

GLOBAL ERGONOMICS MONTH WEBINAR SERIES

# Supporting remote office work, pivoting back to the workplace during a pandemic, and the future of virtual workspaces

Work From Home and Beyond: A Holistic Approach to Addressing  
Technology, Ergonomic, and Organizational Factors

Michelle Robertson

October 15, 2021

OERC, NU, COEH-UCB, CPH-NEW, UCONN

# Agenda

- Telework; Virtual Office; Hybrid
- Challenges
- Work Systems Perspective
  - Job; Individual; Group; Organization
- Virtual Office intervention study
- Practical Implications and Programmatic Recommendations



# Background: Telework/Remote Work



- Telework: Not a new concept---working from home full-time or partial; alternative work arrangements
- Research identifies several challenges and benefits of telework
- Insufficient research: positive or negative effects for employees?
  - well-being, safety and performance effects?
- How to manage telework—distance managing?
- How best to address the Safety/Health and Ergonomic factors?
- Use these findings to adopt and create new, flexible ways of working at home
- Provide managers guidance on the Human Factors/Ergonomics & Occupational Safety & Health Issues to build sustainable programs



# Successful telework program elements (1990-2020)

- ▶ Plan & evaluate program
- ▶ Identify appropriate population
  - ▶ Work; Preferences; Skills
- ▶ Define level of formalized policies
- ▶ Secure commitment from senior managers
- ▶ Address legal issues
- ▶ Consider Human Resources:
  - ▶ Employee selection & career development;
  - ▶ Training, communication and role expectations
  - ▶ Teams; Norms & shared experiences
  - ▶ Address inclusion/belonging/fairness
- ▶ Maintain infrastructure & support of Information Technology
- ▶ ***Telework isn't for everyone—until COVID-19***



# Challenges



Lack of social interaction

Changes in job autonomy

Distance Management

Absence of mentoring

Collaborative/  
teamwork

Extended work hours

Increased Workload

Work Environment

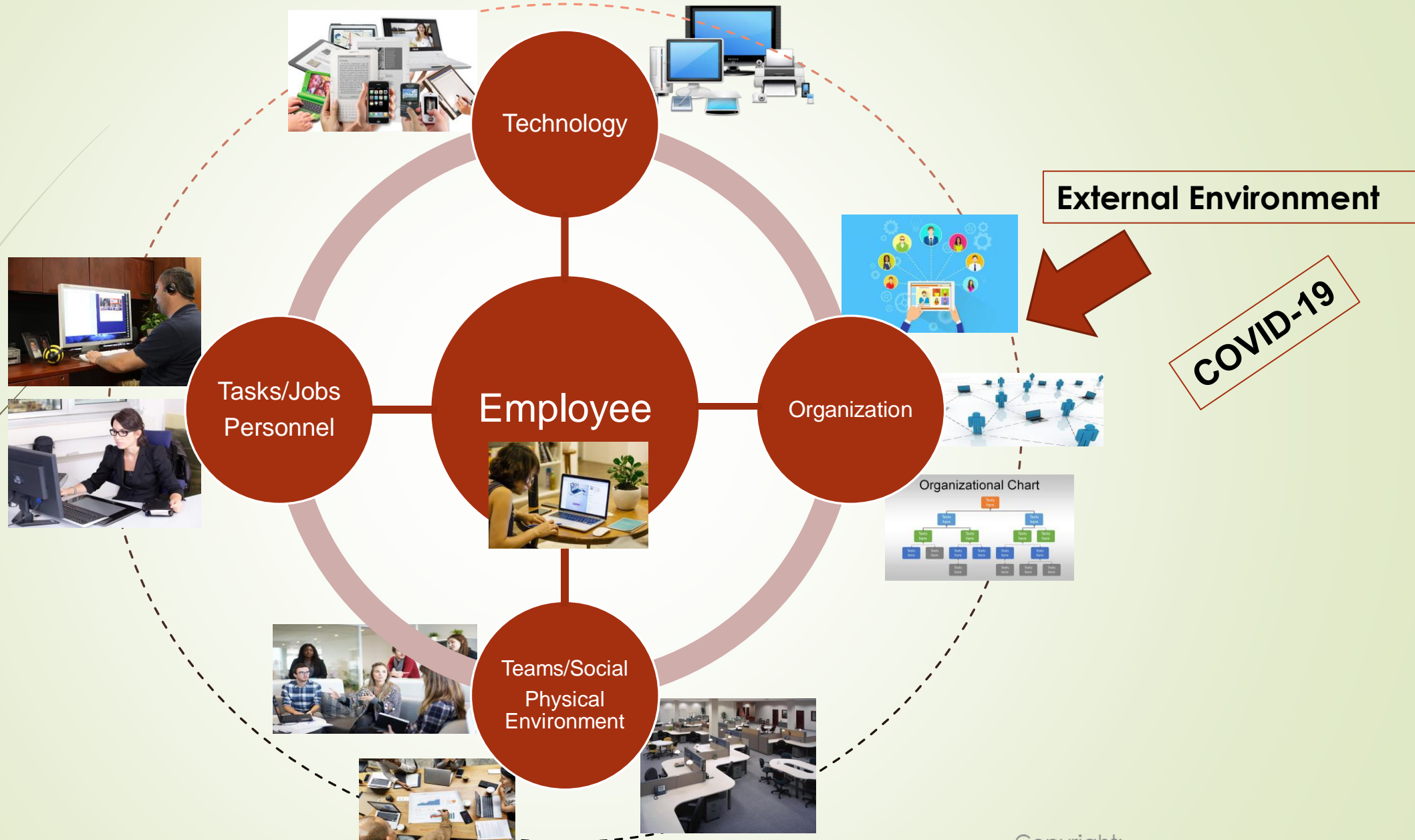
Work/Life Balance

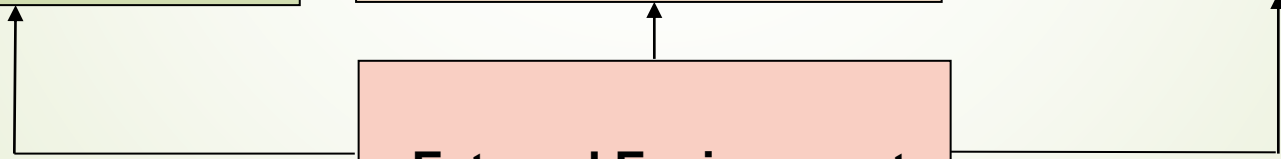
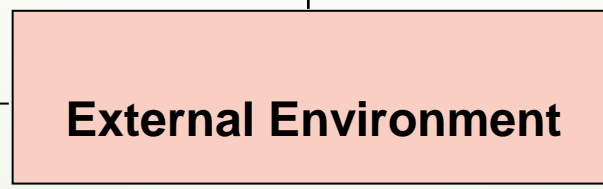
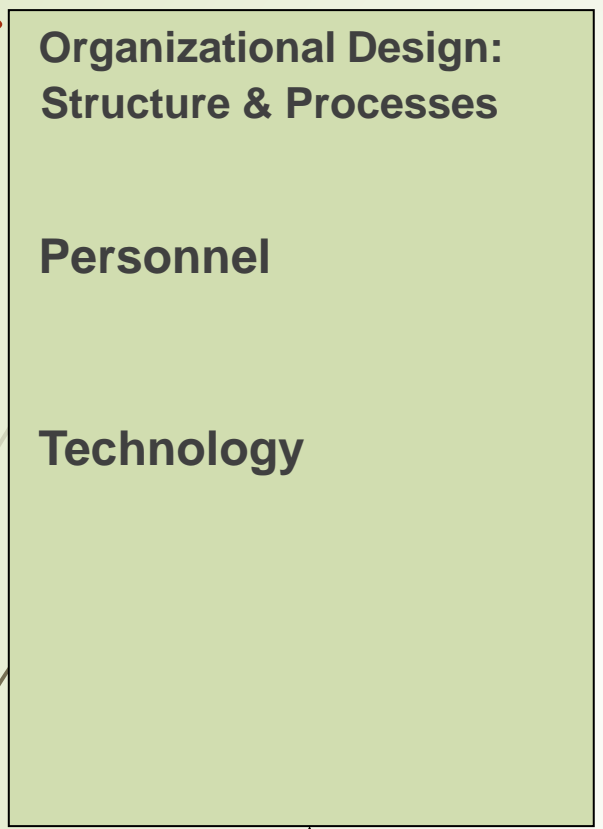
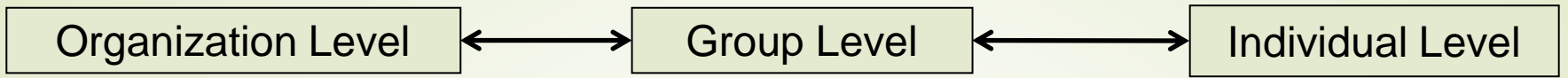
Healthy Work/Computing

Technologies  
Digital age

Internet Security

# A Holistic Perspective: "The Big Picture"



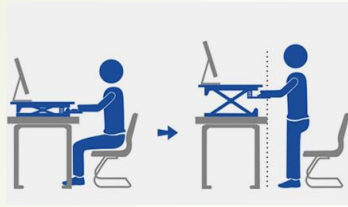




Organization Level

Group Level

Individual Level



Individual Differences

### Physical Environment

- ◆ Workstation/Workspace design

### Technology

- ◆ Software Design
- ◆ Usability

### Personnel

- ◆ Training & Performance Aids

### Psychosocial & Work Organizational Factors

- ◆ Balanced work/personal
- ◆ Job Demands (24/7)
- ◆ Telepresence
- ◆ Decision making (workstyle)
- ◆ Job control
- ◆ Work/Life Balance
- ◆ Career development
- ◆ Social isolation

### Effectiveness Outcomes

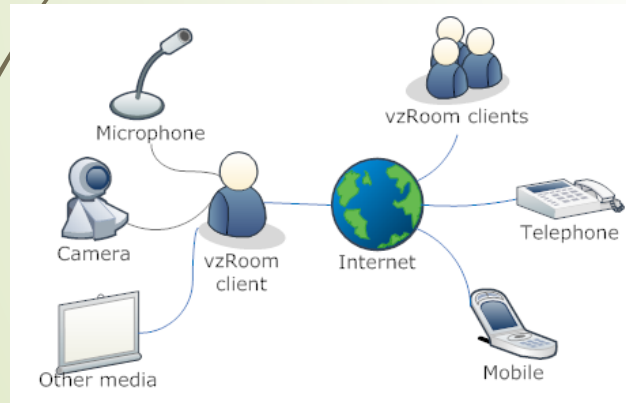
- ◆ Performance
- ◆ Workplace comfort
- ◆ Workplace design satisfaction
- ◆ Job satisfaction
- ◆ Quality of work-life
- ◆ Wellness and Health



Organization Level

Group Level

Individual Level



### Psychosocial/Work Organizational Factors & Professionalism

- ◆ Teamwork synergy
- ◆ Job design for teams
- ◆ Co-worker support & interaction
- ◆ Managerial support (facilitator/communicator)
- ◆ Work/Performance Contract
- ◆ Cultural/social norms

### Technology

- ◆ Groupware & social media
- ◆ Video/tele-conferencing

### Effectiveness Outcomes

- ◆ Group collaboration; effectiveness
- ◆ Teamwork performance

Organization Level

Group Level

Individual Level

### Organizational Design: Structure & Processes

- ◆ Operating Policies/Practices
- ◆ Human resources
- ◆ Senior management support
- ◆ Financial resources

### Personnel & Training

- ◆ Information systems training
- ◆ Job performance training
- ◆ Safety/ergonomic training

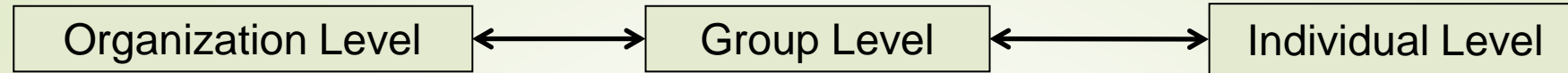
### Technology

- ◆ Information systems
- ◆ Technical on-line support

### Effectiveness Outcomes

- ◆ Customer satisfaction
- ◆ Employee satisfaction
- ◆ Turnover, absenteeism
- ◆ Balanced score card
- ◆ Economic Value Added
- ◆ Operational Excellence





### Organizational Design: Structure & Processes

- ◆ Operating Policies/Practices
- ◆ Human resources
- ◆ Senior management support
- ◆ Financial resources

### Personnel & Training

- ◆ Information systems training
- ◆ Job performance training
- ◆ Safety/ergonomic training

### Technology

- ◆ Information systems
- ◆ Technical on-line support

### Effectiveness Outcomes

- ◆ Customer satisfaction
- ◆ Employee satisfaction
- ◆ Turnover, absenteeism
- ◆ Balanced score card
- ◆ Economic Value Added
- ◆ Operational Excellence

### Psychosocial/Work Organizational Factors & Professionalism

- ◆ Teamwork synergy
- ◆ Job design for teams
- ◆ Co-worker support & interaction
- ◆ Managerial support (facilitator/communicator)
- ◆ Work/Performance Contract
- ◆ Cultural/social norms

### Technology

- ◆ Groupware & social media
- ◆ Video/tele-conferencing

### Effectiveness Outcomes

- ◆ Group collaboration; effectiveness
- ◆ Teamwork performance

### External Environment

- Global economy
- World politics
- International Culture & values
- Market/customer demands

### Physical Environment

- ◆ Workstation/Workspace design

### Technological

- ◆ Software Design
- ◆ Usability

### Personnel

- ◆ Training & Performance Aids

### Psychosocial & Work Organizational Factors

- ◆ Balanced work/personal
- ◆ Job Demands (24/7)
- ◆ Telepresence
- ◆ Decision making (workstyle)
- ◆ Job control
- ◆ Work/Life Balance
- ◆ Career development
- ◆ Social isolation

### Effectiveness Outcomes

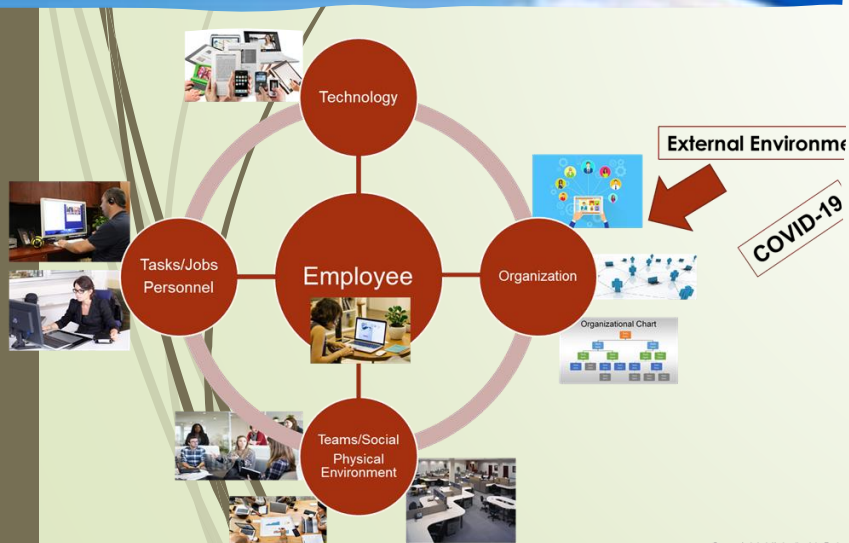
- ◆ Performance
- ◆ Workplace comfort
- ◆ Workplace design satisfaction
- ◆ Job satisfaction
- ◆ Quality of work-life
- ◆ Wellness and Health





# Research Gap

- Few studies have examined the long-term effects of telework and virtual offices compared to a control condition
- Meta-analysis of 23 epidemiological studies (Oakman, et al., 2020)
- Need for interdisciplinary, systematic research aimed at the safety and health of teleworkers





# Purpose: Virtual Office (VO) Intervention

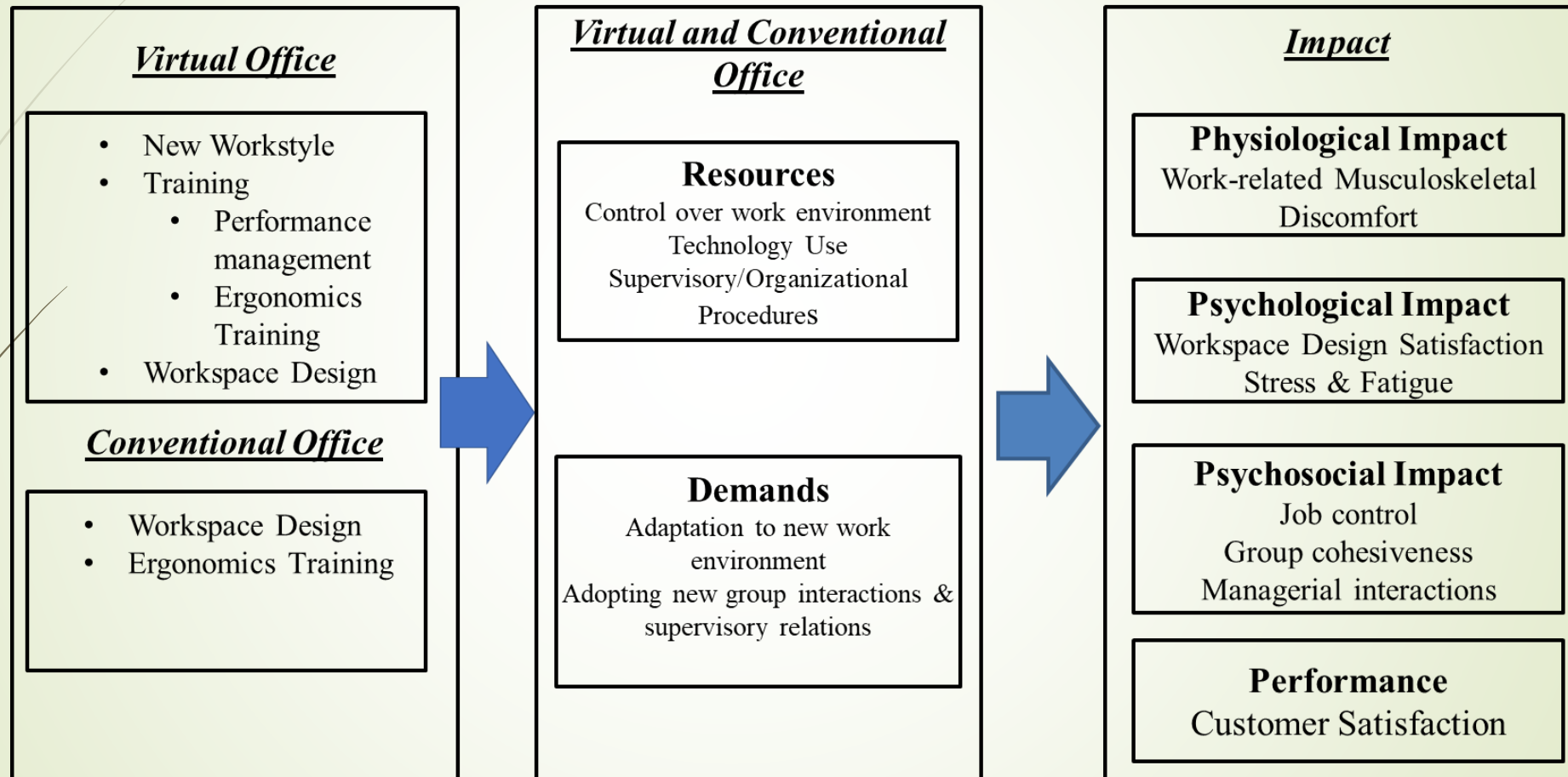


- ▶ Examine the effects of a Virtual Office (VO) program on office workers':
  - ▶ Psychosocial perceptions,
  - ▶ Mental and physical well-being,
  - ▶ Workplace satisfaction
  - ▶ Performance

Compared to a control group working in a Conventional Office (CO) setting

- ▶ Use these study findings to provide HFE guidance to adopt and create new ways of working:
  - ▶ Home
  - ▶ Hybrid flexible model
  - ▶ Abrupt shift in the nature of work systems across the globe due to COVID-19

# VO Intervention: Conceptual Model





# Research Hypotheses:

Compared to the CO group, VO group will report:

- **Enhanced job control** over psychosocial and physical environment of work and **greater group participation/interaction**
- **A more positive virtual office experience** in terms of the quality of supervision, work-life boundary, and workflow (i.e., less work interruption)
- **Greater workspace satisfaction**
- **Less work-related musculoskeletal discomforts**
- **Less mental and physical stress** and **commuting fatigue**
- **Similar level of customer satisfaction**, performance indicator

# Study Design



- Prospective, repeated-measure field intervention study
- Pre and Post intervention survey measures
  - Assess effects of a Virtual Office (VO) pilot intervention
- Focus groups: Post-intervention (managers/employees)
- Two groups:
  - Virtual office workers (n=137)
  - Conventional office workers (n=85)
- Both groups include employees and managers
- Study period over 12 months



# Virtual Office Program



- VO steering committee
  - Sub-Teams: IT; Training; Communications; Measures; Policies
- Employee and Manager training
  - Communication, performance, setting expectations
  - Safety and ergonomic training (corporate resource)
  - Logistics
  - Planned & discussed VO performance management contract
- Office equipment
  - Laptop, printer, cell phone and file cabinet

# Study Measures: Mixed Methods

- **WorkStyle Environment & Health Survey:** pre and post-intervention
- Focus groups
- Business Results (confiendital)

Employee Satisfaction	Customer Satisfaction	Business Results
<b>Survey topics:</b>	<b>Survey topics:</b>	<b>Survey topics:</b>
<ul style="list-style-type: none"> <li>• Opinions on Overall Impacts of Virtual Office</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Managers' Opinion on Virtual Office</li> </ul>
<ul style="list-style-type: none"> <li>• Perceptions on Virtual Office: Psychosocial</li> </ul>		<ul style="list-style-type: none"> <li>• Workgroup Effectiveness from the Managers' Perspective</li> </ul>
<ul style="list-style-type: none"> <li>• Impact on the Work</li> </ul>		<ul style="list-style-type: none"> <li>• Productivity</li> </ul>
<ul style="list-style-type: none"> <li>• Communications</li> </ul>		<ul style="list-style-type: none"> <li>• Impact on the Work from the Managers' Perspective</li> </ul>
<ul style="list-style-type: none"> <li>• Characteristics of Work Management</li> </ul>		<b>Additional information:</b>
<ul style="list-style-type: none"> <li>• Commuting Issues</li> </ul>		<ul style="list-style-type: none"> <li>• Public Transportation Subsidy Program (PTSP) Impact</li> </ul>
<ul style="list-style-type: none"> <li>• Physical Comfort and Stress: WMSDs</li> </ul>		<ul style="list-style-type: none"> <li>• Use of Sick and Annual Leave</li> </ul>
<ul style="list-style-type: none"> <li>• Physical Work Environment (Workspace)</li> </ul>		<ul style="list-style-type: none"> <li>• Pilot Implementation Costs</li> </ul>
<ul style="list-style-type: none"> <li>• Tools and Technology</li> </ul>		<ul style="list-style-type: none"> <li>• Rent and Space Savings</li> </ul>
		<ul style="list-style-type: none"> <li>• Employee Retirement Rate</li> </ul>

# Summary



- VO: Positive impact on employees' well-being and performance
- VO intervention:
  - Enhanced job control, participation and decision making, and interaction and cohesiveness
  - Improved supervisory quality
  - Increased workspace design satisfaction
  - Fewer WSMD symptoms in upper body only
  - Reduced physical and mental stress, and physical commuting fatigue
    - Interesting: Rest breaks, interruptions, physical commuting fatigue; No difference CO vs. VO. VO reduction in mental fatigue
  - Greater customer satisfaction (self-reported performance)



# Strengths and Limitations

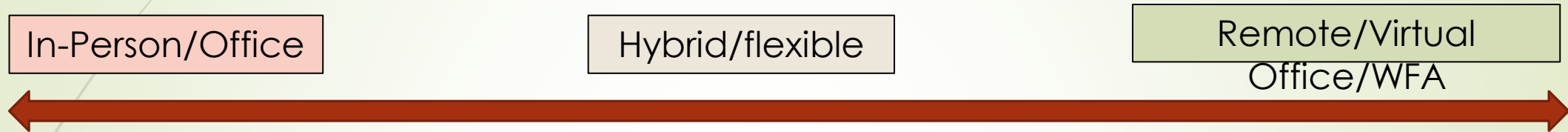
- Limitations:
  - Non-randomized
  - Prior expectations of teleworking
  - Subjective ratings
- Strengths:
  - Work Systems approach to design VO intervention
    - Performance management contract; training
  - Field long-term intervention study
  - Prospective, repeated measures, study with control group
  - High participation rate
  - Sr. management and union support



# Research to Reality: Learnings---Guidelines



- ▶ Use a systems approach to plan, implement and evaluate sustainable VO/telework/hybrid programs –Working From Anywhere



- ▶ Importance of senior management commitment & communication
  - ▶ Goals and policies of VO program: Flexible Work Arrangement Policy
    - ▶ Level of Organizational readiness
    - ▶ Support & Resources; Technologies; Equipment; Purchasing; Compensation (shifting of costs)
    - ▶ Involve key stakeholders: Management; Union; IT; Measures (KPIs)
    - ▶ Evaluate & adapt program for sustainability, continuous learning; External environment impacts
  - ▶ Evaluate jobs, Work Based Activity, and align with business strategies:
    - ▶ Timing and geographic location (satellite hubs)
    - ▶ Sharing Information
    - ▶ Degree of collaboration & coworker support
    - ▶ Informal learning (on-boarding and career-extending benefits)
    - ▶ Public Service relationships & client interactions

# Research to Reality: Learnings---Guidelines (cont.)



Design training programs & provide supplemental resources:

- ▶ Managerial training on how best to manage VO and hybrid workers:
  - ▶ Performance management contract
  - ▶ Communication strategies; time, role expectations; method, tasks and career development; job autonomy/control & decision making
  - ▶ Create a sense of connection: belonging & engaged
  - ▶ Facilitate team and co-worker interactions; team software & meetings
    - ▶ Teams/manager/employees determine “A day in the office” or “satellite”
  - ▶ Formally develop and support boundaries concerning work/life issues
    - ▶ Ability to “disengage”: Prevent burnout
- ▶ Use of technologies;
  - ▶ equipment set-up & technical IT support
- ▶ Arranging one’s work environment: Ergonomic/safety and health policies
  - ▶ Workstation set-up; “House/Office Rules”
  - ▶ Ergonomic assessments; surveillance; Resources
- ▶ Create network for VO and CO experiences: Culture & Norms

# New Way of Working Training: Customize for Corporate Culture

- Tips for comfortable working postures
- Monitor your working habits
  - Take Mental and Physical breaks
- Schedule your virtual meetings for natural breaks and work tasks variation
- Be Aware of your time spent on task
- Create Work Boundaries
  - Separate Workspace
  - Signals of quiet time
- Turn it off; separate home and work life
- Look for new opportunities to try something different during you personal time

Copyright:  
Michelle M. Robertson, PhD, CPE

### Get fit for mobile working

Take your office anywhere in comfort

Recent studies show 63% of at-home mobile and flexible working brings competitive advantages in business, whilst 54% of managers believe flexible workers have a better quality of life. The freedom to work from any location is good for both the bank balance AND the work-life balance. But if you don't ensure you are using mobile working tools such as laptops, mobile and smartphones with care and attention, you might just be doing up the potential for future discomfort.

This 'at a glance' guide from BT Business the does and don'ts of mobile working will ensure you stay comfortable whilst enjoying the benefits of working on the move.

**On the train**  
**Under pressure**

- ✗ Don't sit too close to the mobile screen because you're leaning on the edge of the table for long periods, which isn't healthy for you.
- ✓ Position laptop so you can reach it comfortably without leaning forward.
- ✓ Take regular breaks every 20-40 minutes.

**At the airport**  
**Pain in the neck?**

- ✗ Neck has to be twisted to look at the screen - could lead to discomfort.
- ✓ Sit upright away from this, so the screen is likely to be too low for comfortable viewing.
- ✓ Place something (e.g. the magazine) in between your laptop and screen to prevent from the heat of the laptop and bring it to a suitable angle for typing, which should be straight when typing.

**In a coffee shop**  
**Watch your back**

- ✗ Screen may be in uncomfortable view position.
- ✓ Be careful about sitting area on the edge of the table, at high pressure on the forearm or wrist discomfort.
- ✓ Consider using a stool, roll-up towel or bean bag chair to support the small of your back.
- ✓ Don't have your bag or equipment nearby - make equipment on a table for itself.

**Borrowing a desk in another office**  
**Sitting pretty**

- ✓ Good posture, with upper arms by body and forearm horizontal, without resting on the desk, and back supported.
- ✓ Connect a separate keyboard and mouse to the laptop so you can position them independently of the laptop.
- ✓ If you use the laptop screen, place it on something (e.g. a stand) so it's a comfortable viewing height and distance.

BT Business [www.bt.com](http://www.bt.com)



### take time to stretch

**head & neck**  
Tuck chin in, circle head in one direction very slowly. Repeat in other direction.

**shoulders**  
Hold one arm straight up above shoulder. Push up towards ceiling. Repeat with other arm.

**hands**  
1 Drop your hands by your sides, shake vigorously.  
2 Put your palms together in front of your chest. With the tips of your fingers pointing upwards, push fingers left and right alternately.

**hips**  
1 Open your eyes wide, raise eyebrows, then close eyes as tightly as possible.  
2 Look straight ahead, roll eyes from left to right, then up and down.

**body**  
1 From a seated position, reach toward your toes and hold for 5 to 10 seconds. Slowly return to an upright position.  
2 From a seated position, hold your leg just below the knee, and hug it to your chest. Hold for 5 to 10 seconds. Switch legs and repeat.

**lower back**  
Place hands on hips, slowly arch back.

References:  
[www.bencable.edu.au](http://www.bencable.edu.au)  
[www.citilife.com.au/bt.com](http://www.citilife.com.au/bt.com)  
© Liberty Mutual Research Center for Safety and Health

### Loss Prevention Worksheet

Liberty Mutual

#### Telecommuter Safety and Health Survey

Instructions to employee:

The survey below is intended to identify opportunities for improving the safety and health of your residential office work environment. We recognize the importance of comfort and productivity and request your feedback on the ergonomics of your computer workstation. Please take a few minutes to complete the assessment including your computer set-up (if any). No visit to your home will result from this assessment. The information you provide will only be used to improve the safety and health of your residential office. A "No" response to any question below should be discussed with your manager or supervisor to determine an agreeable solution.

Name: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/State/Zip Code: \_\_\_\_\_  
 Business Telephone: \_\_\_\_\_

### Ergonomic Tips to Maximize Your Comfort When Computing

Ergo-Guide from Liberty Mutual Insurance

Upright Sitting   Reclined Sitting   Declined Sitting   Standing

**1. Chair and Posture**

- Use the backrest of the chair to provide full support to your lower back
- Make sure your chair allows clearance behind your knees when seated against the backrest

Maintain proper body posture by:

- Sitting with your hips and knees at a 90 degree or greater angle
- Keep your feet flat on the floor or on a footrest
- Keep your arms relaxed at your sides, ideally with elbows at 70 - 135 degrees
- Change posture frequently; common postures include upright sitting, reclined sitting, declined sitting and standing

**2. Monitor**

- Place the monitor directly in front of you — about an arm's length away
- Position the top of the monitor screen at, or below, eye level

**3. Keyboard and Input Devices**

- Adjust the keyboard or chair height to keep forearms, wrists and hands in a straight line
- Place mouse and other input devices near to and at the same height as your keyboard
- Keep your elbows close to your body

**4. Work Area and Lighting**

- Allow ample clearance to move your knees and legs under the keyboard and desk
- Avoid contact stress with the edge of the desk and keyboard

To reduce glare and shadows on your work surface:

- Adjust window shades or decrease overhead lighting
- Adjust the monitor screen or add an anti-glare filter
- Add a task light to properly illuminate paper references

**5. Accessories**

- Get a head-set if you regularly talk on the phone for extended periods of time. Use a lowered voice

Use an adjustable document holder to:

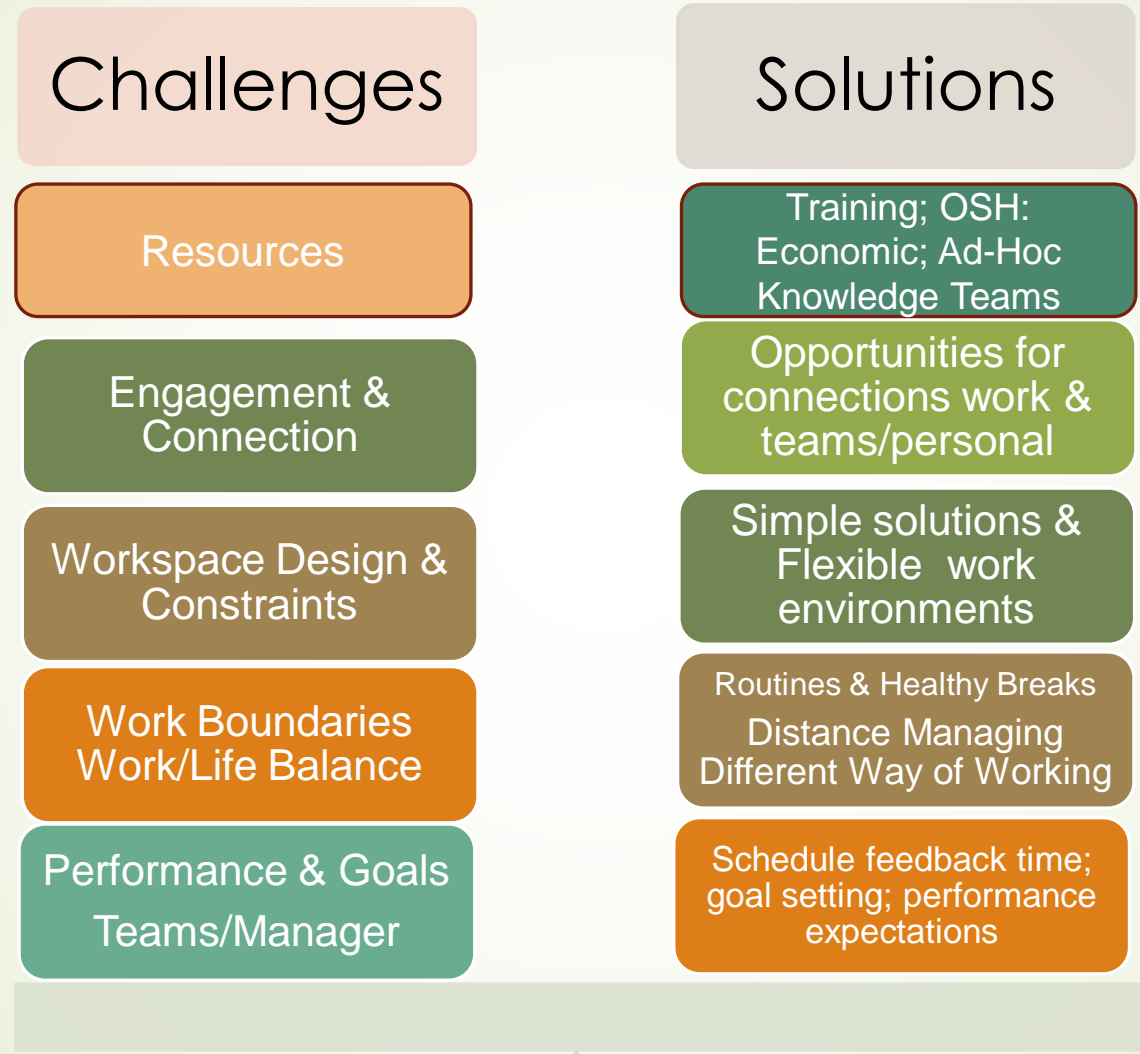
- Place reference materials as close to the computer screen as possible
- Keep materials at the same height and distance as your computer screen
- Use your ergonomic accessories to support body posture (e.g. lumbar support, arm rests, monitor blocks, external keyboard)

**6. Healthy Computing Habits**

- Use a softer touch when keying; relax your grip on the mouse
- Avoid working too long in one position
- Change your body posture frequently
- Take frequent breaks. Stretch periodically
- Give your eyes a visual break

Robertson, M. M., & Maynard, W. (2016). Managing the safety and performance of home based teleworkers: A macroergonomics perspective. In A. Hedge (Ed.), Ergonomics Design for Healthy and Productive Workplaces

# Balancing: Creating a Sense of Control





# Helpful Resources

- Robertson, M. M., & Maynard, W. (2016). Managing the safety and performance of home based teleworkers: A macroergonomics perspective. In A. Hedge (Ed.), Ergonomics Design for Healthy and Productive Workplaces
- [www.hfes.org](http://www.hfes.org); [info@hfes.org](mailto:info@hfes.org)
- Robertson, M.M., & Mosier, K. (2020) Work from Home: Human Factors/Ergonomics Considerations for Teleworking, International Labour Organisation; World Day Safety at Work. [https://www.ilo.org/global/topics/safety-and-health-at-work/events-training/events-meetings/world-day-safety-health-at-work/WCMS\\_742138/lang-en/index.htm](https://www.ilo.org/global/topics/safety-and-health-at-work/events-training/events-meetings/world-day-safety-health-at-work/WCMS_742138/lang-en/index.htm)

Ipsen, Christine, et al., EXPERIENCES OF WORKING FROM HOME IN TIMES OF COVID-19 International survey conducted the first months of the national lockdowns <https://www.researchgate.net/publication/342691416>

Stop the pandemic

SAFETY AND HEALTH AT WORK CAN SAVE LIVES



**Ergonomic Tips to Maximize Your Comfort When Computing**  
Ergo-Guide from Liberty Mutual Insurance

- 1. Chair and Posture**
  - Use the back rest of the chair to provide full support to your lower back.
  - Make sure your chair allows clearance behind your knees when seated against the backrest.
  - Maintain proper body posture by:
    - Sitting with your hips and knees at a 90-degree or greater angle.
    - Keeping your feet flat on the floor or on a footrest.
    - Keeping your arms relaxed at your sides, ideally with elbows at 70-100 degrees.
    - Change posture frequently, common postures include upright sitting, racked sitting, decided sitting and standing.
- 2. Monitor**
  - Place the monitor directly in front of you — about an arm's length away.
  - Position the top of the monitor screen at, or below, eye level.
- 3. Keyboard and Input Devices**
  - Adjust the keyboard or chair height to keep forearms, wrists and hands in a straight line.
  - Place mouse and other input devices near to and at the same height as your keyboard.
  - Keep your elbows close to your body.
- 4. Work Area and Lighting**
  - Allow ample clearance to move your torso and legs under the keyboard and desk.
  - Avoid contact with the edge of the desk and keyboard.
  - To reduce glare and shadows on your work surface:
    - Adjust window shades or decrease overhead lighting.
    - Adjust the monitor screen or add an anti-glare filter.
    - Add a task light to properly illuminate paper references.
- 5. Accessories**
  - Get a headset if you regularly talk on the phone for extended periods of time. Use a headset with:
    - Microphone
    - Use an adjustable document holder to:
      - Place reference materials as close to the computer screen as possible.
      - Keep materials at the same height and distance as your computer screen.
      - Use your ergonomic accessories to support body posture (e.g. lumbar support, arm rests, monitor tilt, external keyboard).
- 6. Healthy Computing Habits**
  - Use a softer touch when typing, relax your grip on the mouse.
  - Avoid working too long in one position.
  - Change your body position frequently.
  - Take frequent breaks. Stretch periodically.
  - Give your eyes a visual break.

**HFES** Human Factors and Ergonomics Society

As so many of us shift from the office of work to the home office, we are faced with a new environment that is not set up for all day work (e.g. more than a couple of hours). At work, we often have a desk made for computer work, flat screen monitors, and a decent chair. But at home, we don't have a dedicated work desk or ergonomic chair, and are now working on laptops. To help you optimize posture and comfort at home in the new "normal", we have developed a top ten list of human factors/ergonomics concerns and related ergonomic fixes.

- 1) Foot fits chair including no lumbar support, non adjustable, and no arm rests**  
Fix: Use a foot rest that allows between back and chair back, make sure you stand and/or walk around every 30 minutes.
- 2) Hard edge of table or counter where keyboard sits**  
Fix: Use a soft fabric cloth or paper mat under an edge, position chair close to table edge so that arms can rest flat on table surface.
- 3) Non-adjustable or seated only workstation**  
Fix: Use objects around house to create a standing workstation like ironing board, boxes or laundry basket on top of table/kitchen counter, make sure height of the top of the computer screen is slightly at or below eye level and between 20-40 inches away from you (e.g. eyes to screen about an arm's length).
- 4) Glare from overhead lights or windows**  
Fix: Position monitor away from window or at a right angle to window with glare to the back of the monitor, position monitor slightly behind the overhead light.
- 5) Laptop on the lap results in head to be flexed forward**  
Fix: Place a pillow or lap desk/tray under the laptop, use a sturdy hard surface between the pillow and laptop to prevent monitor from buckling and the lumbar cooling seat is blocked by your solution.
- 6) Long periods of inactivity, fixation and static postures causes discomfort and eye strain**  
Fix: Move approximately every 30 minutes, varying seating posture, stand and walk outside if available. Give eyes a break, focus on something 20 feet away for 20 sec.
- 7) Extended use of mouse will result in wrist and shoulder problems, especially if arm is extended away from body**  
Fix: Use mouse in a position where arm is supported and not extended, take routine breaks every 30 min. If long duration of mouse activity is required, use external hand.
- 8) Use of two monitors may result in twisted posture of neck and/or back**  
Fix: Place monitor that is being used most directly in front of you with secondary monitor to the side (e.g. split between front and directly in front).
- 9) Small laptop keyboards and touch pads will result in poor wrist postures**  
Fix: Purchase an ergonomic keyboard and mouse for the laptop and use the monitor on the laptop at a position viewing height.
- 10) Disruptions to managing a work/life balance**  
Fix: Create boundaries for work and personal time, maintain a routine of work and non-work related activities, develop a time management schedule and share.
- 11) Loss of connection and social isolation**  
Fix: Create a sense of work and social connectivity by connecting with coworkers for frequent chats and sharing personal stories about working at home, connect daily with the community.

Contributors: Kenneth Clark, Mark Stanton, Jack Conover, Michelle Robertson, Tony Anshu  
Copyright: © 2020 Human Factors and Ergonomics Society