into a composite of who you are at your best. The self-portrait is not designed to be a complete psychological and cognitive profile. Rather, it should be an insightful image that you can use as a reminder of your previous contributions and as a guide for future action. The portrait itself should not be a set of bullet points but rather a prose composition beginning with the phrase, "When I am at my best, I..." The process of writing out a two- to four-paragraph narrative cements the image of your best self in your consciousness. The narrative form also helps you draw connections between the themes in your life that may previously have seemed disjointed or unrelated. Composing the portrait takes time and demands careful consideration, but at the end of this process, you should come away with a rejuvenated image of who you are.

In developing his self-portrait, Robert drew on the actual words that others used to describe him, rounding out the picture with his own sense of himself at his best. He excised competencies that felt off the mark. This didn't mean he discounted them, but he wanted to assure that the overall portrait felt authentic and powerful. "When I am at my best," Robert wrote,

> I stand by my values and can get others to understand why doing so is important. I choose the harder right over the easier wrong. I enjoy setting an example. When I am in learning mode and am curious and passionate about a project, I can work intensely and untiringly. I enjoy taking things on that others might be afraid of or see as too difficult. I'm able to set limits and find alternatives when a current approach is not working. I don't always assume that I am right or know best, which engenders respect from others. I try to empower and give credit to others. I am tolerant and open to differences.

As Robert developed his portrait, he began to understand why he hadn't performed his best at work: He lacked a sense of mission. In the army, he drew satisfaction from the knowledge that the safety of the men and women he led, as well as the nation he served, depended on the quality of his work. He enjoyed the sense of teamwork and variety of problems to be solved. But as an IT manager in charge of routine maintenance on new hardware products, he felt bored and isolated from other people.

The portrait-writing process also helped Robert create a more vivid and elaborate sense of what psychologists would call his "possible self"—not just the person he is in his day-to-day job but the person he might be in completely different contexts. Organizational re-

## Gathering Feedback

A critical step in the Reflected Best Self exercise involves soliciting feedback from family, friends, teachers, and colleagues. E-mail is an effective way of doing this, not only because it's comfortable and fast but also because it's easy to cut and paste responses into an analysis table such as the one in the main body of this article.

Below is the feedback Robert, a manager we observed, received from a current colleague and from a former coworker in the army.

From: Amy Chen
To: Robert Duggan
Subject: Re: Request for feedback
Dear Robert,

One of the greatest ways that you add value is that you stand for doing the right thing. For example, I think of the time that we were behind on a project for a major client and quality began to slip. You called a meeting and suggested that we had a choice: We could either pull a C by satisfying the basic requirements, or we could pull an A by doing excellent work. You reminded us that we could contribute to a better outcome. In the end, we met our deadline, and the client was very happy with the result.

From: Mike Bruno
To: Robert Duggan
Subject: Re: Request for feedback

One of the greatest ways you add value is that you persist in the face of adversity. I remember the time that we were both leading troops under tight security. We were getting conflicting information from the ground and from headquarters. You pushed to get the ground and HQ folks to talk to each other despite the tight time pressure. That information saved all of our lives. You never lost your calm, and you never stopped expecting or demanding the best from everyone involved.

searchers have shown that when we develop a sense of our best possible self, we are better able make positive changes in our lives.

### Step 4
### Redesign Your Job

Having pinpointed his strengths, Robert's next step was to redesign his personal job description to build on what he was good at. Given the fact that routine maintenance work left him cold, Robert's challenge was to create a better fit between his work and his best self. Like most RBS participants, Robert found that the strengths the exercise identified could be put into play in his current position. This involved making small changes in the way he worked, in the composition of his team, and in the way he spent his time. (Most jobs have degrees of freedom in all three of these areas; the trick is operating within the fixed constraints of your job to redesign work at the margins, allowing you to better play to your strengths.)

Robert began by scheduling meetings with systems designers and engineers who told him they were having trouble getting timely information flowing between their groups and Robert's maintenance team. If communication improved, Robert believed, new products would not continue to be saddled with the serious and costly maintenance issues seen in the past. Armed with a carefully documented history of those maintenance problems as well as a new understanding of his naturally analytical and creative team-building skills, Robert began meeting regularly with the designers and engineers to brainstorm better ways to prevent problems with new products. The meetings satisfied two of Robert's deepest best-self needs: He was interacting with more people at work, and he was actively learning about systems design and engineering.

Robert's efforts did not go unnoticed. Key executives remarked on his initiative and his ability to collaborate across functions, as well as on the critical role he played in making new products more reliable. They also saw how he gave credit to others. In less than nine months, Robert's hard work paid off, and he was promoted to program manager. In addition to receiving more pay and higher visibility, Robert enjoyed his work more. His passion was reignited; he felt intensely alive and authentic. Whenever he felt down or lacking in energy, he reread the original e-mail feedback he had

## >>Finding Common Themes

Creating a table helps you make sense of the feedback you collect. By clustering examples, you can more easily compare responses and identify common themes.

| Common theme | Examples given | Possible interpretation |
|---|---|---|
| **Ethics, values, and courage** | • I take a stand when superiors and peers cross the boundaries of ethical behavior.<br>• I am not afraid to stand up for what I believe in. I confront people who litter or who yell at their kids in public. | • I am at my best when I choose the harder right over the easier wrong. I derive even more satisfaction when I am able to teach others. I am professionally courageous. |
| **Curiosity and perseverance** | • I gave up a promising career in the military to get my MBA.<br>• I investigated and solved a security breach though an innovative approach. | • I like meeting new challenges. I take risks and persevere despite obstacles. |
| **Ability to build teams** | • In high school, I assembled a team of students that helped improve the school's academic standards.<br>• I am flexible and willing to learn from others, and I give credit where credit is due. | • I thrive when working closely with others. |

*Why should a natural third baseman labor to develop his skills as a right fielder?*

received. In difficult situations, the e-mail messages helped him feel more resilient.

Robert was able to leverage his strengths to perform better, but there are cases in which RBS findings conflict with the realities of a person's job. This was true for James, a sales executive who told us he was "in a world of hurt" over his work situation. Unable to meet his ambitious sales goals, tired of flying around the globe to fight fires, his family life on the verge of collapse, James had suffered enough. The RBS exercise revealed that James was at his best when managing people and leading change, but these natural skills did not and could not come into play in his current job. Not long after he did the exercise, he quit his high-stress position and started his own successful company.

Other times, the findings help managers aim for undreamed-of positions in their own organizations. Sarah, a high-level administrator at a university, shared her best-self portrait with key colleagues, asking them to help her identify ways to better exploit her strengths and talents. They suggested that she would be an ideal candidate for a new executive position. Previously, she would never have considered applying for the job, believing herself unqualified. To her surprise, she handily beat out the other candidates.

## Beyond Good Enough

We have noted that while people remember criticism, awareness of faults doesn't necessarily translate into better performance. Based on that understanding, the RBS exercise helps you remember your strengths—and construct a plan to build on them. Knowing your strengths also offers you a better understanding of how to deal with your weaknesses—and helps you gain the confidence you need to address them. It allows you to say, "I'm great at leading but lousy at numbers. So rather than teach me remedial math, get me a good finance partner." It also allows you to be clearer in addressing your areas of weakness as a manager. When Tim, a financial services executive, received feedback that he was a great listener and coach, he also became more aware that he had a tendency to spend too much time being a cheerleader and too little time keeping his employees to task. Susan, a senior advertising executive, had the opposite problem: While her feedback lauded her results-oriented management approach, she wanted to be sure that she hadn't missed opportunities to give her employees the space to learn and make mistakes.

In the end, the strength-based orientation of the RBS exercise helps you get past the "good enough" bar. Once you discover who you are at the top of your game, you can use your strengths to better shape the positions you choose to play—both now and in the next phase of your career.

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# Slaying the Seven-Headed Dragon: The Quest for Gender Change in Academia

Marieke van den Brink and Yvonne Benschop*

**In this article we propose a multi-level distinction between gender inequality practices and gender equality practices to come to better understanding of the slow pace of gender change in academia. Gender inequality resembles an unbeatable seven-headed dragon that has a multitude of faces in different social contexts. Based on an empirical study on the recruitment and selection of full professors in three academic fields in The Netherlands we discuss practices that should bring about gender equality and show how these interact with gender inequality practices. We argue that the multitude of gender inequality practices are ineffectively countered by gender equality practices because the latter lack teeth, especially in traditional masculine academic environments.**

*Keywords*: change, gender practices, academic fields, recruitment and selection

## Introduction

The underrepresentation of women in senior academic positions persists at an international level, regardless of the variation in the history of higher education in different countries and regardless, too, of their varying equality policies (EU, 2008, 2009; Eveline, 2005; National Science Foundation, 2007; Osborn *et al.*, 2000; Rees, 2002). Gender inequality resembles an unbeatable seven-headed dragon that has a multitude of faces in academic life. One of these 'heads' of gender inequality resulting in the underrepresentation of women is biased decision-making in academic appointments. This article focuses on the multiple gender practices in the recruitment and selection of full professors in The Netherlands. We examine the many gender inequality practices that are part of recruitment and selection in the ivory tower (Knights

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and Richards, 2003; Krefting, 2003; Van den Brink *et al*., 2010). We look at both these gender inequality practices and at measures that universities have taken to change the representation of women in the professoriate and analyse why these gender equality attempts have limited effects at best. The aim of this article is to come to a better understanding of how gender inequality practices in recruitment and selection affect gender equality practices to the point that sustainable change is impeded.

When it comes to achieving change, we argue that there is no such thing as academic practice in general. Academia is not a monolithic entity; gender practices do not always operate in the same way (Bourdieu, 1988; Kekäle, 1999; Musselin, 2002). In most studies on gender in academia, little distinction is made between academic fields. Academic fields vary in their core activities, financial resources, career patterns, epistemological issues and publishing strategies (Becher and Trowler, 2001; Cownie, 1998; Knorr Cetina, 1999). An important point of departure for this article is, therefore, the acknowledgement of differences in the academic field and the production of situated knowledge for different academic fields with regard to potential routes to gender change. We support scholars who argue that various gender practices contribute to the emergence of gender inequality (Benschop and Doorewaard, 1998; Tienari *et al*., 2002) and contribute to our knowledge of the gender dynamics in specific academic contexts.

We begin by theorizing gender practices and propose a distinction between gender inequality and gender equality practices. In our view there is more to gender in organizations than the reproduction of gender inequality, and undoing gender inequality is the core target of change. After describing the cases and methodology, we outline the specific loss of women candidates in the appointment systems of the respective fields. We show that gender is not a static entity but is dynamically situated in various structural and cultural academic contexts. In these contexts, we subsequently examine the interaction of gender inequality and equality practices. We conclude with three explanations why it is often so difficult to undo gender in academia.

## Theorizing gender practices

In line with what Lorber (2005) labels social construction feminism, we consider gender as an integral part of organizational practices (Acker, 1990; Benschop, 2001; Gherardi, 1994; Martin, 2006; Poggio, 2006). The 'practice turn' in gender studies has yielded revealing empirical and theoretical insight into the field of gender, work and organization (Poggio, 2006; Van den Brink and Stobbe, 2009). The conceptualization of gender as practice builds on the influential notion of 'doing gender' (West and Zimmerman, 1987). In her introduction of the special issue of *Gender, Work & Organization* on gender as a social practice, Poggio outlines a theory of gender practices that sees gender as situated social practice, actualized through social interaction and rooted in the doing and saying of organizational actors, stating that

> gender is constantly redefined and negotiated in the everyday practices through which individuals interact; how men and women 'do gender' and how they contribute to the construction of gender identities by engaging in a process of reciprocal positioning. (Poggio, 2006, p. 225)

The conceptualization of gender as a practice enables us to show the multiplicity, fluidity and situatedness of gender practices in various academic contexts. We argue that gender practices include both the practices that continuously reproduce gender inequalities and the practices that aim to bring about gender equality.

Of relevance here is the ongoing theoretical discussion in gender studies on doing and undoing gender. The undoing gender literature criticizes the notion of doing gender for its inevitable reproduction of gender inequality (Deutsch, 2007). Several authors propose a shift to undoing gender to emphasize the possibilities for change (Butler, 2004; Deutsch, 2007; Kelan, 2009; Lorber, 2005; Pullen and Knights, 2007). The central idea behind undoing gender is to accomplish gender change through social interactions and associated discourses that can reduce, dismantle, disrupt and challenge gender difference (Deutsch, 2007). However, there seems to be little consensus on what undoing gender exactly means and implies, how it is related to doing gender and how undoing gender leads to organizational change. This article contributes to the undoing gender debate by examining the relation between doing and undoing *inequality*. We argue that it is not so much gender *per se* that needs to be undone as it is the hierarchical power relation tied to it, at least when it comes to changing organizations. Thus, it is inequality that needs to become undone in order to foster change. What adds to the complexity here is that undoing and doing are always inextricably linked. Following Pullen and Knights (2007) who state that any undoing of gender is at one and the same time also a positive doing of some alternative, we contend that the undoing of gender inequality simultaneously entails a doing of something else. To come to better understanding of the ways to undo gender inequality we thus need to take into account how undoing inequality is related to multiple gender practices.

We therefore propose a multilevel distinction between gender inequality practices and gender equality practices to explain that there is more to gender in organizations than the perpetual reproduction of gender inequality and that undoing gender inequality is the core target of change. Our notion of gender inequality practices refers to the hierarchical distinction in which either women and femininity or men and masculinity are valued over the other. In the context of organizations this distinction predominantly amounts to powerful positions and privileges for men and masculinity. We use the notion of gender equality practices to refer to the policies and processes that aim to bring about gender equality. In other words, gender equality practices aim to undo gender inequality. The intentional gender policies and feminist intervention strategies that have been developed over the years (Ely and Meyerson, 2000; Kirton and Greene, 2005; Walby, 2005) fall under this category, as do organization processes that change unequal gender relations as an unintended effect. We will examine how gender equality and gender inequality practices intersect with, conflict with and anticipate each other. Both gender inequality practices and gender equality practices are manifold in today's universities and we demonstrate the myriad of manifestations of inequality and equality practices in the various academic fields. This way, we increase our understanding of the slow rate of change brought about by gender equality policies in higher education.

## Case and methodology

### *The Dutch case*

This article draws on empirical material constructed in a research project on recruitment and selection of full professors in The Netherlands (Van den Brink, 2010). International benchmarks repeatedly show that The Netherlands is at the back end of Europe when it comes to the percentage of women professors (11%), even though Dutch women students outnumber and outperform men students (EU, 2009). Yet, there are remarkable differences between academic disciplines. In the humanities, medical sciences and natural sciences the percentage of women among professors is respectively 18.8, 12.9 and 7.7 per cent (Gerritsen *et al*., 2009).

The Dutch academic career system differs slightly from the Anglo-American one. Although we have translated Dutch ranks as if they corresponded directly with the US system (that is, assistant, associate and full professor), this is not in fact the case. There is no promotion system to progress from one rank to another. Traditionally, an upward career trajectory to the highest academic position in the Dutch system (full professor) depends not only on the individual merits of an academic but also on the positions available. Each step requires a vacant position and a recruitment and selection process. In that process, similar criteria to evaluate candidates are used as in the Anglo-American system; bibliometrics lead in assessing the work of academics, with an emphasis on international publications in top-tiered journals.

For this article we examined the various gender inequality and equality practices in each field. We selected three academic fields that include various disciplines. Although the distinction between fields is not unambiguous, each

 

*Table 1: Selection of interview respondents and their gender*

| Fields | Interview respondents | Gender |
|---|---|---|
| Humanities | 13 committee members | 14 M, 8 F |
| Natural sciences | 16 committee members | 14 M, 5 F |
| Medical sciences | 21 committee members | 13 M, 10 F |

field has its own specific structure and logic (Maton, 2005, p. 689). Based on previous research, some differences between the recruitment and selection practices in academic fields were to be expected (Musselin, 2002). For instance, fields vary considerably with regard to the gender composition of students and staff, career patterns and the possibility of gaining additional funding. Three fields have been distinguished: humanities, natural sciences and medical sciences. We invited all 13 universities in The Netherlands to participate, but due to privacy issues and time scarcity of auxiliary personnel, only seven universities co-operated.

## *Data collection*

This research study used qualitative and quantitative data collection methods. The quantitative data consisted of 971 committee reports covering almost all appointments of full professors at seven Dutch universities in the period 1999 to 2003. Information of the sex of men and women applicants — in general and on the shortlist — and of the final nominee, enabled us to reconstruct the academic pipeline. Qualitative data consisted of interviews with members of appointment committees. In total, the first author interviewed 24 women and 40 men in the function of chairpersons (deans, vice-deans, directors of research and teaching managers) (See Table 1). Some members of these appointment committees were also questioned in their role as former applicants. They reflected not only on their role and experiences in the committee but also on their experience during their own recent appointment procedure. All interviewees were full professors in their field.

The analytical focus of the interviews was on the recruitment and selection practices, that is to say, on what people say and do in their social interaction in organizations (Yanow, 2006). The interviewees were asked to describe the recruitment process and highlight the arguments used by committee members to explain their choice of the nominated candidate. We encouraged the respondents to talk about concrete yet anonymized cases and incidents, not about generalities. In an attempt to capture as much detail about the appointment process as possible, we asked the respondents to focus on the most recent appointment procedures they were involved in. Data were collected between October 2004 and January 2006.

## *Data analysis*

To analyse the interviews we used qualitative content analysis (Lieblich *et al*., 1998). The content analysis was done by breaking the text into relatively small units of content on the basis of areas of interest. By giving open codes to different sections in the text, the first descriptive coding gave insight in the common patterns and themes of these research areas. We analysed the dominant patterns in each context that emerged from our data, producing three archetypical contexts that overlapped with the academic fields. Then we shifted to a more holistic content analysis, as researchers should interpret parts or categories of the text in light of the rest of the text (Ollerenshaw and Creswell, 2002). In this way, it became clear that some gender practices are dominant and more salient in specific fields. This is not to say that such gender practices were confined to certain fields but that they were most prominent in specific contexts. It is not the intention of this article to systemically compare the gender practices in the different fields. Rather, we are concerned with how gender equality and gender inequality practices in those fields intersect with, conflict with and anticipate each other. We used the computer software program Atlas-ti to systemize, code, compare and explore our data since this mapping method is appropriate for interpreting large numbers of interviews.

As feminist researchers working in academia ourselves we face some key ethical questions when conducting fieldwork and analysing the data. Fieldwork is a dialogical process, influenced by the positions and biographies of both researchers and the participants. The identity of the first author as a woman and PhD candidate played a role in the social interactions with the elite academics interviewed. Being 'just' a woman PhD candidate meant that she was relatively 'harmless' and this may have encouraged the disclosure of sensitive information that was contrary to the formal rules and regulations governing appointments. Many respondents were surprisingly frank, and some even boasted about moments when they had deviated from formal policies. Others paternalistically placed themselves in the role of PhD supervisor by interrupting and questioning the methodology and research questions of the project. Analysing the data as feminist researchers we run a risk of gender-oversensitivity in interpreting the data (Alvesson and Billing, 2009). Our elaborate training in identifying gender inequality makes us vulnerable to reading more inequality in the data than may exist. To prevent this, we have intentionally searched for deviant cases and alternative interpretations in all phases of the research.

The next section begins by reconstructing the leaky pipeline in the appointment process. Since the proportions of women in the pipeline differ between the fields of the medical sciences, natural sciences and humanities, we subsequently analyse the different gender inequality practices in these contexts to find how these intersect with gender equality policies.

 

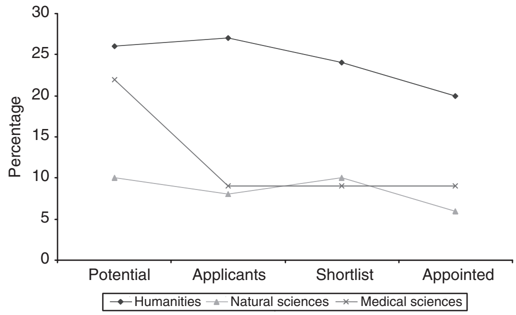


*Figure 1: The proportion of women academics as potential, applicants (general and on the shortlist) and finally appointed, for each field*
Source: Analysis appointment 565 reports (humanities $n = 181$, natural sciences $n = 191$, medical sciences $n = 193$). The difference between the total number of appointment reports analysed ($N = 971$) and the number of appointed reports in Figure 1 can be explained by the selection of three academic fields for this article.

## The leaky pipeline

At every stage of the appointment process the number of women academics decreases and, as a result, the percentage of women full professors does not reflect the proportion of qualified women. In this section, we identify this leaky pipeline (Osborn *et al*., 2000; Pell, 1996; Rees, 2002) in each field by reconstructing the proportion of women in different stages in the appointment process. Figure 1 shows the proportion of women academics among the potential candidates, the applicants (in general and on the shortlist) and the professors appointed.[1]

The potential of women academics is the highest in the humanities (26%) and increases further to 27 per cent among women applicants but declines towards the later stages of the selection process: and the proportion of women on the shortlist and in final appointments tails off. The pipeline leaks at the moment when selection begins and the proportion on women undergoes a more dramatic decline in the final selection. The situation in the natural sciences is rather different: the proportion of women applicants is slightly less than the potential of academic women, but the proportion of women on the shortlist rises slightly. The percentage of women finally appointed drops again. In the medical sciences, the proportion of women applicants and appointments is low (9%) despite a large proportion of qualified women (22%). The difference between the potential and expected women applicants is immediately obvious. Once invited to appear before the committee, the percentage of women on the shortlist and those finally appointed stays the same.

What these figures show, then, is that success rates of men and women vary considerably between academic fields but in all of them the success rate of women is lower than that of men. These differences on the leaky pipeline in science are corroborated by the US National Academy's Report 'Beyond Bias and Barriers' (National Science Foundation, 2007). The reduction in the biological sciences, with a larger pool of women academics is greater, as in the humanities, whereas the physical sciences are more similar to the field of natural sciences in this study. The patterns of the leaky pipeline in our data also differ, which brings us to the question of the specific gender practices in these fields that account for the lower success rate of women — each field's specific pipeline.

In the next section we describe the dominant gender inequality practices and analyse how they interact with gender equality practices in the three fields. The gender equality practices that will be reviewed are the prevailing measures that were referred to most frequently by interviewees when discussing current tools to undo the dominant inequality practices in that field. These were, respectively, the transparency of procedures and mentoring in medical sciences, the introduction of special women's chairs in humanities and the explicit search for women in the natural sciences. The quotes have been selected because they convey most powerfully the experience that was expressed by many respondents.

## Medical sciences: women as the 'other'

### *Gender inequality practices*

Nowhere is the leak in the pipeline more obvious than in the field of the medical sciences. While there is a substantial pool of qualified women (22%), the percentage of women applicants drops towards 9 per cent. Although it is possible that more women opt for another career than men — which some respondents suggested — this argument does not hold because of the substantial share of women associate professors (16%). A better explanation for the sudden decrease is the high number of closed recruitment (77%) in the medical sciences. In closed recruitment procedures candidates are invited by scouts through formal and informal networks, which means that academics search in their own networks for eligible candidates and use their own view of excellence to assess these candidates. Our data illustrate that talented women are systematically overlooked due to the overrepresentation of men on scout positions and their homogeneous masculine networks in combination with the embedded notion that women are different or 'others', and therefore considered less suitable. We discern two salient gender inequality practices leading to a neglect and underestimation of talent women: (a) the paternalistic view of scouts and (b) the image that women do not correspond to the image of the ideal manager.

The first gender inequality practice is the paternalistic view of some respondents that the role of professor is too much to expect of a woman, so that women are not seen as obvious choices for professorships. They share the opinion that being a full professor is very hard for women because it is a demanding job and a vocation rather than an occupation. A male respondent illustrates this by arguing that a woman with care responsibilities has to convince the committee that work will take priority, while a man with family responsibilities is rarely asked about his plans to combine family with work. The following quote illustrates how this particular type of strategic communication and interpretation takes place:

> It is possible that women are more often put on the defensive [during the selection interview] because they have a family with young children. It shouldn't be happening but the committee will wonder whether it can — or should — demand 100 or 150 per cent dedication of somebody with three children. You shouldn't be doing that as a committee, but if someone takes that into account without saying it, you will not find out. That is why as a woman, you should try not to be put on the defensive. If you have three children you have to make it clear to the committee how you think you are going to manage this. (Man, committee chair)

This quote also illustrates that a committee sometimes tries to be protective towards women and wonders whether they 'can ask this of a woman'. Other members argued that 'it is impossible to combine' (female committee member); 'can be hard in daily practice' (male committee chair) and 'you shouldn't place such high demands on women candidates with family responsibilities' (male committee member). Men committee members feel the need to 'protect' women from this heavy duty by not appointing them. So if committee members take a traditional view of care responsibilities, there is a reasonable chance that they will assume that a woman will have trouble managing her work. Martin (2006, p. 262) calls this 'paternalistic masculinity'. Although well-intended, it perpetuates the stereotypes upon which it is premised: women's role is to take care of the children. Care-taking responsibilities are seen as exclusively women's problems since these arguments are never discussed with male candidates. Men do not have to justify the arrangement of their family responsibilities. This means women have to counteract stereotypical images on the part of committees with traditional attitudes towards gender roles.

Secondly, our data show that women candidates are seen as different from men when judged alongside the stereotypical ideal of the strong, authoritarian, masculine leader. In medical sciences the high-risk factor means that an important talent for a full professor is the ability to manage the competitive and stressful combination of science and medical care. The interview material and the appointment reports showed that women's leadership skills were regularly questioned. Women made — so was said — too modest an impression and it was not believed they could survive in the tough, hierarchical medical field:

> That woman, who was one of the final four candidates, had a great résumé, sufficient, more than sufficient publications with some experience of supervising PhD candidates, experience with contract research. She met most of the criteria. But she failed on academic leadership. I had my doubts about this and the other committee members did as well, including the women. We thought that she was too diffident, not vigorous enough, not capable of managing the group, to be the boss. I just thought she was too sweet. (Man, committee member)

> Once I heard the story of a very competent candidate, a woman, small in size, fragile, and a [male] member of the university board said: 'Well, should we take that *girl*?' So physical appearance is something crucial. (Man, committee member)

This last quote illustrates that the physical appearance of this candidate affected how the committee assessed her competence to be given a full professorship. Her petite feminine appearance influenced both their perceptions of her behaviour and the abilities they ascribed to her. The member of the university board cast doubt on her suitability by referring to her as 'girl', the implication being that a girl would certainly not survive in a competitive academic environment. Judgments are made about the management capacities of men and women on the basis of personal characteristics. Women are not seen as qualified because of the unusually high standards required. Men are treated as the reference point and women as the 'other' that deviates from this reference (Czarniawska and Höpfl, 2002; Eveline and Booth, 2004; Oppenheim Mason, 1986). Women tend to be seen as 'other' because their appearance fails to inspire predominantly male committee members with confidence that they have the kind of leadership skills needed in the medical sciences today.

## *Gender equality practices versus gender inequality practices*

Gender equality practices in medical sciences mobilized to undo persistent gender inequality practices are protocols concerning an open recruitment process and coaching and mentoring of women faculty. Findings of gender research (Academy of Finland, 1998; Allen, 1988; Brouns and Addis, 2004; EU, 2008; Husu, 2000; Ledwith and Manfredi, 2000; Rees, 2004; van Balen, 2001) have led to calls for more transparent and open procedures and accountability among decision-makers in order to remedy the bias and arbitrariness of opaque appointment processes and guard against the reproduction of gender inequality practices that hamper the career progression of women. Universities and medical schools uphold the official standards concerning open recruitment; the open and public advertisement of vacancies so that all eligible candidates have the opportunity to apply. Our data have made it clear that the reality of practice deviates dramatically from the standards of open recruitment. More than three-quarters (77%, $n = 211$) of newly appointed professors were recruited by closed procedures. Due to a lack of commitment on the part of key individuals and a lack of pressure from the university board, the official policy of open and transparent recruitment remains a paper tiger. In the most extreme case, the policies to promote open recruitment have been countered, for example by committee members using techniques and strategies to appear to be transparent or to be following the gender equality regulations while manipulating the system in their interest behind the scenes.

We have found that the pressure from the board to open up these procedures and announce the vacancies publicly often leads to the mere semblance of transparency. The respondents, and also the appointment reports, reveal that the consequence of this pressure to make the vacancy public can lead to a veneer of transparency. Vacancies are advertised in the media, but in reality the preferred candidate is already known, the profile attuned to this candidate and other academics who might apply for the position are part of a purely decorative appointment procedure. Thus, the gender equality practice of promoting open recruitment has actually legitimized current methods of recruitment and selection practices by lending gender inequality practices a spurious objectivity. Due to the fact that these transparency and accountability policies exist on paper, the hegemonic discourse among committee members on fairness and meritocracy in the appointment process is strengthened still further. The norms of transparency, accountability and gender equality veil the practice of inequality; the norm is conceived as the practice and the fact that these policies are routinely ignored is hushed up (Van den Brink *et al*., 2010).

The gender equality practices of mentoring and coaching mainly pertain to the mobilization of (potential) women candidates and the development of leadership skills. These measures then, mainly adhere to gender equality from an equal opportunities perspective — helping women to adjust to the male world. The focus is on enlarging women's ambitions and making them visible as serious professorial candidates (Benschop, 2007). As important as these measures are, when implemented alone as the primary solution to the problem of gender inequality among full professors they have a limited effect on the structure, norms and practices in academia. They can even strengthen the idea that women are the problem and have to be fixed instead of the academic system itself.

 

## Humanities: a crowded house

### *Gender inequality practices*

Our data shows that this field has the largest proportion of women candidates (26%), but this proportion decreases considerably during the appointment process (20%). Characteristics of this field are fierce competition between academics due to a large number of educated professionals, abundant junior staff and a scarcity of top-level positions. The scarcity of positions is mainly caused by fewer national and international funding possibilities and limited career prospects for academics outside the university (Nederlandse Organisatie Voor Wetenschappelijk Onderzoek, 2007). For that reason, the stakes of appointments are high; both for the candidates and for the research group. Our interviewees referred to a relatively idiosyncratic and political context in which power struggles between fields, disciplines and epistemic cultures can come to the fore in the final decision-making. Connections with academic elites and knowledge of how things 'work around here' are crucial for success. Most of the respondents complain about the lack of transparency in the appointment system which, in their view, originates from the old academic tradition of this field where positions were assigned to a 'crown prince'.

The dominant gender practices that produce inequality in this field can be related to the exclusionary effect of masculine information and support systems. These patriarchal support systems (Bagilhole and Goode, 2001) have a strong exclusionary effect in terms of access to professorial positions and social networks that facilitate insight information about vacancies and job criteria. In order to increase their visibility, influential scientists can recommend candidates when names are asked for, encourage candidates to apply and help them make their name. It is essential that potential candidates are encouraged to apply or that the vacancy is explicitly pointed out by colleagues and superiors:

> My own promoter has always supported me when I asked him to. But he never supported my career on his own initiative, as far as I know, and nominated me for things. Never, never. It is not something he usually does, but I know he has done it for some men around him.… Actually, he has never understood that I have just as much ambition in this area as men have. And that is not because he isn't the sweetest man or doesn't care about me. That is not the case. But he doesn't realize that all this is as important for me as it is for my male colleagues. He once told me this honestly, that the penny hadn't dropped. (Woman, committee chair)

A more subtle way of exclusion is the uneven access to knowledge on the rules of the academic career game. 'In order to know how to play it, it is beneficial to have a mentor or contacts with the "old academic elite" ' (committee member). Because of the large influence of invisible connections and tacit rules and criteria it is hard for newcomers and outsiders to be a member of this inner circle. Women respondents argue they often lack access to these patriarchal support networks and are unaware of the tacit rules that are necessary to operate in this idiosyncratic environment. Unofficially required criteria can be difficult to identify for a candidate who does not know the existing arrangements. As a consequence, women are viewed as not operating strategically enough to survive in this highly idiosyncratic environment. Some male respondents illustrate this with such statements as 'women are not slick enough', 'don't know the rules of the game' and 'put all their cards on the table'. Academic male elites nurture their male successors from the beginning of their career and teach them the informal rules of the field, so that they know how to survive in this highly political culture:

> Eventually, he will — well, I will not hold this position forever — have to be positioned as an excellent professor with experience in management, and so on. Therefore he will have to follow all these courses, and spend many hours on research. He has to have that [experience] by the time I leave in about 5 years … so, we put those people [prospective successors] into position. (Man, committee chair)

As with the preferential treatment of men, masculine support networks offer advantages to academics who seek to raise their profile and build a reputation as an academic. Excellence is not something one is born with but is the outcome of a stimulating work environment, infrastructure and social capital that has to be given meaning and valued in a certain context. Due to the same homophily or masculine relationships men tend to help their own sex in an unintentional, matter-of-fact way. Women receive less reflexive help from these influential support systems.

## Gender inequality practices versus gender equality practices

The dominant gender equality practices in the humanities mainly imply special chairs and mentoring programmes for women so that women do not have to compete with men or lose the competition due to strong gender stereotypes (Ridgeway and Smith-Lovin, 1999) and clone behaviour (Essed, 2004). Although special chairs give women the opportunity to be appointed in disciplines in which they are underrepresented, strong gender inequality practices withhold the intended effect. On the one hand, men and women interviewees indicate that specific support policies, such as women-only fellowships or professorial chairs, are needed to encourage women to stay in the academic community. On the other hand, both men and women argue against these policies due to the possible gender discrimination it induces.

Special women's programmes or chairs are not uninimously supported by most of the committee members interviewed. Our data also showed that some women were unhappy with how they were viewed after being awarded a grant for women only. An additional problem reported by women respondents was that, even if they would have been hired anyway and therefore would have received the funding through the regular channels, their male colleagues now directed them repeatedly to the special women's programmes. In this way women report becoming trapped in areas with women's funds.

Resistance to the reservation or creation of chairs for women is mostly prompted by the strong ideology of meritocracy: one should be appointed on the basis of merit and not gender. This ideology is strongly present in all fields but it is most salient in the humanities because most respondents regard the gender issue as outdated in light of the relatively large share of women among academic staff members and students. The academic recruitment system is therefore assumed to be gender neutral and to offer equal opportunities to all candidates in so far as they are equally meritorious. Gender is not seen as something that matters in the selection of a full professor. Yet our data show that organizational practices continue to categorize men and women and masculinity and femininity hierarchically. This ideology renders invisible the discrepancy between academic values (merit) and actual practices and outcomes (the unequal share of women appointed) (Benschop and Doorewaard, 1998). Due to this process of hidden inequality the academic system goes unquestioned: standards for promotion and appointments are seen as gender neutral, offering the same chances to all candidates. In the eyes of most interviewees, gender inequality is therefore automatically related to women's personal choices. They argue that women lack the track record or experience to be appointed but this has nothing to do with the organization: the system itself is beyond reproach. The effectiveness of gender equality is mitigated by women that refuse to take positions that are installed for them, out of fear of being marked out as an 'affirmative action' case.

## Natural sciences: the ideal scientist

### *Gender inequality practices*

This field exhibited the smallest discrepancy between potential women candidates (10%) and appointments (6%), meaning that a large proportion of potential female candidates achieve their goal. However, the number of women ultimately appointed to professorial chairs is still not in line with the potential number. Women seem to lose the competition in the final stage (see Figure 1). One of the respondents suggested a possible explanation: the shortlisted women are underqualified, but are put on the shortlist regardless and lose the competition to better qualified men. The interviews reveal that women often lose the competition because of a lack of 'quality points'. Although committee members seem to have the best intentions, they argue that they are not willing to lower the standards of the required number of top publications or international experience. Women are welcome, but only when they conform to existing image of the ideal scientist (Acker, 1992), meaning a more than full-time devotion and willingness to spend long periods abroad. The masculine model of the ideal academic remains unquestioned. Women faculty members are expected to be able to follow this model with a little extra help, with mentoring and coaching. The assumption is that women who follow this model will be as successful as their male colleagues (Bailyn, 2003).

It is questionable whether women lose the competition because they lack quality points or because decision-makers perceive they lack this quality. Many studies have convincingly shown that women's qualities are systematically undervalued (Cole *et al.*, 2004; Foschi, 1996; Wennerås and Wold, 1997). Women in a token position are visible but also have to deal with prejudice and stereotypes (Kanter, 1977). Kanter suggests that the sex ratio of a group determines their perceptions of behaviour and the position of tokens within the group. While members of the majority are regarded as individuals, tokens symbolize the minority they belong to and are considered representative of that minority. The 'intrinsic' ability of women to excel in natural and technical sciences is often questioned (Fox Keller, 1985; Schiebinger, 1989). In the context of the final selection, this might mean that committee members' perceptions and evaluations of competence and performance are also skewed to the point that women are consistently underrated and men consistently overrated.

Masculinity and power are intertwined in such a way that men represent the standard; they naturally represent the norm against which the performance of women is measured. In other words, the attributes stereotypically labelled as masculine — such as technical ability, psychical strength and being goal-oriented — are valued more highly and taken to be the natural norm. Women in this masculine field may experience increased pressure to perform in order to counter stereotypical images. A more profound approach that scrutinizes and challenges the masculine notion of the ideal scientist is needed.

## *Gender equality practices versus gender inequality practices*

In the natural sciences we experienced a willingness to support talented women, leading to gender equality practices such as searching explicitly for women candidates and putting in extra effort when a woman applicant is eligible. Adding more women was perceived by committee members as the only way to break the circle of not having examples to emulate (role models) and to help to remedy the unfashionable image of the natural sciences. In line with the policies of gender equality, although this was not included in formal policies, a stronger desire to appoint more women in senior positions was detected, particularly in those fields where women are underrepresented. In general, respondents appreciated the urgency of appointing more women on senior positions: 'Women have a different leadership style, which we really need here'; 'They have to serve as role models for our women students' (male dean); 'we need to attract more women students into physics and chemistry' (male committee member) but also: 'It could change the atmosphere in a positive way' (male committee chair) and even: 'It would be more natural' (male committee member). Many committee members are convinced that women add to science and have a special contribution to make.

Special attention has been given to searching for female candidates to appoint them as full professors to these committees and this demonstrates that the issue is indeed on the agenda of committee members. However, such gender equality practices appear to be more like sticking plaster than a permanent solution. The issue that hinders gender equality practices from being effective is the inevitable quality discussion. Women benefit from this special search for women as they make it to the short list relatively often. In the final appointment however, the difference arguments that women add to science do not hold, as the norms of the ideal scientist prevail in the final selection. While many committee members are convinced of the need to prioritize the search for women, later in the same interviews they also vent their concerns about the quality of the candidates: 'We are not interested in gender, only in appointing the best qualified candidates' (male dean). Controversy surrounds the search for women candidates as this method could mean that less qualified women are hired. Our analysis of the appointment reports shows that the quality argument is hardly ever mentioned in relation to the appointment of men candidates.

Gender equality policies based on difference do not match well with a construction of quality based on a meritocratic norm. The overall norm of the natural scientist remains intact and as masculine as ever and both women and men are held against that norm. The different qualities that women allegedly bring pertain to people skills and those play a subordinate part to the masculine norm of the ideal scientist. The gender equality practices in the natural sciences help to bring potential women candidates to the attention of selection committees. These attempts are mitigated by stronger gender inequality practices that mean that women do not make it to the final selection.

## Discussion and conclusion

In this article we have offered insights on normally impermeable academic practices that stay largely undocumented due to privacy issues. We have shown that gender is not a static entity but a dynamically situated social practice that operates in various structural and cultural academic contexts. Without wanting to imply that some gender inequality practices occur only in certain fields we have observed that different gender inequality practices were most salient in each context. The exclusionary effect of informal recruitment by scouts mean that women candidates are not invited to apply for professorships in the medical sciences. In the humanities, the exclusionary effect of masculine information and support systems affects women candidates in all phases of the appointment process. And finally, in the natural sciences women lose the competition in the final selection as their qualities are questioned and measured against a masculine standard.

To understand the slow pace of change, we have analysed how gender inequality practices interact with gender equality practices. We offer three explanations for the slow change. Firstly, analysis of the current gender equality policies shows that many interventions for achieving gender equality in organizations target women candidates. These interventions often derive from liberal feminist theories, which focus on the barriers women encounter in organizations and focus on women as their solution (Ely and Meyerson, 2000; Liff and Cameron, 2002), such as mentoring and providing special women's chairs. Although these interventions often result in significant and necessary changes in organizations they are 'not sufficient to disrupt the pervasive and deeply entrenched imbalance of power in the social relations between men and women' (Ely and Meyerson, 2000, p. 589). Structural change within the organizations themselves is not attempted. If we really want to bring about change, the system itself must change and gender must be practiced differently. In other words, gender inequality practices need to be undone. Academics ought therefore to reflect on why these gender imbalances persist in higher positions, how they come about and who benefits from keeping them in place. More structural action should include interventions that change 'the way we do things here'. This calls for reflection on the current gender inequality practices in recruitment and selection and explicit attempts to break fossilized patterns. Gender awareness training of committee members, for instance, such as that developed by the University of Michigan,[2] could be a first step in this reflection. Yet gender awareness training is effective only when it is implemented in actual appointment practices. More attention should thus go to the incorporation of gender awareness into the messy realities of actual professorial appointments.

Secondly, future policies should take into account gender dynamics in the various fields. University-level policies designed to address the underrepresentation of women academics tend to generalize all academic fields. Our study demonstrates that academic fields are gendered somewhat differently and that tackling the underrepresentation of women requires a variety of gender equality measures tailored to the specific discipline or field. In the medical sciences much is to be gained from a more diverse group of scouts with ties to varied networks, and from a more open way of recruitment. Furthermore, recruiters in the medical sciences should be made aware that female talent is available and women (including mothers) can harbour the same ambitions of becoming full professors as their male counterparts. They should not be overlooked simply because existing senior academics hold the paternalistic view that combining a career with family responsibilities is too hard for women. For the humanities, more structural change could come from strategic alliances between women candidates and men in decision-making positions. Mentors are often proposed as being helpful for women, yet the mentors themselves have a lot to learn about the inclusion and support of female talent. Recruiters in the humanities need to become aware that gender inequality needs to be undone and that this requires interventions that go beyond special chairs and target regular procedures. In the natural sciences, it takes reflection on the mismatch between women candidates and the dominant image of the ideal scientist. The tendency to systematically underrate women in competition with men is difficult to counter. The inclusion of female committee members has proved to be an effective measure to get more women appointed (National Science Foundation, 2007; Van den Brink, 2010). Moreover, assessors should look beyond the normal way of evaluating the quality of the candidates. Norms on productivity often emphasize the research output of a candidate but should be correcting for the input. Academics with alternative career paths or career interludes often lose out even when they are gifted scientists (Stobbe *et al*., 2004; Valian, 1998). While these gender equality practices have the potential to undo inequality, we should reckon with counter effects.

These counter effects constitute the third and final reason why change is so slow. Our research has shown that equality practices are intertwined with a myriad of gender inequality practices. These gender inequality practices cover up, change the direction of, or even hijack gender equality practices. This has been shown by the inequality practices that hinder, alter or transform equality measures. For example, the establishment of special chairs for women mitigates the dominant inequality practice of support of men by male scouts. Simultaneously, these gender equality practices lead to questions about the woman appointee's quality, which is suspect when not tested in competition with men or measured against male competitors. As a result, some women academics refuse to take positions that are established for women, out of fear of being marked out as an 'affirmative action' case. The transparency policies make for a second example. These policies are designed to counter gender inequality by advocating open recruitment so that recruitment bias is limited and a wide variety of applicants can be addressed. The norms of transparency and open procedures veil the practice of gender inequality when designated candidates are singled out in closed procedures, while people adhere to the rules that prescribe open competition between candidates. Gender equality practices thus unintentionally silence debate on favouritism rather than achieving actual transparency. A third example pertains to the equality practice of explicitly searching for women candidates because they would add to science and have a special contribution to make. This leads to a substantial increase of women on the long list. Our data have shown that in the end, the gender equality practices are hijacked by the persistent inequality practices of questioning women's qualities and constructing those qualities as inferior to men's (Van den Brink *et al*., forthcoming).

This article has contributed to our knowledge on why gender change in academia is so awfully slow and why it is so hard to undo gender inequality in daily practice. In our opinion, undoing gender simultaneously implies doing gender and it would be more fruitful to distinguish between multiple inequality and equality practices if we are to disrupt gender inequalities and bring about sustainable gender change. In our research, the gender equality practices were unable to counter the multitude of gender inequality practices; their sword was too blunt, there are simply too many heads on the dragon and each requires a specific attack. This explains why it is often so difficult to undo inequality; simultaneous multi-faced gender inequality practices are ineffectively countered by gender equality practices because those lack teeth, especially in traditional masculine academic environments with 'thick', ponderous traditions and values. We conclude that there is no one-size-fits-all approach that can undo inequalities. Clearly, research on effective measures and interventions should continue to come up with sharper swords to slay the dragon.

## Notes

1. For the purposes of this study, the available female pool of talent for full professors is defined using two criteria: (a) the proportion of female doctorate holders (1986–1992) and (b) the proportion of female associate professors (1999–2005). A candidate is someone who has applied for a position or who has been nominated by related faculties or a member of the appointment committee and who has notified the committee that he or she is interested in the position. Shortlisted candidates have passed the first stage of selection and committee members regarded them as serious candidates for the professorial position.
2. The Advance project at the University of Michigan developed 'strategies and tactics for recruiting to improve diversity and excellence' for members of selection committees. More information is accessible through the ADVANCE web portal (n.d.).

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