Redesigning Work Design Research and Theory: New Directions

Sharon K. Parker

Centre for Transformative Work Design

ANZAM 2017
Keynote Address

(1) What is work design (and re-design?)

(2) What do we know about work design?

(3) What don't we know? (Future Directions)

Work design is:

"the **content** and **organizing** of tasks, activities, relationships, and responsibilities within a job or role, or set of jobs/roles" (Parker, 2014)

"Work (Job) Characteristics"

Physical Characteristics

Biomechanical Characteristics

Psychosocial Characteristics

Cognitive Characteristics

Example 1 'redesign'

Standard midwifery model

Pre-natal

Birth

Post-natal

Midwife A-C ➡ Midwife D-G ➡ Midwife H

Example..

THE UNIVERSITY OF WESTERN AUSTRALIA

Midwife A x multiple 'cases'

| Pre-natal | Birth | Post-natal |

Midwife B x multiple 'cases'

| Pre-natal | Birth | Post-natal |

Midwife C x multiple cases

| Pre-natal | Birth | Post-natal |

Midwife A → Midwife A → Midwife A

Outcomes

CENTRE FOR
TRANSFORMATIVE
WORK DESIGN

THE UNIVERSITY OF
WESTERN
AUSTRALIA

SEEK WISDOM

For patients and the hospital

Standard work design (N= 877)

Randomly assigned

1748 pregnant women

Caseload work design (N = 871)

- Caseload work design:
  - fewer elective cesarians; more spontaneous births
  - less postpartum blood loss
  - faster discharges
  - more babies breastfed
  - $556 cheaper per woman *[reported by Stacey et al., 2013, Lancet]*

For midwives

*(Johnson & **Parker**; same sample – preliminary results)*

Significantly better work design:
- More Job Resources
  - Greater skill variety
  - More task significance
  - Greater task identity
  - More job autonomy

Better outcomes
- Lower intention to quit
- Higher job satisfaction

Example 2

- Introduction of 5 minute inter-professional briefings prior to surgical list
  - Anaesthetists, surgeons, trainees, nurses
  - Increased role clarity; team autonomy
- Preliminary findings:
  - 30% efficiency gain
  - More staff engagement
  - Increased voice

Carpini & **Parker**, in prep.

Many Other Examples

Work Redesign	Example Outcomes	Occupations
Increased team autonomy	Better customer service; Increased job satisfaction	Insurance company Banks Manufacturing
Multiskilling/ increased task variety	Reduced musculoskeletal injuries	Production teams
Increased control over work hours	Lower turnover	Management consultants
Greater support	Enhanced quality of care	Trainee doctors
Autonomy over shifts	Reduced chance falling asleep, better blood pressure	Maintenance workers

See:
https://www.comcare.gov.au/__data/assets/pdf_file/0003/145236/Professor_Sh

(1) What is work design (and 're'design?)

(2) What do we know about work design?

(3) What don't we know? (Future Directions)

Cluster Legend
- Sociotechnical systems and beyond
- Job characteristics
- Job demands-control
- Role variables
- Job demands-resources

Job demands-control (strain/ health) (Karasek 1979)

Job demand- job resources model → Strain/ burnout (Demerouti et al)

Teams, autonomous work groups, sociotechnical systems theory (Trist & Emery, 1951)

Role theory/ role stressors/ role performance (Kahn et al., 1964)

performance) (Ha... an & Oldham, 1975)

Parker, Morgeson, & Johns (2017) S... f JAP

VOSviewer

Expanded outcomes

Expanded moderators

Expanded mechanisms

Expanded work characteristics

Widely studied

Other disciplines (N = 17,500+)

Number of publications

Psychology & Management (N=5700+)

Impact

- On management thinking
  - Analysis of 178 HBR articles in 2014
    - 24% on work design topics
    - 24% highly relevant to work design

- On practice & policy?

EXAMPLE

- Kuehn (2014) on how, in response to more AIDS patients in Uganda, teams introduced "task shifting" involving pharmacists doing some Drs' tasks, **freeing up Drs' time** for patient care.

CENTRE FOR
TRANSFORMATIVE
WORK DESIGN

THE UNIVERSITY OF
WESTERN
AUSTRALIA

(1) What is work design (and 're'design?)

(2) What do we know about work design?

(3) What don't we know? (Future Directions)

Future Directions

CENTRE FOR
**TRANSFORMATIVE
WORK DESIGN**

THE UNIVERSITY OF
**WESTERN
AUSTRALIA**
SEEK WISDOM

Beyond expanding and refining existing approaches… see Parker et al., 2017; Parker, 2014; Others

(1) Antecedents of work design

(2) Designing work for 'growth'/ adult development

(3) Proactively designing jobs to improve future work

Business School

Centre for Transformative Work Design

Innovative research.
Informed leaders.
Inspired workers.

www.transformativeworkdesign.com

Parker, SK. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more**.** *Annual Review of Psychology, 65, 661-691.*

Despite the evidence…

- People do not have universally well-designed jobs….
  - Growing low-wage/ low-quality jobs in advanced & developing economies (Osterman & Schulman, 2011)
  - Increasing gap between "good jobs" and "bad jobs" (Kalleberg, 2011)
  - Evidence from many large scale surveys (e.g., European Working Conditions Survey)

Bar chart:
- high-paid, good jobs: 14
- well balanced good jobs: 37
- poorly balanced: 29
- poor quality jobs: 20

50% poor jobs!

Stress

Low job performance

Symptom

Root Causes

Poor Work Designs

Why does poor work design continue?

Figure 1. Framework of Work Design Influences

See review by Parker, Van den Broeck, Holman, in press, *Academy of Management Annals*

Raine Study

Approach-oriented temperament (e.g., approaches new situations)

Avoidant/ insecure temperament

Which (if any) baby will end up with enriched work design?

Liu, Parker & others (in prep).

Raine Study

**Approach-oriented temperament at 1year old
(rated by parents)**

Higher self-efficacy at 13 years (self-rated)

Job crafting at 25 years

Enriched job at 25 years

- Alternative explanations
- Moderators?

Liu, Parker & others (in prep).

Why does poor work design continue?

Contextual Influences

Higher-Level External Influences
(e.g., global, national, occupational)

Organizational Influences
(e.g., HR strategies, structure)

Local Context (Work Group) Influences
(e.g., team interdendence)

Individual Influences
(age, personality, etc)

Managers' Motivation, KSAs & Opportunity

Formal Decision-Making Process

Dividing Labor

Work Design

Integrating effort

Informal, Emergent & Social Processes

Employees' Motivation, KSAs & Opportunity

Figure 1. Framework of Work Design Influences

See review by Parker, Van den Broeck, Holman, in press,
Academy of Management Annals

Local work design decisions matter

- – 'Naïve' job designers tend to 'naturally' design Tayloristic jobs, Campion & Stevens (1991)

- – Descriptive only

- – We replicated in pilot work

- Less than 3% (2%) tried to design motivating jobs
- Sometimes 3 levels hierarchy for 4 roles!

Empirical study

- Extended study involving
  - New 'work design behavior & choice' measures

  - Expanded sample
    - Safety Institute of Australia Members (N = 160)
    - Organisational psychologists (N=40)
    - "MOOC" participants (N = 200)
    - Post-graduate students, management/org development (N = 80)
    - Working undergrad. students (N = 220)

Parker, Andrei, van den Broeck under review

Simulation A

..... It is already decided that Mary's job includes the following 4 tasks, which each take one hour per day.

1.   Making photocopies of Court_A documents
2.   Filing Court_A documents in the correct folders
3.   Making photocopies of Court_B documents
4.   Filing Court_B documents in correct folders

For this to be a full-time job, it needs 4 more one-hour tasks. Which FOUR of the following tasks would you allocate to Mary?

Please assume that Mary can readily carry out all of the tasks.

Also note that any tasks not allocated to Mary will be assigned to other members of the team (so no tasks will be neglected).

Making photocopies of Court_C documents

Make suggestions to redesign the filing system to improve it

Filing Court_C documents in correct folders

Retrieve from the folders relevant files for lawyers and arrange delivery

Help with a project to computerise court documents

Making photocopies of Court_D documents

Miscellaneous photocopying and filing

Greet and direct court visitors

Help a colleague in arranging meetings at the court

Make a report on the numbers of cases that got delayed because of mistakes in the archives or files.

Filing Court_D documents in correct folders

Job simplification

Simulation B

Four scenarios all designed to suggest "work" problems
- Warehouse worker
- Overloaded team of consultants
- Stressed managers in company, high turnover
- Hotel cleaners in luxury hotel with financial problems

Karen works in the warehouse for an on-line company. Her job is to fill the on-line orders. After clocking in, Karen logs into the hand-held device she uses. She is informed of an item she is to gather from the warehouse, as well as how long this is expected to take. Karen then moves quickly, sometimes running, to get the item and take it to despatch. She receives feedback as to whether she meets the time allocated or not. Karen repeats this process about fifteen times per day. About 50% of the time, Karen's response is slower than the time that has been allocated for the task.

Rate the effectiveness of each of the following in terms of how to respond to the situation:

Discretely observe Karen's behaviour to see how fast she is moving

Inform Karen that her pay will be reduced if she doesn't improve her times

Send Karen on a training program

Advise Karen to improve her physical fitness

Blame the person strategies

Ask Karen why her times are not being met

Review whether the times allocated for gathering items are reasonable

Other strategies

Design more motivating work so that tasks don't need to be timed

Redesign the jobs so that Karen and her colleagues have more meaningful work

Work design strategies

Work Design Strategies

EXAMPLE 42% of u/grads thought it would be moderately/very effective to "send Karen on a training program" (vs. 16% org. psychs)

Predictors of Work Design Approach/Strategies

General Work Experience
- Managerial role
- Specific role experience

Work Design "willingness"
- Openness to change values
- Conservation values

Work Design "capacity"
Theoretical knowledge
Professional expertise
Own Job Enrichment ('tacit')

?

(A) Job Simplification of Clerical Job

(B) Blame the Person Strategies

(B) Work Design Strategies

Predictors of Work Design Approach/Strategies

General Work Experience
- Overall work experience
- Management experience

ns

Work Design "willingness"
- Openness to change values
  - Conservation values

+

-

Work Design "capacity"
Theoretical knowledge
Professional expertise
Own Job Enrichment ('tacit')

+

+

+

?

(A) Job Simplification of Clerical Job

(B) Blame the Person Strategies

(B) Work Design Strategies

Summary

- Enriched work designs tend to beget enriched work designs
  - Do people unconsciously replicate their own work designs?
  - Is this one powerful path by which poor designs are perpetuated?

- Personal values matter

- Expertise matters - organisational psychologists tend to design the highest quality jobs in these simulations (interestingly, HR expertise is negative)

Next steps

Extensions (e.g., power, age, better sim's, etc)

Actual work design approaches in organisations (case studies of decision-making)

How can we influence job designers to make better choices?

- What types of education, training & development affect job design choices? How sustainable?

Understanding the role of higher-level forces / policy

Why does poor work design continue?

Contextual Influences

Higher-Level External Influences
(e.g., global, national, occupational)

Organizational Influences
(e.g., HR strategies, structure)

Local Context (Work Group) Influences
(e.g., team interdendence)

Individual Influences
(age, personality, etc)

Managers' Motivation, KSAs & Opportunity

Formal Decision-Making Process

Dividing Labor

Work Design

Integrating effort

Informal, Emergent & Social Processes

Employees' Motivation, KSAs & Opportunity

Figure 1. Framework of Work Design Influences

See review by Parker, Van den Broeck, Holman, in press, *Academy of Management Annals*

Future Directions

Beyond expanding and refining existing approaches… see Parker et al., in press; Parker, 2014.

(1) Antecedents of work design
- Enhance impact of work design on practice?

(2) Designing work for 'growth'/ adult development

(3) Proactively designing jobs to improve future work

Parker, SK. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology, 65, 661-691.*

The Bad News

Fluid intelligence eg memory, problem-solving ability, declines with age.

The good news… brain plasticity

a. standard cage

b. enriched cage

c. appearance of nerve cells, mouse cerebrum

d. appearance of nerve cells, mouse cerebrum

Effect of good work design?

a. standard office

b. enriched office

c. appearance of nerve cells, mouse cerebrum

d. appearance of nerve cells, mouse cerebrum

The role of work

Twin 1
No alzheimers
Complex, challenging job

Twin 2
Alzheimers
Simple, routine job

Work design promotes learning

Job Autonomy
Job Complexity
Task Feedback
etc

Active mastery/
learning

Controlling
variances/
cause-effects

Complete action
regulation
sequence

Exposure to
broad
perspectives

Learning
- Mental model development
- Fault prevention
- Integrated understanding

Karasek (1979)/ Taris et al., 2003
Wall & Jackson, 1995
Leach et al., 2003
Frese & Zapf, 1994
Parker & Axtell, 2001

Work design for Cognitive Development

TIME

Work design

Learning

?

Unanswered Questions
- Can cognitive functioning be enhanced and decline prevented? (Rigorous longitudinal studies needed)
- Which work characteristics (or combinations) matter most?
- What are the mechanisms?

Cognitive Development
Changes in the structure and organization of knowledge

Kohn & Schooler/
Schooler et al., (2004)
Karp et al., 2004
Andel et al., 2005

Example Study

- Can work design change your 'locus of control'?
- Using HILDA 2003, 2004, and 2007 (when LOC assessed); N = 3045

Job Autonomy T1	Job Autonomy T2	Job Autonomy T3
Locus of control T1	Locus of control T2	Locus of control T3

(PS Many controls, including auto-regressive effects, and findings same using latent growth curve or latent difference score)

More enriched jobs change your "personality"

Wu, C., Griffin, M. A., & Parker, S. K. (2015). Developing agency through good work: Longitudinal effects of job autonomy and skill utilization on locus of control. *Journal of Vocational Behaviour, 89, 102-108*

Summary

- Work design might be a relatively untapped source of growth and development across the lifespan; even preventing cognitive decline

- Instead of focusing on developing people for work (via education), focus on **work for development**

- Need to go beyond analysing secondary data sets…

"Working Across the Life Span"
(WALS) 20 year study

Future Directions

Beyond expanding and refining existing approaches… see Parker et al., in press; Parker, 2014.

(1) Antecedents of work design
  - Enhance impact of work design on practice?

(2) Designing work for 'growth'/ adult development
  – Cognitive development
  – Identity/ personality development
  – Moral development

 (3) Proactively designing jobs to improve future work

Parker, SK. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology, 65, 661-691.*

TIME

Failed State: The Sources of Pakistan's Chaos

The Unseen Struggle of Autistic Adults

Summer Arts Preview: From Harry Potter To Thomas Pynchon

The Future Of Work

Throw away the briefcase: you're not going to the office. You can kiss your benefits goodbye too. And your new boss won't look much like your old one. There's no longer a ladder, and you may never get to retire, but there's a world of opportunity if you figure out a new path. Ten lessons for succeeding in the new American workplace.

THE YEAR WITHOUT PANTS

WORDPRESS.COM and the future of work

SCOTT BERKUN

JACOB MORGAN

The Future of Work

Attract New Talent, Build Better Leaders and Create a Competitive Organization

WILEY

LYNDA GRATTON

THE SH/FT

The future of work is already here

Have you made the crucial shifts for success?

The Future of Work

How the New Order of Business Will Shape Your Organization, Your Management Style, and Your Life

...as W. Malone

...D BUSINESS REVIEW PRESS

MACHINE AGE

WORK, PROGRESS, AND PROS... IN A TIME OF BRILLIANT TECHNOLOGIES

ERIK BRYNJOLFSSON
ANDREW McAFEE

The future of work
A journey to 2022

10,000 people in China, India, Germany, the UK and the US give their views on the future of work and what it means for them

66% see the future of work as a world full of possibility and believe they will be successful

53% think technological breakthroughs will transform the way people work over the next 5 – 10 years

BusinessWeek

SPECIAL DOUBLE ISSUE

HOW WE WILL MASTER TECHNOLOGY, MANAGE COMPANIES, AND BUILD CAREERS IN THE ERA OF THE GLOBAL, 24-7 WORKFORCE

THE FUTURE OF WORK

MIT Technology Review
BUSINESS REPORT

The Future of Work

THE NEW BASICS
EDUCATION AND THE FUTURE OF WORK IN THE TELEMATIC AGE

DAVID THORNBURG

RICHARD SUSSKIND   DANIEL SUSSKIND

THE FUTURE OF THE PROFESSIONS

HOW TECHNOLOGY WILL TRANSFORM THE WORK OF HUMAN EXPERTS

www.pwc.com/humancapital

THE FUTURE OF WORK

What jobs will there be? What will life be like? What needs to be done?

Charles Handy

The Future of Work and Health

The Institute for Alternative Futures

Clement Bezold
Rick J. Carlson
Jonathan C. Peck

e.g., Technology & health

Possible illness?

- Genomics
- Wearable devices
- Big data

Book appointment Dr

- WebMD
- Online communities

See the Dr

- Nurse + diagnostic tools/apps
- Telehealth

Treatment

- Robotic medical dispensers
- Nanobots
- Crowdsourcing
- 3d printing of body parts

WebMD
Better information. Better health.
- Symptom Checker
- Conditions
- Drugs & Treatments
- First Aid Information
- Local Health Listings
- Saved

Major Changes For Work

Example

Disaggregation of Professional Work

RICHARD SUSSKIND   DANIEL SUSSKIND

THE FUTURE OF THE PROFESSIONS

HOW TECHNOLOGY WILL TRANSFORM THE WORK OF HUMAN EXPERTS

- Computers & machines
- On-line communities & crowdsourcing
- Para-professionals (e.g., nurses)
- Expert teams
- Professional (different tasks)

Work Design Decisions

How do we choose who does which tasks?

And how do we design work so that computers/ machines support & empower human workers?

"Glass cage" of Automation

Example: Aviation

"We're forgetting how to fly"

Overuse of automation: *"leads to a degradation of the pilot's ability to quickly recover the aircraft from an undesired state"*

Many other examples:

AMAR BHIDÉ

A CALL FOR **JUDGMENT**

SENSIBLE FINANCE FOR A DYNAMIC ECONOMY

"robotization of finance"

THE GLASS CAGE

AUTOMATION AND US

NICHOLAS CARR

New York Times best-selling author of THE SHALLOWS

Potential / Ongoing Projects

Conclusion

In the future, we must actively design meaningful, "smart" jobs in the future in which technology empowers rather than enslaves.

The best way to predict the future is to create it.

Summary

THE UNIVERSITY OF WESTERN AUSTRALIA

SEEK WISDOM

1) What is work design & work redesign?

(2) What do we know about work design?

(3) What don't we know? (Future directions)

Symptom

Root Causes

Figure 1. Framework of Work Design Influences

"We're forgetting how to fly"

www.transformativeworkdesign.com

PS brochures available for anyone interested!

Thrive@Work in WA Initiative

To conclude…

"Is there no inspiration in labor? Must the man who works go on forever in a deadly routine, fall into the habit of mechanical nothingness, and reap the reward of only so much drudgery and so much pay?

I think not. The times demand an industrial prophet who will lift industry off from its rusted, medieval hinges and put pure human interest, and simple, free-spirited life into modern workmanship"

(McChesney, 1917, p. 176-7, First Edition of the *Journal of Applied Psychology*).

Thanks for listening!

www.transformativeworkdesign.com