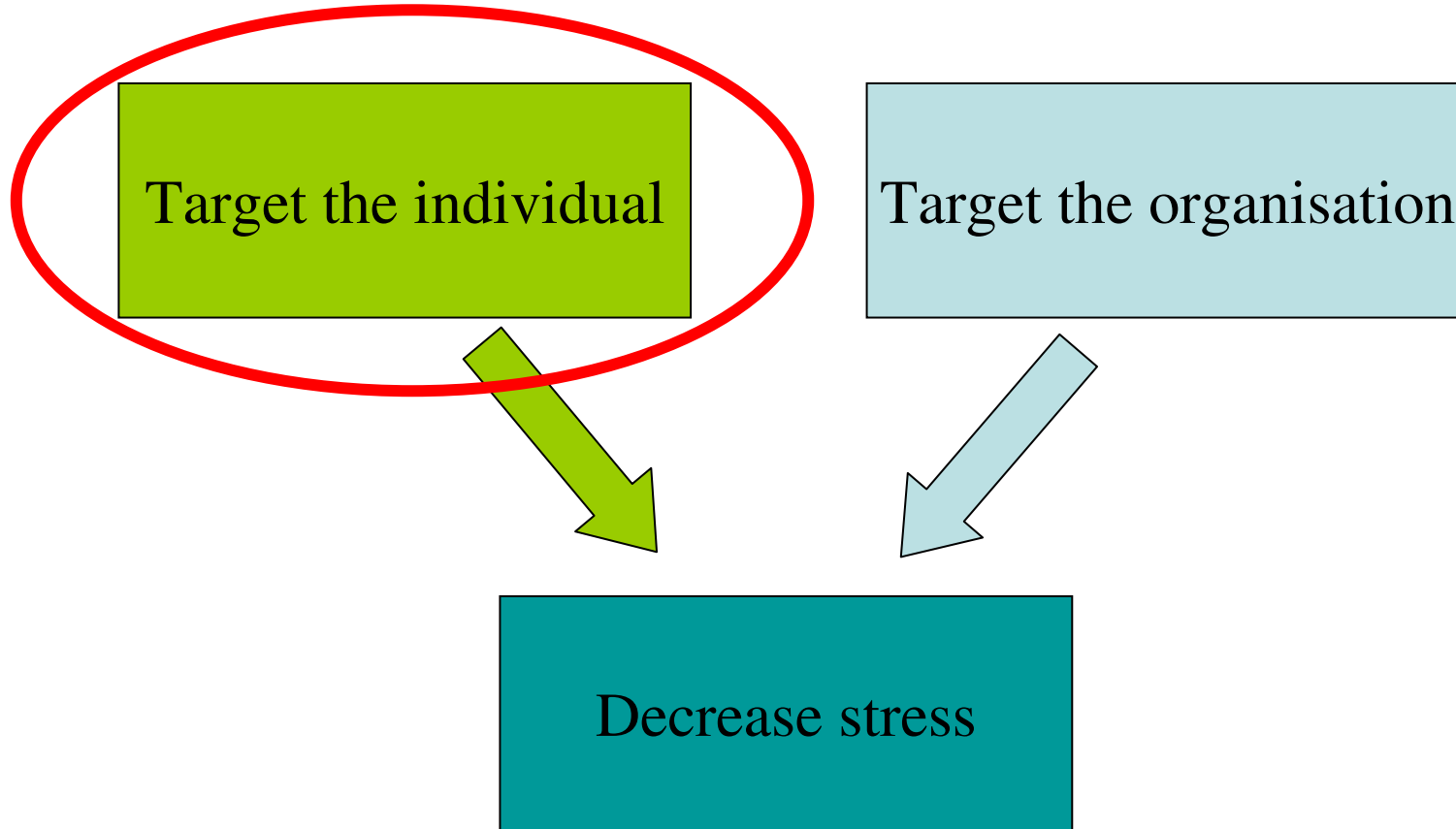


# How can job design improve worker well- being and workplace performance?

**Professor Frank W. Bond**

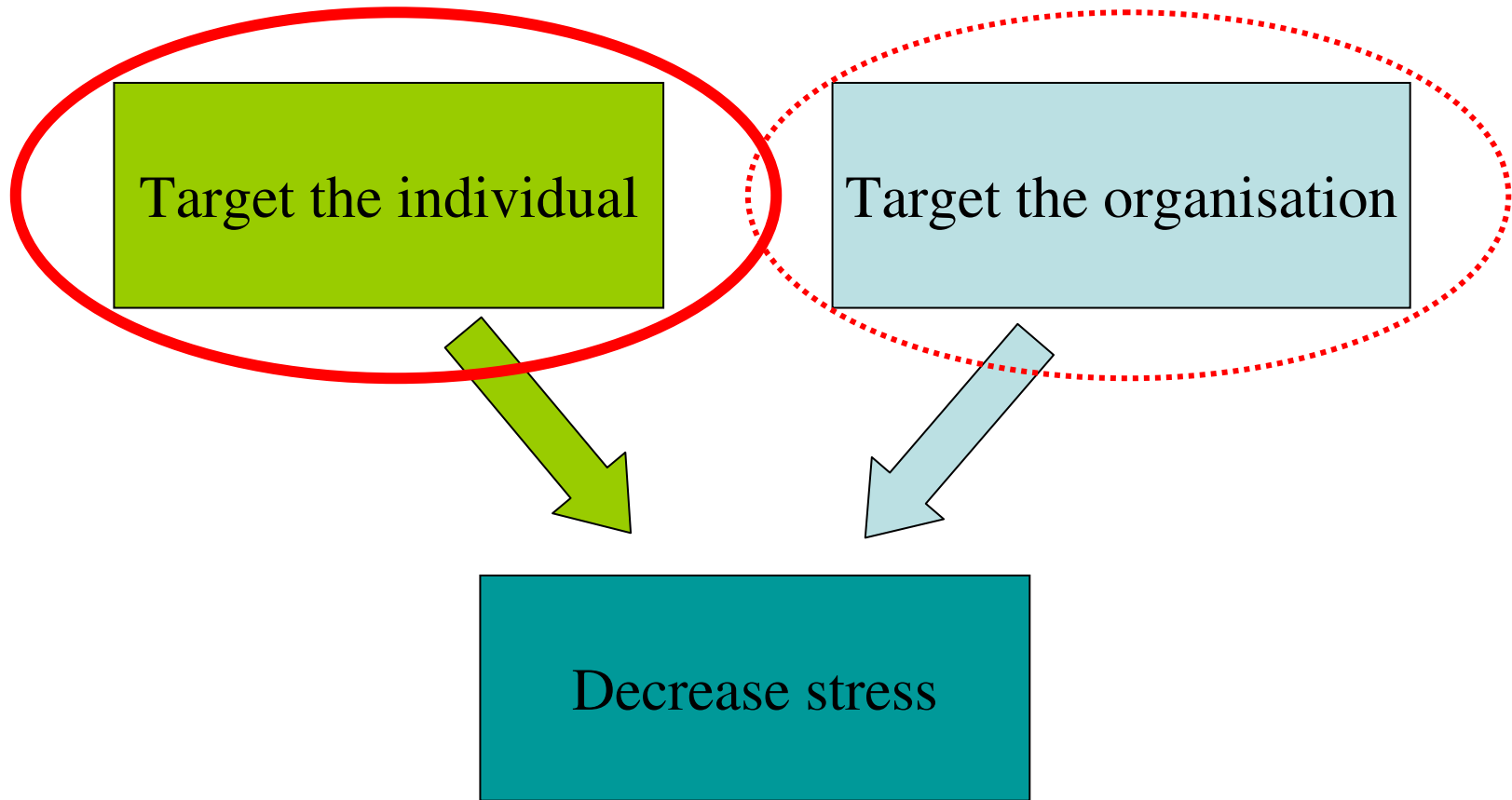
# Reducing occupational stress



# If you can't take the heat...

- Traditionally, organisations have (at least implicitly) maintained that it is the individual's responsibility to manage his/her stress levels
  - Employee assistance programmes
    - *Weight and alcohol reduction*
    - *Gyms and exercise*
  - Counselling services
  - 'In house' doctors and dentists
  - 'Macho' cultures emphasising resilience

# Reducing occupational stress



# Work design

The way work processes are structured and managed, dealing with issues such as:

- Scheduling of work
- Job design
- Interpersonal aspects of work
- Management style
- Organisational characteristics

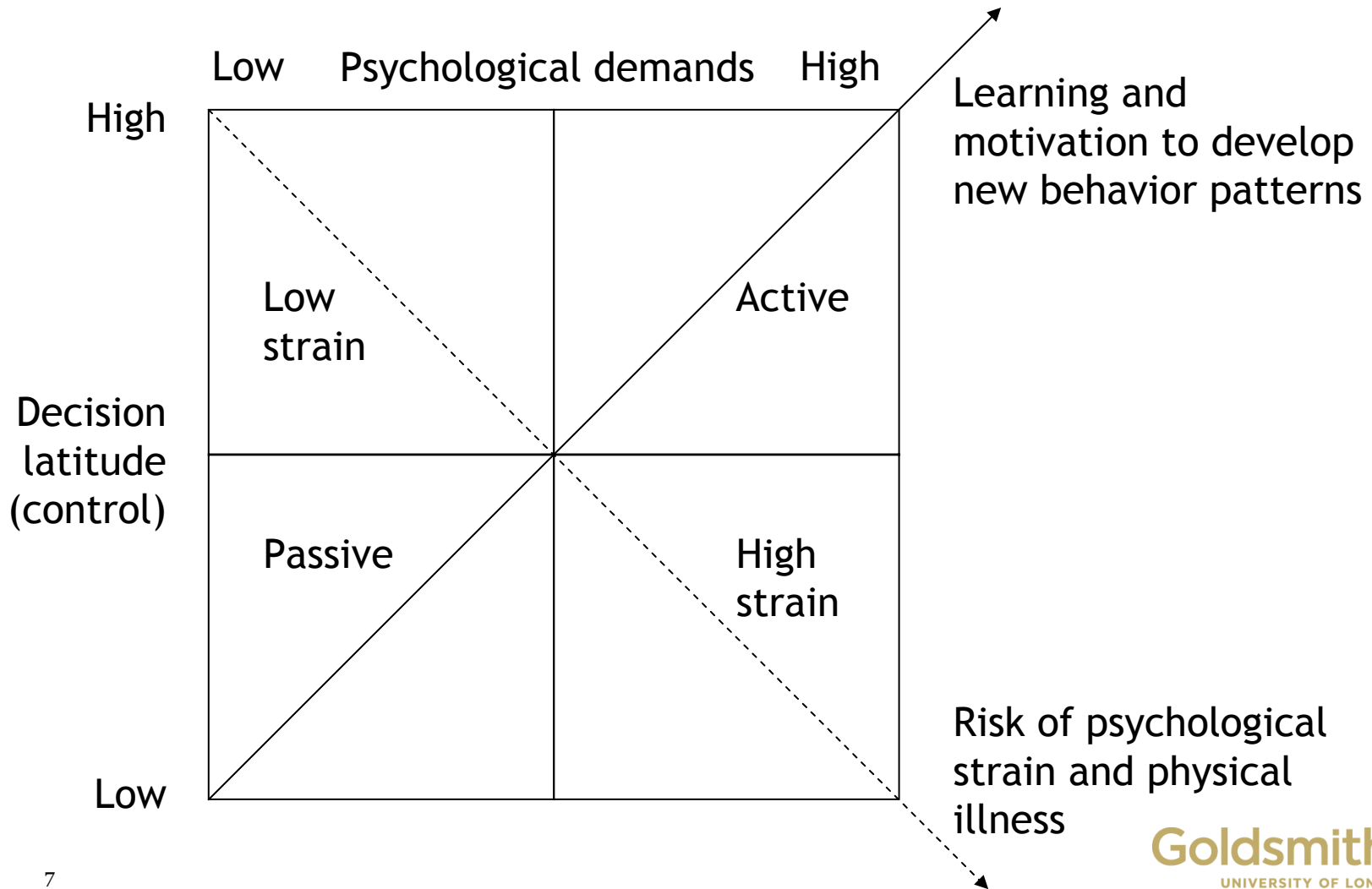
# Work design

Work design theories and models go back nearly 100 years

- Taylor (1911) Simplified and efficient work
- Harding (1931) Horizontal job enlargement
- Herzberg (1959) Two-factor theory
- Emery & Trist (1960) Sociotechnical systems
- Hackman & Oldham (1975) Job characteristics model

None of these models discussed psychological health. Their main aim was to increase job satisfaction by enhancing job motivation.

# Karasek's (1979) demands-control model



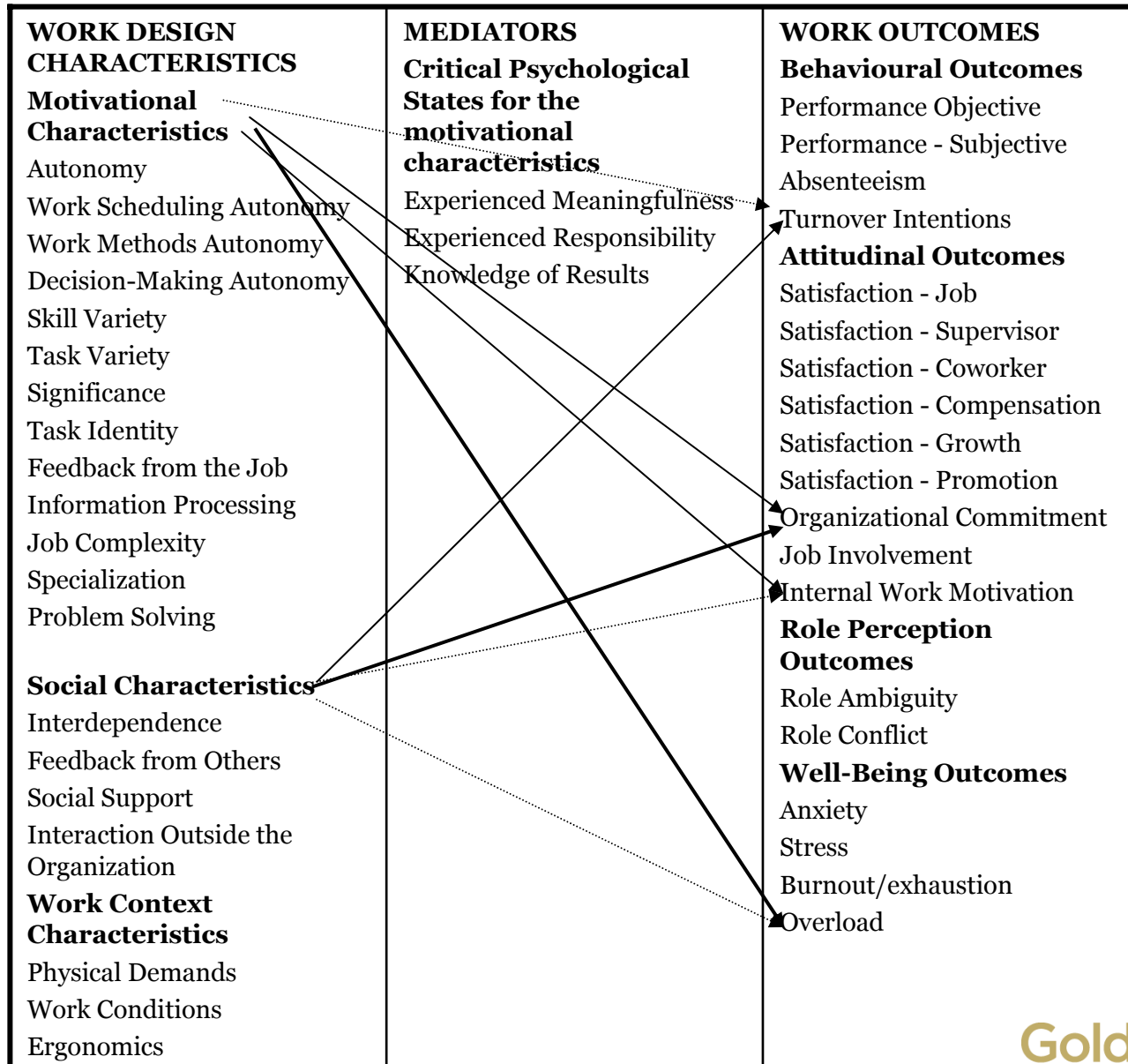
# Humphrey et al.'s (2007) extended work characteristics model

<p><b>WORK DESIGN CHARACTERISTICS</b></p> <p><b>Motivational Characteristics</b></p> <ul style="list-style-type: none"> <li>Autonomy</li> <li>Work Scheduling Autonomy</li> <li>Work Methods Autonomy</li> <li>Decision-Making Autonomy</li> <li>Skill Variety</li> <li>Task Variety</li> <li>Significance</li> <li>Task Identity</li> <li>Feedback from the Job</li> <li>Information Processing</li> <li>Job Complexity</li> <li>Specialisation</li> <li>Problem Solving</li> </ul> <p><b>Social Characteristics</b></p> <ul style="list-style-type: none"> <li>Interdependence</li> <li>Feedback from Others</li> <li>Social Support</li> <li>Interaction Outside the Organization</li> </ul> <p><b>Work Context Characteristics</b></p> <ul style="list-style-type: none"> <li>Physical Demands</li> <li>Work Conditions</li> <li>Ergonomics</li> </ul>	<p><b>MEDIATORS</b></p> <p><b>Critical Psychological States for the motivational characteristics</b></p> <ul style="list-style-type: none"> <li>Experienced Meaningfulness</li> <li>Experienced Responsibility</li> <li>Knowledge of Results</li> </ul>	<p><b>WORK OUTCOMES</b></p> <p><b>Behavioural Outcomes</b></p> <ul style="list-style-type: none"> <li>Performance Objective</li> <li>Performance - Subjective</li> <li>Absenteeism</li> <li>Turnover Intentions</li> </ul> <p><b>Attitudinal Outcomes</b></p> <ul style="list-style-type: none"> <li>Satisfaction - Job</li> <li>Satisfaction - Supervisor</li> <li>Satisfaction - Coworker</li> <li>Satisfaction - Compensation</li> <li>Satisfaction - Growth</li> <li>Satisfaction - Promotion</li> <li>Organizational Commitment</li> <li>Job Involvement</li> <li>Internal Work Motivation</li> </ul> <p><b>Role Perception Outcomes</b></p> <ul style="list-style-type: none"> <li>Role Ambiguity</li> <li>Role Conflict</li> </ul> <p><b>Well-Being Outcomes</b></p> <ul style="list-style-type: none"> <li>Anxiety</li> <li>Stress</li> <li>Burnout/exhaustion</li> <li>Overload</li> </ul>
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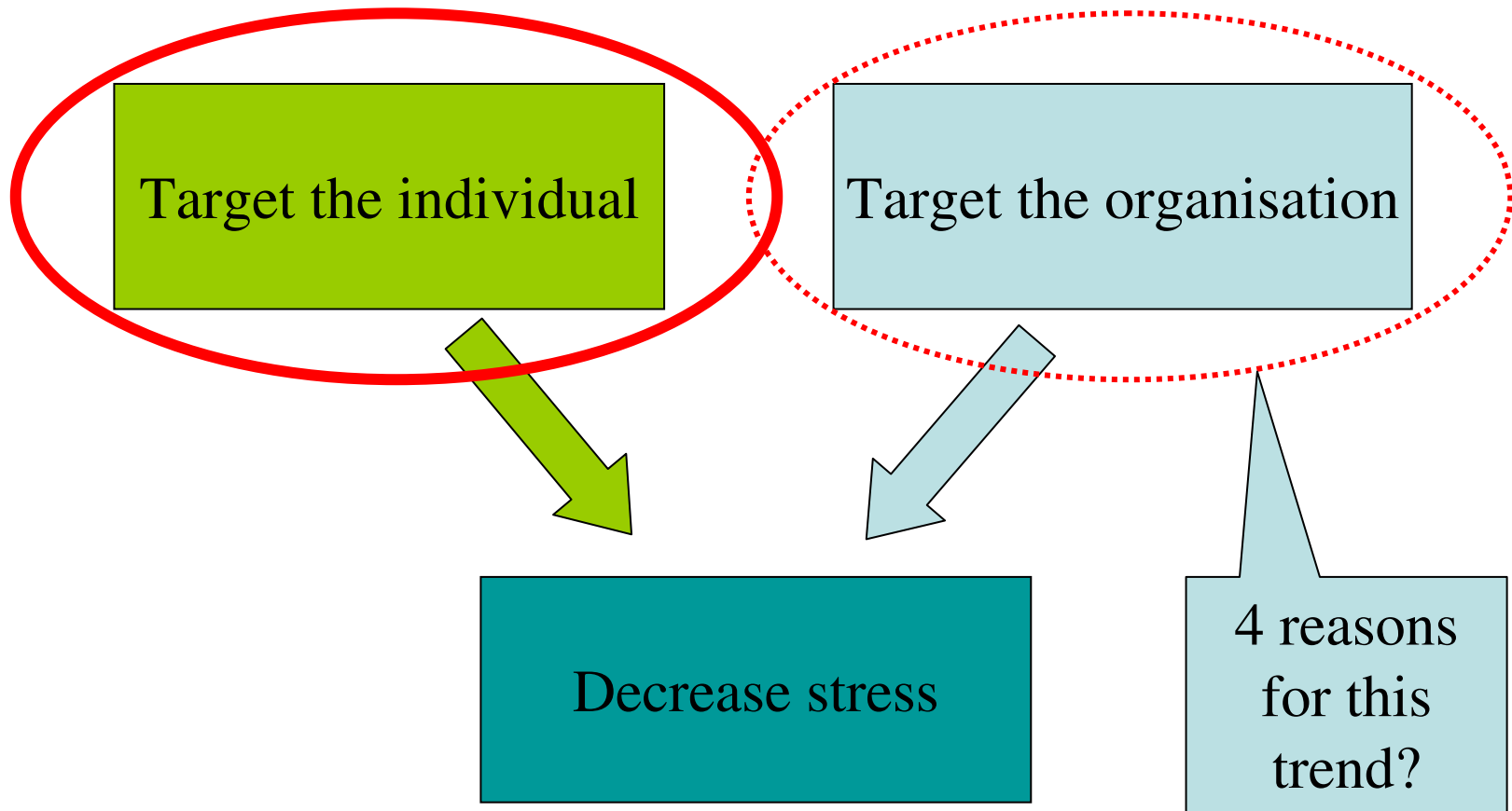
# Humphrey et al.'s (2007) meta-analysis findings

- There is an incremental impact of social and work context characteristics above and beyond the motivational characteristics specified in earlier work design models.
- For many outcomes, the set of social characteristics explained an equivalent amount of variance as the set of motivational characteristics (e.g., for supervisor satisfaction, coworker satisfaction, job involvement, role ambiguity, and stress)

# Humphrey et al.'s (2007) extended work characteristics model



# Reducing occupational stress



# 1. Is the kitchen too hot?

- Good evidence that the design of work – especially low **job control** and poor **social support** – has negative health impacts in terms of:
  - Increased incidence of coronary heart disease
  - Psychological distress
  - Job dissatisfaction
  - Absenteeism
  - Longstanding physical illnesses

## 2. Leadership trends

Emphasising control and a focus on relationships

- **Empowering leadership advocates:**
  - Employee job control
  - Employee influence in teams and the organisation
  - Leaders providing employees with support (instrumental and emotional), feedback, information, access to resources, and interpersonal exchanges that will help them perform effectively

(Spreitzer, 1996)

## 2. Leadership trends

Emphasising control and a focus on relationships

- **Transformational leadership**
  - A motivational or ‘charismatic’ leadership approach that requires high employee engagement  
(Bass, 1985; Burns, 1978)
- **Leader-member exchange (LMX) theory**
  - Advocates supervisor trust and engagement, as well as a participative management style  
(Dansereau et al., 1975)

# 3. HSE Management Standards

A preventive, population-based approach to reducing work-related stress

# The Standards target 6 main working conditions

- Demands
- Control
- Support
- Relationships
- Role
- Change (i.e., promoting effective change management and communication)

# Meta-analyses show

Sufficient evidence that  
successfully managing the six  
working conditions improves  
mental health

# 4. The business case

Does healthy work design (e.g., good levels of control and support) lead to better productivity?

Bond, Flaxman and Loivette (2006) conducted meta-analyses on quantitative studies that examined the effect that the HSE's six working conditions have on business outcomes.

This research suggests that there is a business case for effectively managing the design of work.

# Findings from Bond et al. (2006)

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Greater control	<i>Leads to</i> →	Better performance, objectively measured Better performance ratings Less absenteeism Less turnover intention
Better support	<i>Leads to</i> →	Better performance, objectively measured Better performance ratings Less absenteeism Less turnover intention
Better work relationships	<i>Lead to</i> →	Less withdrawal behaviours Better team performance Less absenteeism Less turnover intention
Well-designed roles	<i>Lead to</i> →	Less work withdrawal Better self-rated performance Less turnover intention
Greater demands	<i>Lead to</i> →	Better performance, objectively measured ( <i>in lab studies</i> ) Better performance ratings ( <i>in lab studies</i> ) Less absenteeism ( <i>when demands are accompanied by low levels of control</i> )
More effective change management and communication	<i>Lead to</i> →	Better performance ratings Less absenteeism Less turnover intention

# Can work redesign interventions improve productivity?

Quasi-experimental outcome studies

- Four of five clearly demonstrated that increasing job control paid off considerably in terms of improving absenteeism, turnover, objectively measured performance, and financial savings from lost wages

# Can work redesign interventions improve productivity?

Quasi-experimental outcome studies

There is an increasing trend for organisations to request work redesign interventions (at least in our experience). So, what is involved in one?

# Example of a work redesign intervention

(Bond, Flaxman, & Bunce, 2008)

## The case of a UK bank

Primary goals of the work redesign:

- Improve mental health
- Reduce absenteeism
- Increase motivation

# Participants

Financial call centre employees who entered customer account information into computerised systems and phoned customers in order to manage banking products (e.g., mortgage applications)

# Design

## **Time 1: One month before starting the intervention**

- Survey distributed that assessed work design characteristics (e.g., control, support, etc.)
- Assigned centres to a group (PAR/control)
  - *West Yorkshire: PAR (97 at Time 2)*
  - *Liverpool: Control (84 at Time 2)*
- Changes implemented by month 7

## **Time 2: 14 months after Time 1**

- Same survey distributed once again

# Participative Action Research (PAR)

- The process by which work redesign is often implemented
- It is a collaborative process that occurs between the change agent and organisational members.

PAR was implemented by forming a steering committee, made up of volunteers from a wide range of levels and functions in the intervention call centre.

- 12 people on the committee.

# PAR procedure

- The committee's aims were to: (1) identify specific instances of the problematic aspects of work organisation identified in the survey, and (2) to recommend changes that might address these problems.
- Committee members also consulted with their team colleagues to develop and finalise their recommendations for change.

# Work organisation problems

Guided by these team consultations, and the Time 1 survey results, the steering committee prioritised two problem areas:

- lack of control over the batching and distribution of work within teams; and
- the infrequency of individualised performance feedback and development planning.

# Increasing control over batching

- The committee proposed that team members be given greater control and influence over their team's daily and weekly work plans, and be allowed more discretion over the selection, timing, and ordering of their work tasks.

# Improving feedback & development

- The committee recommended the implementation of regular (e.g., monthly), informal ‘1-to-1’ (team leader-to-team member) consultation sessions.
- It was apparent that the team leaders ‘held the key’ to the implementation of these two work reorganisation strategies, so we met with team leaders twice to facilitate these changes.

# The changes: Increasing control over planning and batching

- Responsibility devolved to team members for the planning and batching of work tasks.
  - A number of the teams developed a rota system that provided all team members with an opportunity to participate in this work planning process. An interesting result of this change was that many teams decided to shift from unpopular two-hourly work cycles to daily cycles, which in turn, provided team members with more choice over when to complete particular tasks, and when they could take lunch and rest breaks.

# The changes: Increasing control over planning and batching

- The following email extract, from a team leader, illustrates the impact of this work reorganisation strategy:

‘Involving staff at the planning stage for the next day’s batches and allowing them to input – this one I have already implemented with surprising effect. Staff members sometimes choose to increase the amount of time they spend in ‘tough’ batches to keep their speed up or increase their knowledge. Often they do not plan their day the way I would have, but still achieve the same target at the end of the day.’

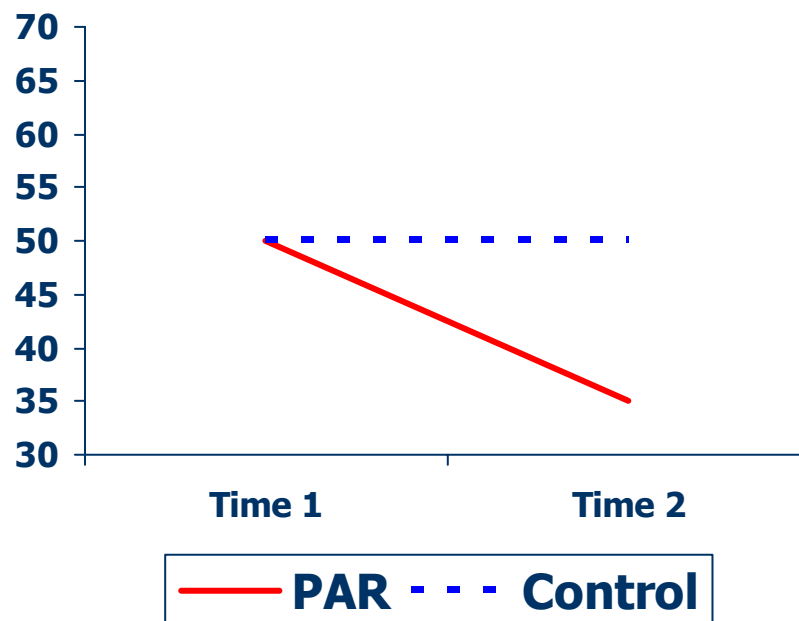
# The changes: Improving feedback and development

- Team leaders would hold regular, informal 1-to-1 consultation sessions with team members, and they would provide their team members with a high level of control over the format of these sessions.
- A number of the team leaders noted the difficulty of providing these 1-to-1s during busy periods and therefore implemented ‘mini’ (5-10 minute) 1-to-1s, which took place at the (private) workstations of individual team leaders.

# Percent with a probable mental health problem

- PAR significantly decreased mental distress
- PAR reduction in mental distress:  
 $F(1, 223) = 6.83^*$   
 $\eta^2 = .05$

## Change in mental distress across time



# Absenteeism

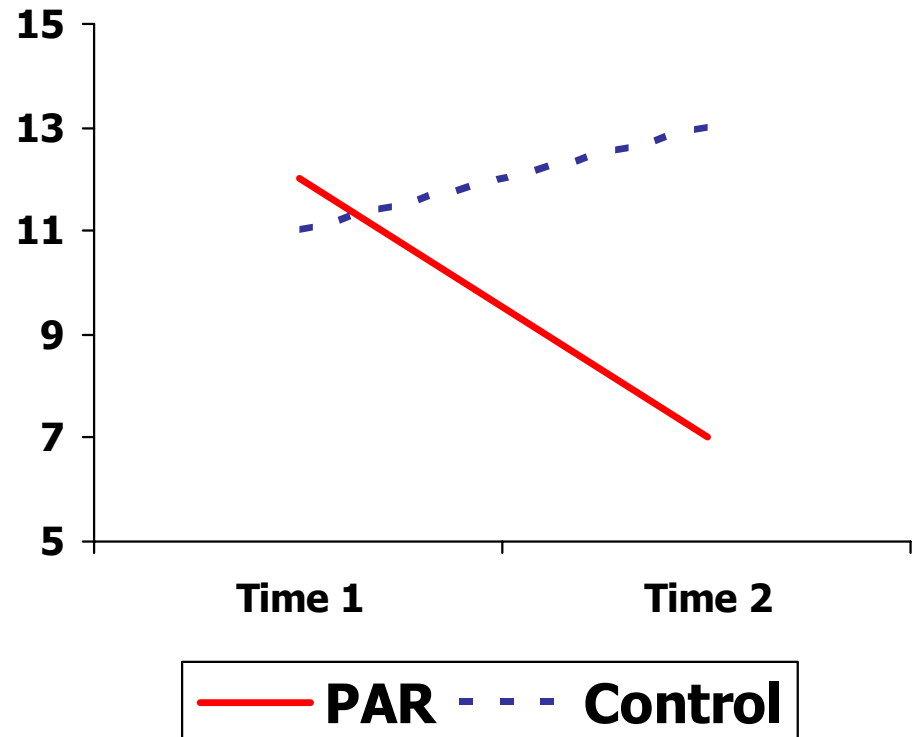
— PAR significantly improved absenteeism

— PAR improvement in absenteeism:

$$F(1, 223) = 4.25^*$$

$$\eta^2 = .02$$

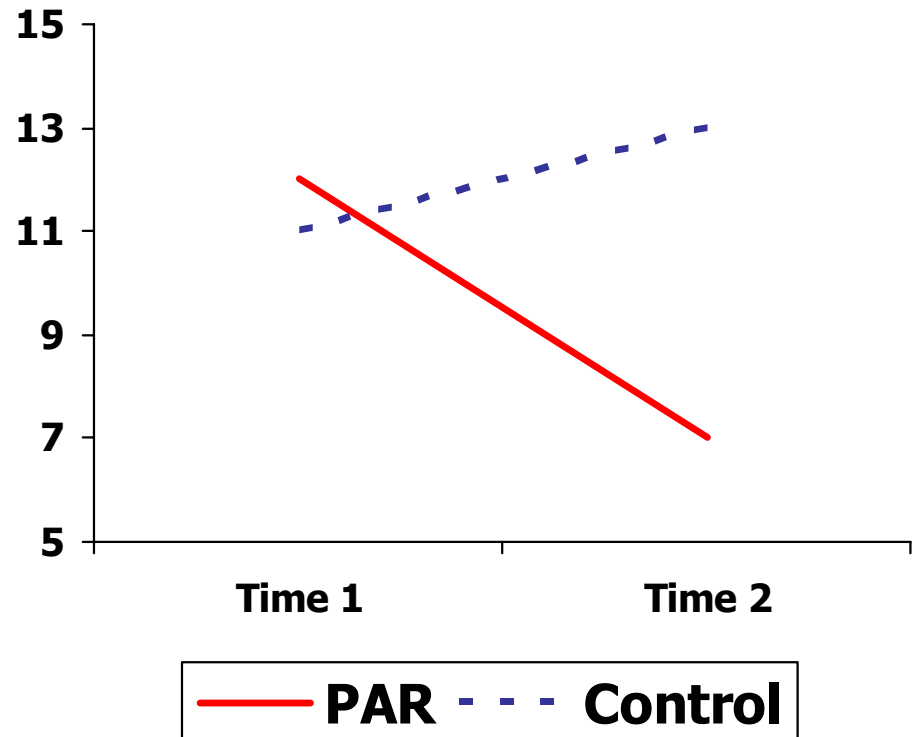
## Group x Time interaction



# Absenteeism

This reduction in days absent saved the company **£105,164** across 97 employees (In salary costs alone.)

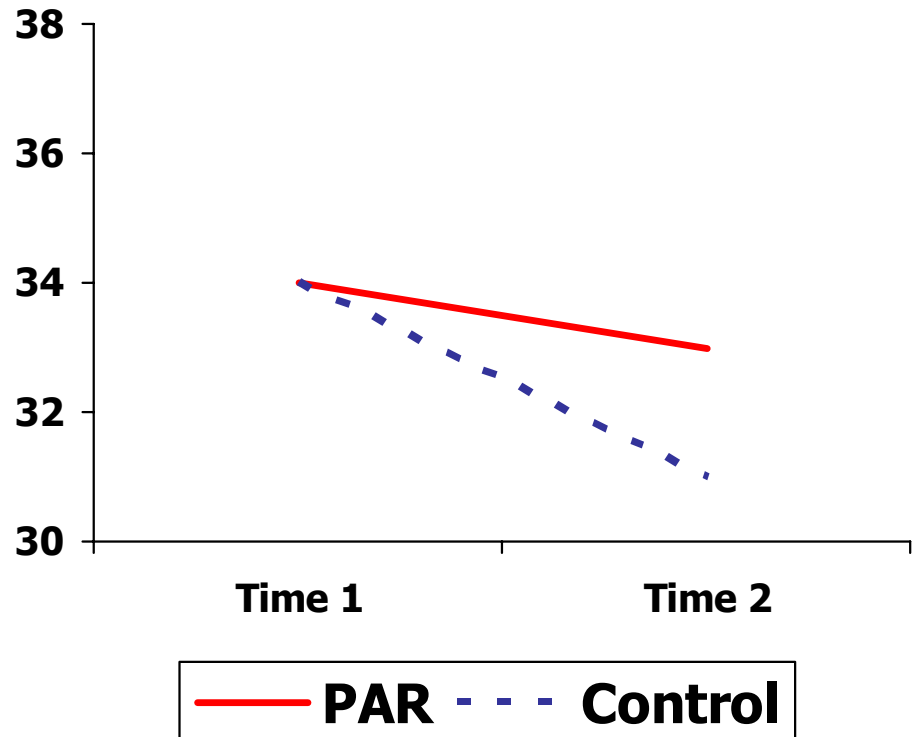
## Group x Time interaction



# Motivation

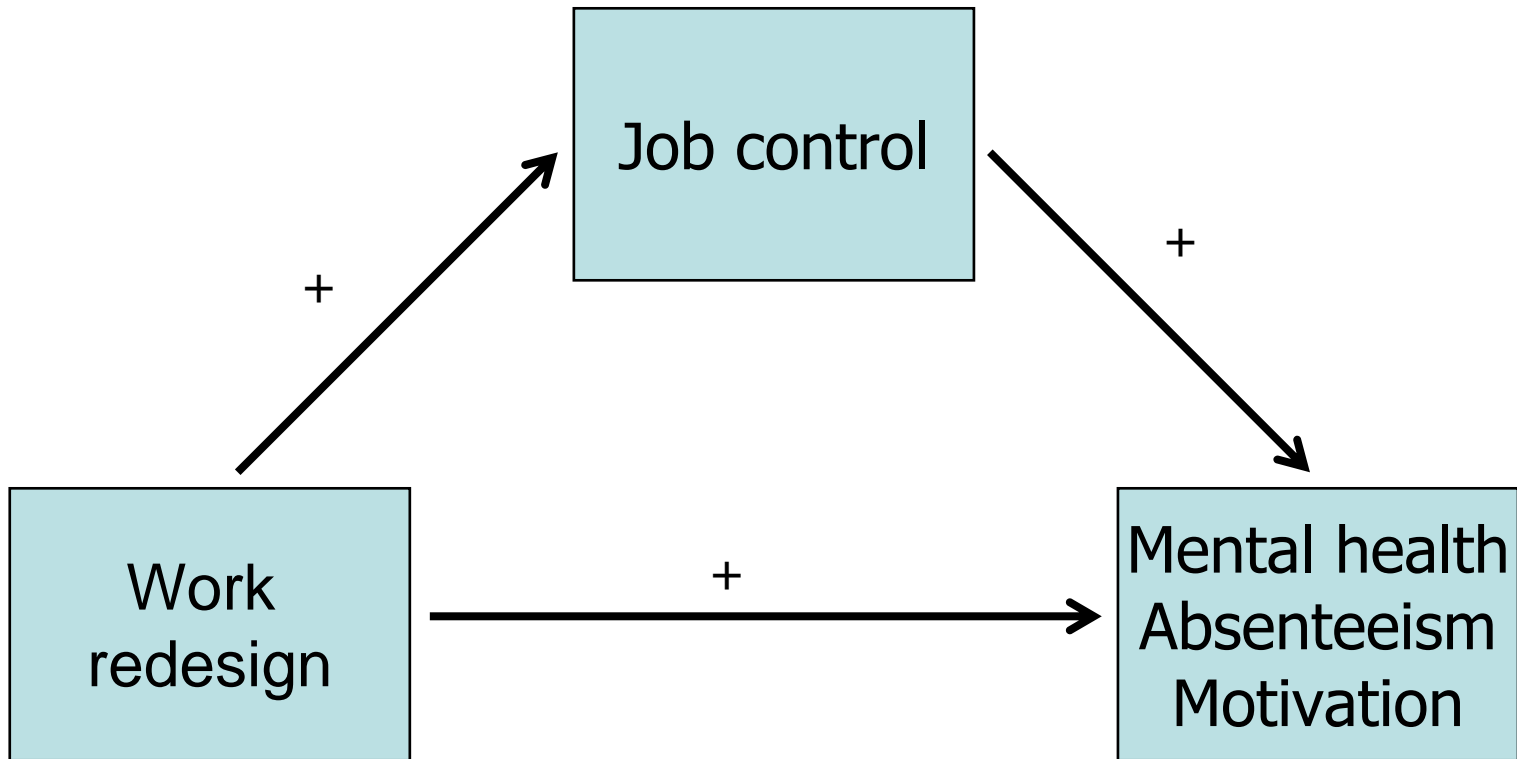
- PAR maintained motivation levels, whilst they dropped in the control group.
- Decrease in motivation:  
 $F(1, 223) = 3.93^*$   
 $\eta^2 = .02$

## Group x Time interaction



# Summary of findings

- The work redesign intervention improved mental health, absenteeism levels, and it sustained motivation levels.
- The intervention impacted all of these outcomes primarily by increasing levels of job control.



# Conclusions

- Small improvements in control, support, and communications can disproportionately benefit employee mental health, absence levels and cost savings for organisations.
  - That is, changes do not have to be large or expensive to have meaningful health and productivity impacts.
- Given that small improvements in work design can lead to both mental health and business benefits, it is little wonder that there is an increasing trend for organisations to tackle work-related stress by improving work design.

# What next in work design?

- **Why does it work?:** Need to investigate *why* work design improves well-being. What are the psychological and organisational mechanisms by which work design has its impacts?
- **Getting the balance right:** Research indicates we could go too far in promoting work design, at the expense of individual-focused interventions (e.g., cognitive behaviour therapies in the workplace)
- **The individual in work design:** Is job control good for everyone? What individual characteristics increase the benefits of job control, social support and other work design characteristics?

Thank-you for your attention

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