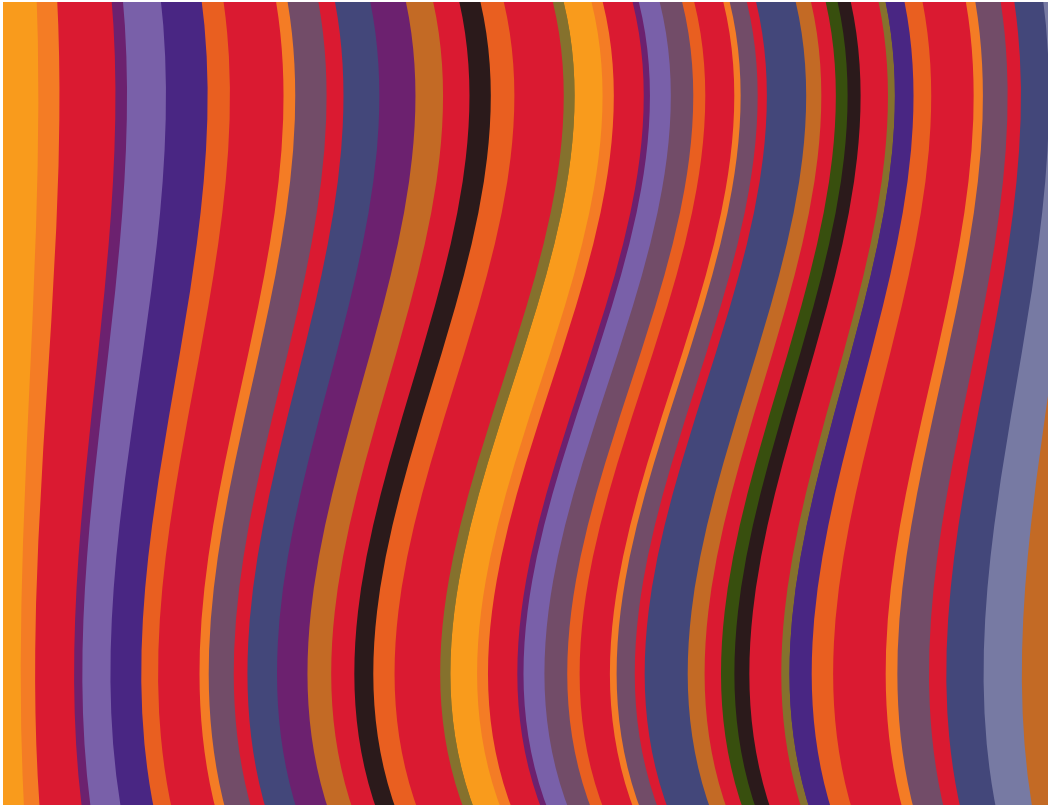**London Business School**

**The Lehman Brothers Centre
for Women in Business**

Innovative Potential:
Men and Women in Teams

Innovative Potential: Men and Women in Teams

Executive Summary

Innovative Potential: Men and Women in Teams
Executive Summary

In companies around the world executives are putting the capacity for innovation top of their strategic agenda. At the heart of the innovation strategy are people prepared and able to work collaboratively in teams and to exchange and synthesise knowledge from many different sources. Whilst academic research has focused on the antecedents of innovation, there is very little work on the potential impact of gender on the innovation agenda. In this research we take a closer look at the role - if any - that gender plays in innovative teams, and make some recommendations about how companies can build and enhance their innovative capacity through team gender composition.

Over the last decade research groups at London Business School – together with researchers across the world – have developed a deep understanding of how and why innovation occurs. We have identified various factors that make a difference. These factors include the style and competence of team leaders, the way in which team members behave and interact with each other, the quality and extent of relationships and networks that are built both within and across teams, and the actual composition of the teams. Our research has also pointed to the crucial role played by the context of the team – both in terms of the practices and processes of the company, and indeed of the culture and norms.

In this study, we broaden and deepen our understanding of innovation in teams by taking a closer look at what it means to be a team member, how team members behave with each other, and what impact this has on the team outcome. Our interest here is in gender. We are interested in the individual experience of both men and women in teams. In our research questions, for example, we ask if there are any differences between men and women in a range of criteria which include their self-confidence; their personal initiative; their sensitivity to others' views; the extent to which they are in a positive mood or negative mood; the extent to which they are able to include others; their satisfaction with their life and their career satisfaction; and the way they look at their work including their perceptions of the significance of the tasks they are undertaking; their commitment to the organisation and their intention to leave. What happens inside work is important – but we know that out of work experiences can sometimes 'Spillover' into work experiences. Therefore, we are also interested in this study in what happens to men and women outside of work – in the context of their private lives. To gain insight to this we asked questions about their life experience, the extent to which they participate in domestic labour and the number and age of any children.

We are also interested in the experience of working as a member of a team. Our research design enabled us to study teams with different proportions of male and female members. This provided a wonderful opportunity to understand the impact of minority and majority status for both men and women. We are able to explore the impact on what being in a minority in a team has on the extent to which knowledge is transferred both within and across teams, the extent to which the team participates in experimentation, the performance of the task, the extent to which the team is able to create and sustain relationships and networks that span the boundaries of the company, and finally, the general feeling of self-confidence and psychological safety that pervades the team.

Research Design

Our interest in this study is to take a closer look at the impact of gender diversity in professional working teams engaged in knowledge-based work. This agenda builds from our earlier study of teams published in November 2006. Whilst this provided some important insights into the experiences of men and women in teams – it did not have a sufficiently wide variety of gender composition for us to really understand the experiences of being in a male minority – or indeed a female majority.

The aim of this study is to find and study teams that represent the whole spectrum of gender diversity. To do this, during the Spring and Summer of 2007, the research team at the Lehman Brothers Centre for Women in Business at London Business School worked with 21 companies to find gender-diverse teams. We were able to collect data from more than 100 teams operating in 17 countries. In total we surveyed and analysed responses from more than 1400 team members and leaders using an online survey tool. Our sample consisted of a wide variety of teams, from all male teams to all female teams and varying proportions of composition in between. We wanted to ensure that the findings were as representative as possible of knowledge work and so chose a sample of teams from different areas and functions within their organisations. We surveyed representative samples of teams from leadership executives, research and development, finance and accounting, legal, information technology, human resources and marketing.

Men and Women in Teams: Key Findings

For many companies innovation is at the very heart of their strategic goals. Our earlier research has shown that whilst the competence and motivation of individual employees plays a role in the innovation agenda – the importance of collections of employees in teams and projects is of central importance. Many of the teams in our previous study had less than 30% women members. As a consequence it was difficult to make any insightful comments about the role of women in teams – as in most cases these women were in a minority. In this study, the nature of the team composition enables us to really understand the impact, if any, that gender has on teams and ultimately on innovation.

Unlocking the Innovative Potential at the Individual Level

Are Men from Mars, and Women from Venus?

There is much talk – particularly in the popular press – about the differences between men and women at work. Women are often portrayed as more caring, emotional, more empathic with others – and less likely to be career-minded and ambitious. Men and women are seen to be from different planets with different styles and aspirations.

One of the challenges of these broad statements is that they are rarely based on high quality research. Moreover, since women are often in a minority – particularly at senior levels – it is difficult to discern whether the differences are about women, or about being in a minority. In this study we are able to look at whether men and women at work indeed inhabit different planets. As the data show – although we studied many possible attitudinal differences between men and women, we found that none showed a significant difference. It appears that in work men and women are remarkably similar in their attitudes and aspirations.

Gender Differences on Planet Earth

Men and women do not inhabit different planets at work. In fact they inhabit the same planet – planet Earth. However, whilst men and women are very similar on planet Earth, there are a small number of significant and important differences between them.

A key difference we found between men and women at work is between the hours that team leaders report they work. In our sample, male team leaders reported working significantly longer hours than female team leaders. We cannot tell from this study why this is the case, and clearly this is a finding we need to look at more closely in the future. For now, we can speculate that men might be more susceptible to adopting a masculine long-hours culture and that there are different pressures for men, women, fathers and mothers at work which lead to different behaviour patterns. As we shall see, this long-hours working culture – coupled with having small children – can create a particularly toxic work/home cycle for men.

We also found a number of differences between men and women with regard to their experiences out of work. This is important since we know that the boundary between work and non-work is permeable. What happens at home

can have a positive or negative impact on our experiences at work. We asked our respondents to tell us who does the majority of the domestic labour in the home. We found that in most cases it is women who perform the majority of the domestic labour. We found that women team leaders are six times more likely to perform the majority of domestic labour than their male counterparts. Women team members are four times more likely to do most of the domestic labour at home than their male counterparts.

We also found significant differences between male and female team leaders in their family experiences – 96% of male team leaders have children, whilst only 48% of female team leaders have children. There is also a difference in the age of the children. Male team leaders are significantly more likely to have children in pre-school than female team leaders with children.

Spillover

The capacity to be innovative requires the ability to be experimental, to 'think out of the box' and to build high quality relationships with others. Much of this depends on the state of mind – and our state of mind is influenced as much by what happens out of work as what happens in work. For over a decade researchers have examined the phenomena of 'Spillover effect'. This Spillover can be positive (that is when home or work are such positive, growth and reassuring places that when you cross the boundary between the two you are 'enriched') or Spillover can be negative (that is when home or work are such negative, caustic, exhausting experiences that when you cross the boundary between the two you are depleted).

We took a closer look at the state of mind and the emotional strength of the men and women in our sample. We found some very interesting results. First, there are differences between the importance of the work and family domain for team members and team leaders (regardless of

whether they are men or women). In general, in the context of Spillover phenomena, both men and women team members consider their home domain to be more important than their work domain. The reverse is true for team leaders. Both men and women team leaders are more likely to rate their work domain as more important than their home domain.

We also found differences between team members and team leaders with regard to the Spillover between the two domains. Most team members – regardless of whether they are men or women – tend to report a positive Spillover from home to work. They also report a positive Spillover from work to home. This creates for many team members an "Enriching cycle" between the two domains of home and work. This is not the same for team leaders. Both male and female team leaders report that work is more important, and that their experience of the Spillover from work to home and home to work is negative. We did find a number of gender differences in team leaders with regard to Spillover. The impact of negative Spillover for women is stronger than for men. So when women experience negative Spillover this has a stronger effect on how they feel about their work and themselves. However, whilst the effect of Spillover may be stronger for women in our sample, male team leaders were more likely to report that they experience Spillover (even though the effects may be weaker). Many of the male team leaders we surveyed report being in a "Depleting cycle" between home and work. They come home from work exhausted (remember they report longer work hours) and then find home equally challenging (they are likely to have more and younger children than female team leaders – 52% of whom do not have children). These results have important implications for the way that flexible working – still seen as a 'women's option' – should be considered in the future. If male team leaders

are to move away from the cycle of depletion many are currently experiencing, it is vital that flexible working is seen and offered objectively as an option for both men and women.

Unlocking the Innovative Potential at the Team Level

Minority Effects

The composition and norms within a team can have an important impact on the extent to which the team is able to work in an innovative and productive manner. Our interest here is in whether the proportion of men and women has an impact on the way in which a team works together. There has been debate about the idea of a 'tipping point' in teams, and also some research that shows that women in teams may network in a different manner than their male colleagues. Much of this research has suffered from looking at teams in which women are in a minority. This study enables us to look at the experiences of men and women in teams when they are in a minority – and indeed in the majority.

In some of the teams we studied, men and women are in the minority. We wanted to understand whether the experience of being in a minority was different for men and women. We found that neither men nor women flourish when they are in the minority in teams. Those in a gender minority tend to report lower life satisfaction, more negative moods and lower commitment to the organisation. There are some differences between how men and women build relationships with others when they are in a minority. When men are in a minority they tend to focus on the others in the group. When women are in a minority they are more likely to network with others outside the team (i.e. boundary span) than when they are in a majority. This reinforces an earlier research finding by Herminia Ibarra that demonstrated when women are in a minority they build

stronger networks with other women – where ever these women are situated in the organisation.

A Question of Proportions

Our interest here is in innovation and the critical factors that we know to drive innovation. Therefore in this study we looked at the impact that the proportion of men and women have on a range of these critical drivers. As the report shows, there are a number of critical innovation factors that are influenced by the proportion of men and women in a team. These include the psychological safety of team members and the whole team, the extent to which they are prepared to take risks and experiment, and the general efficiency of the team. In the past, there has been a view that there is a 'tipping point' of about 30% women that makes a difference. We found that for all these critical factors the optimal gender mix was about 50% men and 50% women. We also found that a slight majority of women (60%) creates optimal conditions in relation to the self-confidence of the team.

Recommended Actions to Unlock the Innovative Potential of Teams

Encourage Shared Domestic Labour

Our research showed clearly that there are few differences between men and women as employees – both inhabit Planet Earth.

This report highlights the extent to which working women continue to carry the bulk of the domestic labour in the home. This makes it difficult for many women to take on more responsibility – and ultimately leads to many potential female team leaders choosing not to have children, or indeed choosing not to take on increased responsibility. As we saw from our last study, in many companies the 'family friendly' policies are seen to be focused primarily on women, whilst the assumption is that men

are able to work long hours supported by their (often working) partner. If this attitude is to change, then companies need to address the wider societal norms regarding the distribution of domestic labour and create a situation where the implication is that there is equal sharing of parental leave and domestic labour.

Actively Manage Spillover

One of the interesting findings from our study of Spillover is that male team leaders experience greater caustic and negative Spillover than their female counterparts. As we have seen, this is a result of the longer hours they report working, and the fact that they tend to have more and younger children. Our last research study showed that whilst most companies have policies around time/flexibility and leave – in fact few of these options are taken up – and when they are it is women rather than men who are the recipients. This study clearly highlights the pressure under which many male team leaders find themselves working. Therefore it is crucial that companies urgently consider the way in which time pressures can be reduced and the long working-hours culture addressed. Instead, they should encourage a climate that allows learning from mistakes, taking ownership of career choices, encourages mentoring and coaching and that enables both men and women to take up flexible working options.

Manage and Minimise the Minority Experience

It is vital that organisations recognise the detrimental effects of minority status for men and women in working teams. In order to address this issue, teams with a high gender diversity (moving towards 50:50) should be encouraged. Tokenisms and stereotypes would then be actively diminished. Too often, senior teams have just one or two women as members. This report highlights the detrimental effect this 'tokenism' has on women and indeed on the performance and innovation of the team.

Optimise your Teams' Innovative Potential

Where innovation is crucial, then companies should actively construct teams with equal proportions of men and women. This will ensure they are able to benefit and select from the most diverse talent pool.

This research has highlighted for the first time the potential that gender balance has on the innovation potential of professional teams. We found that men and women team members have much in common. Where differences do exist, they are mainly related to women's additional roles in society. On a team level it was interesting to note that the key levers and drivers for innovative processes are positively influenced by having a 50:50 proportions of men and women in teams. This clearly shows that equal gender representation can help to unlock the innovative potential of teams.

Professor Lynda Gratton
Dr Elisabeth Kelan
Andreas Voigt
Lamia Walker
Dr Hans-Joachim Wolfram

Our Research Journey

Women Leading Teams (Nov 06)

Inspiring Women: Corporate Best Practice (May 07)

Innovative Potential: Men and Women in Teams (Nov 07)

Innovative Potential: Men and Women in Teams

The companies we studied

Profile: Participating companies

Our study comprises 21 cross-sector organisations ranging in size and maturity, featuring:

More than

100
teams surveyed

60+
teams complete responses

Over

850
survey respondents

17
countries spanned globally

Specifications for teams were:

i.   Knowledge-based workers
ii.   Either virtual or centrally located
iii. Worked together for minimum 3 months
iv.   Under direction of project leader

By industry

Industry Sector	Companies
Automotive	Volvo Cars
B2B	Cargill
Biotech	GSK Biologicals
Consulting	Accenture; IBM Consulting
Education	London Business School
Financial Services	AIB; Fortis Bank; Lehman Brothers; Lloyds; Société Générale
Financial Services (Audit)	BDO Stoy Hayward; KPMG
FMCG	L'Oréal
Insurance	AXA PPP; AXA Ireland
Manufacturing	Corning
Media	Reuters
Technology	Symantec
Telco	Nortel; Orange

Individual Profile:
By Sector

Industry sector	Team Leaders	Team Members
Automotive	5	36
B2B	4	29
Biotech	4	39
Consulting	11	90
Education	2	9
Financial Services	32	280
FMCG	1	11
Insurance	8	68
Manufacturing	6	26
Media	5	49
Technology	14	80
Telco	5	44

Early Findings

Early findings indicate that the innovative potential of Men and Women working in teams is affected by their 'context', whether at work or at home

We studied some contextual factors in order to better understand the degree of impact on their innovation and productivity when working in teams

In reviewing these factors we confirmed some familiar statistics, and found some surprising results

Are Men from Mars and Women from Venus?

We looked at possible differences in a
wide variety of individual criteria at work

NO significant differences between
industry sectors

NO significant differences between
Men and Women

The Individual Criteria we studied:

Self-confidence   Life satisfaction

Personal initiative   Career satisfaction

Sensitivity to others' views   Perceptions of task significance

Positive mood   Organisational commitment

Negative mood   Intention to leave

Inclusiveness

Planet Earth 1

We did find differences in what
happens out of work

Key Findings
Team Members: At Home

	Women	Men
Men Team Members earn more than their Partners		
Income – More than my Partner	33%	69%
Income – Less than my Partner	31%	11%
Women Team Members carry most of the domestic burden at home		
Most domestic labour – By me	47%	14%
Most domestic labour – By my partner	6%	44%

Planet Earth 2

<div style="background:orange">

Men and Women Team Leaders showed differences in our sample, in their Life Experiences at Home

</div>

Key Findings
Team Leaders: Life Experience

	Women	Men
Women Team Leaders are less likely to have children		
Without Children	52%	4%
Men Team Leaders are more likely to have younger children		
Youngest Child in Pre-School	23%	46%
Women Team Leaders are six times more likely to carry the domestic burden		
Most domestic labour – By me	31%	5%
Men Team Leaders earn more than their Partners		
Income – More than my Partner	65%	96%

Key Findings
Team Leaders: Working Hours

	Women	Men
Women work fewer hours		
Working hours per week	44	52

Causes:

- Men are more prone to adopt a masculine long hours culture
- Is there exaggeration / modesty?
- Different sets of pressures on Men, Women, fathers, mothers
  - Women: seen as potential mothers; many decide not to have children
  - Men: seen as workers at work and not as potential fathers

# Work and Home

The Context is Different for Men and Women:

Home offers a different experience

- Women have more domestic responsibilities

Whole life experience is different

- Fewer Women Team Leaders have children
- Men Team Leaders are more likely to have children, and their children are younger

Spillover Between Work and Home

Enriching   OR   Depleting

Work   Positive   Home

Work   Negative   Home
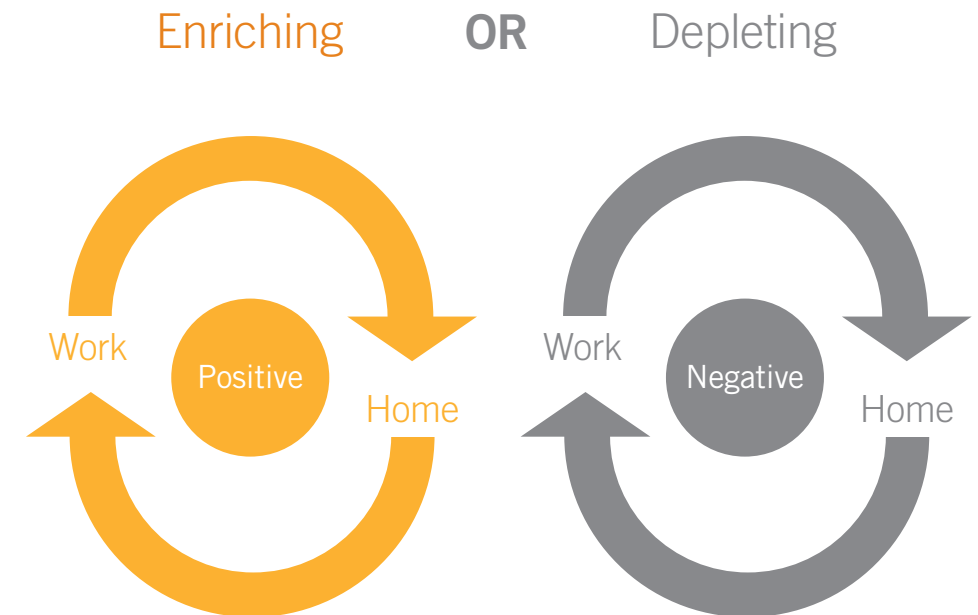
(Rothbard, 2001)

Negative Effects of Spillover

Team members and their teams can be affected by negative Spillover from either Home to Work, or Work to Home

Effects of negative Spillover

- Decreases passion
- Reduces commitment
- Affects participation in the team
- Impacts the potential for innovation

Causes of Spillover

Negative Spillover (conflict):

- Amount of time devoted to work and family
- Degree to which individuals see a life domain as important to their sense of self
- Stressors and dissatisfaction, e.g. high demands, role conflicts / ambiguity
- Non-supportive supervisors/partners

Positive Spillover (facilitation):

- Work-related social support
- Family-related social support
- Work-related decision autonomy

(Frone 2003)

This is how our sample experienced Spillover

Positive Spillover

- ### From Work
  Positive mood; Increased organisational commitment

- ### From Home
  Increased life satisfaction

Negative Spillover

- ### From Work
  Negative mood

- ### From Home
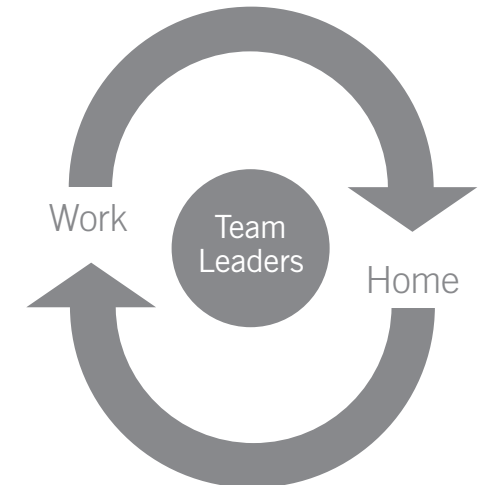 Decreased life satisfaction

Spillover Experience
Team Members:

Enriching Cycle

- For Team Members the positive effects from both domains in life are stronger than the negative
- For Team Members HOME is more important for both Men and Women
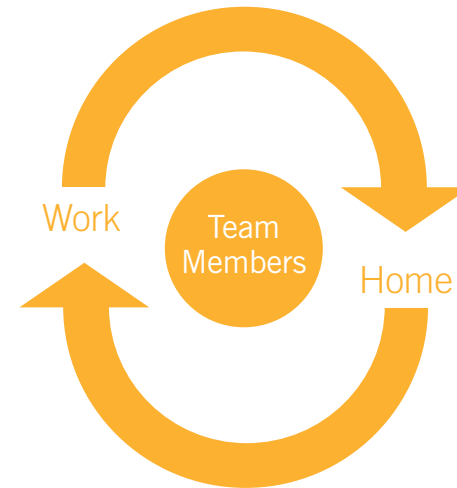
Depleting Cycle

- For Team Leaders WORK DOMAIN is more important than HOME – this applies to both Men and Women
- For Male Team Leaders negative Spillover is more pronounced from HOME to WORK
- The cycle is perpetuated because WORK also can have negative Spillover on HOME

Gender and Spillover
When Spillover occurs:

For Women

- Negative Spillover is more negative for Women than for men (e.g. negative mood, life satisfaction and organisational commitment)
- Positive Spillover is more positive for Women (i.e. positive mood and reduced 'turnover intention')

For Men

- Male Team Leaders experience a higher level of Spillover from home than Female Team Leaders
  - The majority are fathers
  - They have younger children
- Depleting cycles are more negative for Male Team Leaders than Female Team Leaders

Spillover Summary

Team Members experience a Positive 'Enriching' Cycle (Men and Women)

But for Team Leaders

- Men and Women experience Negative Spillover, however, it is especially strong from home to work for men
  - Likely to have more children
  - Their children are younger

- The cycle is perpetuated because WORK can also have negative Spillover on HOME

Innovative Potential
What Drives Innovation?
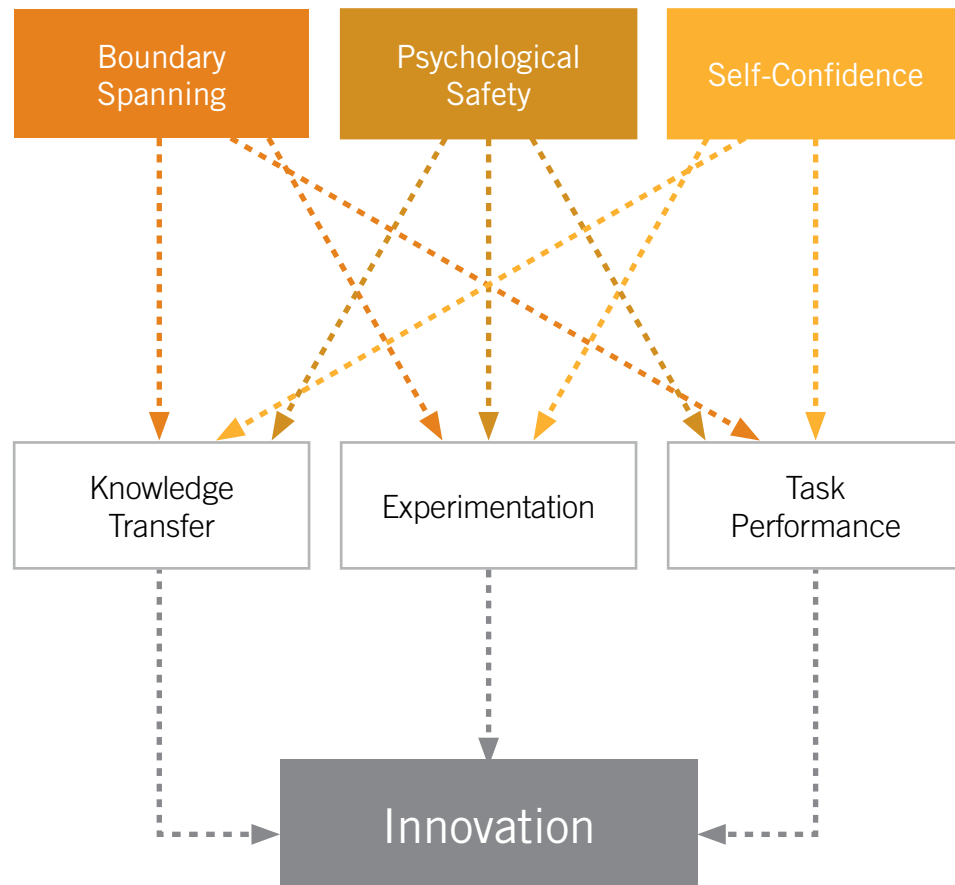
We Studied Teams with Different Proportions of Men and Women

100 Teams with Different proportions of Men and Women
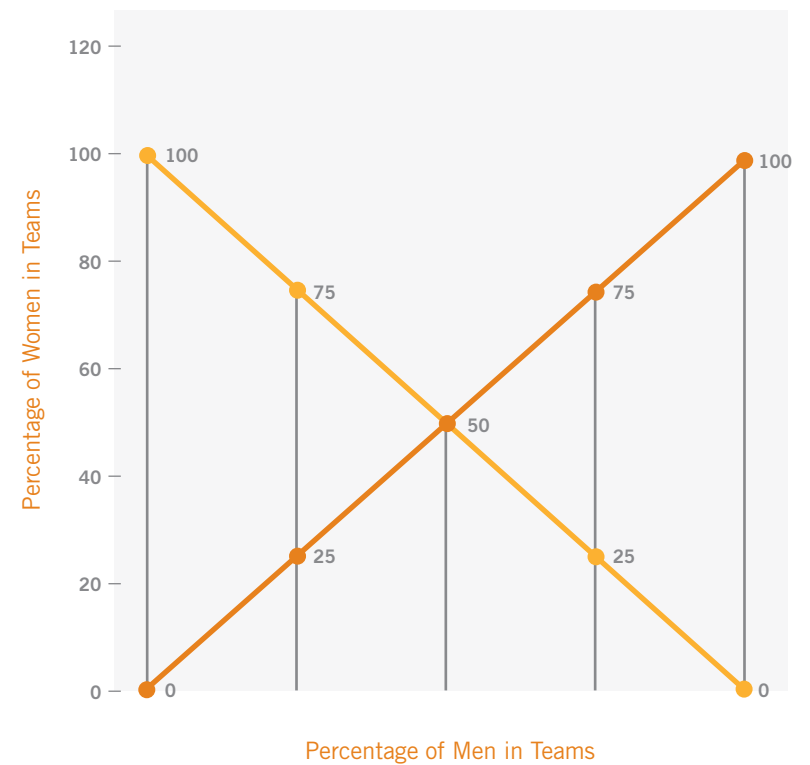
We asked how Gender plays out in teams
Being in a Minority

What happens when Men and Women are in the minority?

Generally, there can be negative outcomes for both Men and Women

- Lower life satisfaction
- Higher negative mood
- Less commitment to the organisation

Being in a Minority

Women

When Women are in a minority they tend to network to other people outside of the team

(Ibarra 1992, 1993)

In our sample:
When Women are in a minority there can also be positive outcomes,
- They engage in high degrees of boundary spanning or networking outside of the team. This leads to knowledge transfer

Men

In our sample:
When Men are in a minority they experience,
- Less boundary spanning (i.e. information seeking and scanning the environment) outside of the team. This reduces the degree of knowledge transfer
- Lower life satisfaction
- Higher negative mood
- Less commitment to the organisation

Proportions of Men and Women in Teams
Psychological Safety

Psychological safety is optimal with 50:50 proportions of Men and Women


Member Psychologically Safe Comm. Climate (y-axis)
Proportion of Women (x-axis)

R Sq Quadratic = 0,042
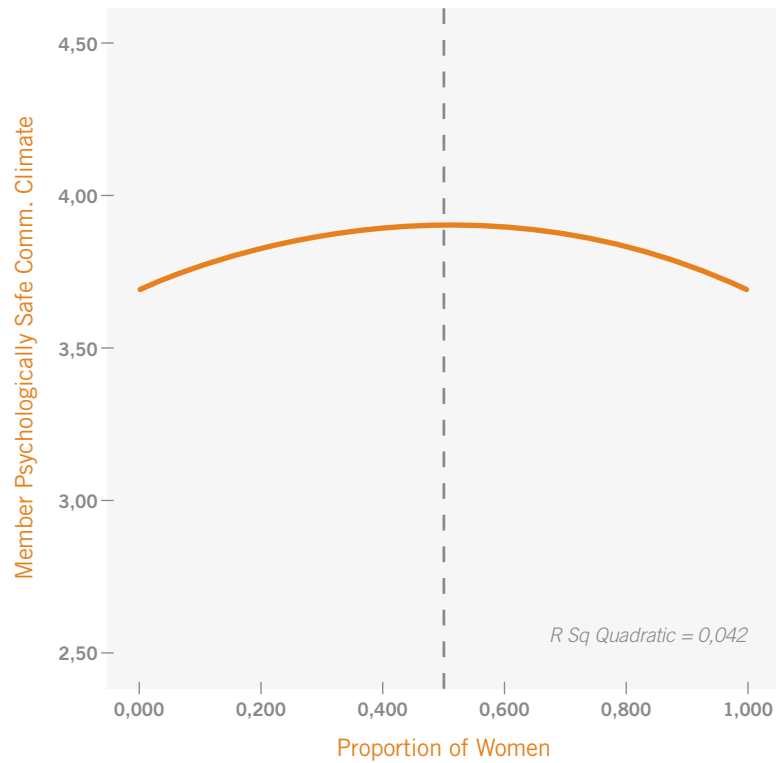
Proportions of Men and Women in Teams
Self-confidence

## Self-confidence of team members is optimal with 60:40 proportions of Women and Men

Member Mean Self Confidence (y-axis)
Proportion of Women (x-axis)

R Sq Quadratic = 0,111
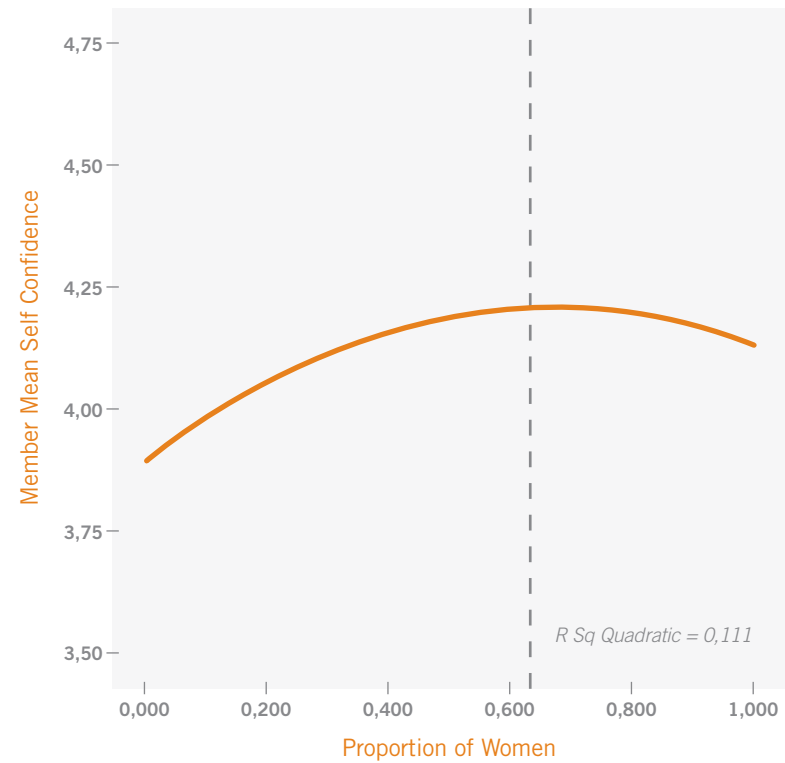
Proportions of Men and Women in Teams
Experimentation

Experimentation is optimal with 50:50 proportions of Men and Women

R Sq Quadratic = 0,114

(X-axis: Proportion of Women; Y-axis: Leader Team Experimentation)
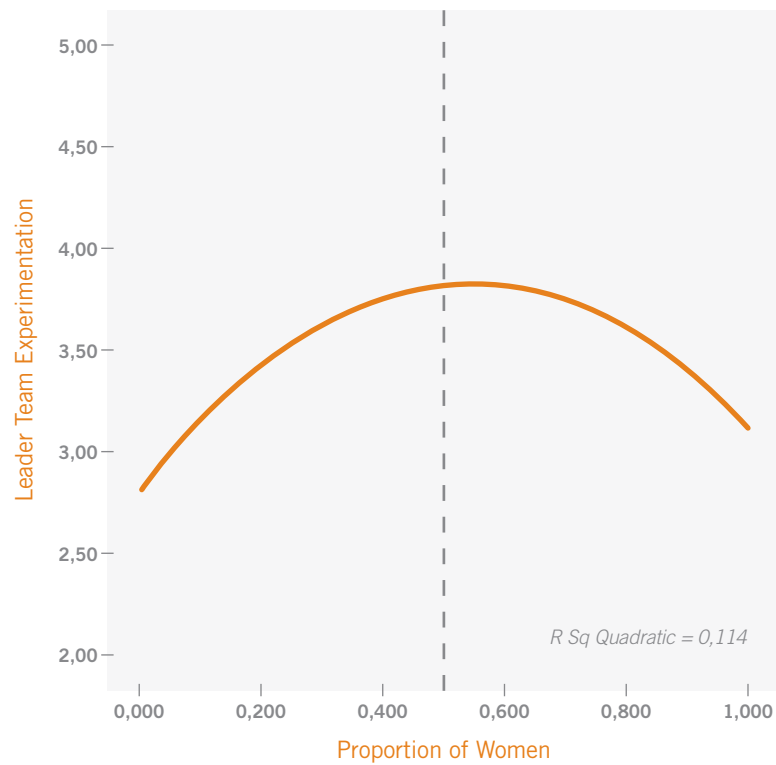
Proportions of Men and Women in Teams
Efficiency

Efficiency is optimal with 50:50 proportions of Men and Women

R Sq Quadratic = 0,088

(X-axis: Proportion of Women; Y-axis: Leader Value Appropriation)
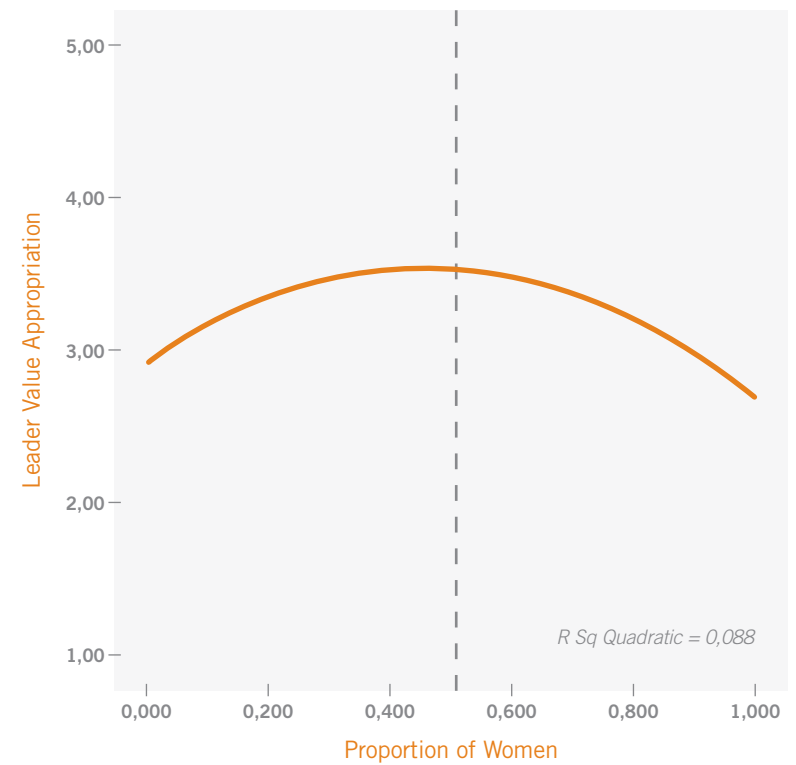
Asking Different Questions to Create Innovation – A Car by Women for People

- Cars are usually designed for and by men
- Research shows that women are the most discerning customers in the premium segment: what pleases them, will also please men
- What would a car designed by women look and feel like?
- Designing a concept car is already special, but this project was high-profile with a lot of media coverage which made it extra special
- A great experiment in gender mix

Because They Are Worth It – Valuing Differences in Perspective Among Men and Women at L'Oréal

- Over 60% of employees at L'Oréal are women – and women are the key customers for their products
- This mix of men and women has not created a culture that is 'feminine' – but one rather that is complex with many elements of difference
- Diversity is crucial to the innovation agenda – and the emphasis on selection is about diversity within gender as much as diversity across gender
- Encouraging the expression of these different qualities is key to innovation

The KPMG Difference

- Innovation is crucial to the value of this team – the senior executive tax advisory group
- Innovation is enabled through empowerment and strong channels of communication
- 50:50 gender mix ensures broad experience and diverse backgrounds – a breadth of heuristics
- Much emphasis on creating networks and knowledge transfer – the speed of innovation is key

Recommendations

1.

Encourage shared Domestic Labour

- Companies should offer and reinforce 'family friendly' policies and practices
- Companies to offer adequate allocation of parental / care leave for Men and Women
- Support the uptake of paternity leave to support fathers building relationships as early as possible
- Encourage 50:50 share of responsibility for Domestic Labour at home

Recommendations

2.

Actively manage Spillover
Today, the main recipients of negative Spillover are men

- Reduce
  - Pressure to fit in or adapt
  - Working under time pressure
  - Address the long working hours culture

- Encourage
  - A more open dialogue with men about stress
  - Personal ownership / interest in career choices
  - Enable family-friendly policies as much for men as women
  - Adoption of the choices available to employees related to where, when and how to work
  - Encourage male role models

Recommendations

3.

Manage and minimise the 'Minority Experience'

- Remember that Men suffer when in a minority as well
- Aim for higher gender diversity when building teams (50:50 proportions of Men and Women)
- Beware of tokenism and stereotypes
- Don't rely on women minorities to do the boundary spanning, encourage everyone
- Planting in threes

Recommendations

4.

Optimise your Teams' Innovative Potential

- Construct your team with the following criteria in mind:
  – Gender diversity
  – Boundary spanning capability
  – Psychological safety

- Affirmative search…keep looking for 'talent' that brings diverse views – this needs courage and conviction

Recommendations
Summary

1.

Encourage shared Domestic Labour

2.

Actively manage Spillover

3.

Manage and minimise the Minority Experience

4.

Optimise your Teams' Innovative Potential

The Lehman Brothers Centre for Women in Business Research Agenda

1.

Gender and the MBA
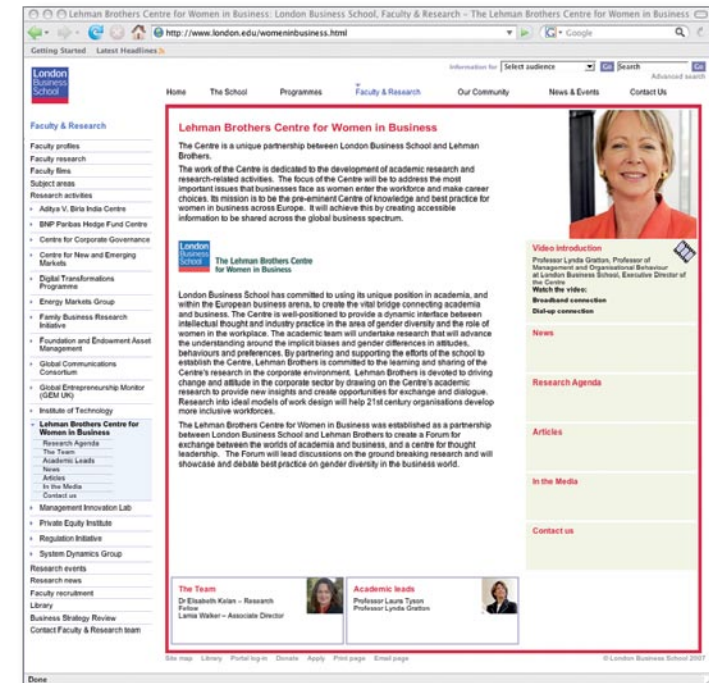
2.

Gender, career advancement and promotability

3.

Gender and leadership

4.

Diagnostic tool for gendered organisational cultures

Website

www.london.edu/womeninbusiness.html

Notes