Good work design and applying it to psychosocial risks

## by Professor Sharon Parker, University of Western Australia's Business School

§ (Music Playing) §

**Jennifer Taylor:**

Good morning everybody. I'm Jennifer Taylor, the Chief Executive of Comcare. Thank you all for being here today for those that are with us in person and also for those that are joining us online. And I'd like to thank Michelle Baxter, the Chief Executive of Safe Work Australia for inviting me to launch this seminar.

Firstly I'd like to acknowledge the traditional custodians of the land on which we meet today, the Ngunnawal people and pay my respects to elders past and present. I acknowledge and respect the continuing culture and the contribution that they make to life in this city and in this region.

This presentation is part of a suite of virtual seminars being held throughout safety month to support the important goals of the Australian Work Health and Safety Strategy and congratulations to all at Safe Work Australia for putting on this seminar series. The last series has been extremely popular and they're an absolutely excellent opportunity for us to learn and share our experiences.

It's also an opportunity to showcase the latest thinking, innovation, research, development and experiences in work health and safety. It's important to share ideas, experiences, skills and knowledge so that we can work together to achieve the Australian Strategy vision of healthy, safe and productive working lives.

Before introducing our key speaker, Professor Sharon Parker, who's going to talk about good work design and applying it to psychosocial risks, I'd like to talk about the development of the Good Work Through Effective Design collaborative project that's been jointly led by WorkCover Queensland and Comcare. This initiative contributes to the Australian Strategy outcome of Healthy and Safe by Design because it aims to eliminate or minimise hazards through better work design. The *Principles and Evidence for Good Work Through Effective Design* report was commissioned by Comcare and written by our key speaker Professor Sharon Parker and Professor Mark Griffin of the University of Western Australia.

It led to the development of ten guiding principles of good work design which aimed to encourage duty holders to move beyond compliance towards better practice. Broadly the principles are about identifying hazards and controlling risks, learning from experts, evidence and experience, engaging decision makers and leaders and actively involving people who do the work.

The inclusion of "reasonably practicable" within the principles is emphasised as it recognises organisations will have varying capabilities and capacities. The principles also outline the importance of considering all hazards and risks together so that these risks collectively can be managed against what is practicable to protect employees from harm to their health, safety and welfare, improve employee health and wellbeing and improve business success through higher productivity.

The Australian Strategy is underpinned by the principle that well designed healthy and safe workplaces give employees more productive lives. The Good Work Design Principles provide a practical framework to achieve that in the workplaces and more information is available on our website.

Well I'd now like to introduce Professor Sharon Parker who is going to talk to us about good work design and how it can be applied to the very challenging area of psychosocial aspects of work. Across the Australian Public Service psychological injury represents 14% of all of our claims. But it represents 44% of all time lost and 42% of all cost. Good work design to minimise the risk to people in the workplace is absolutely essential and I know that I'm looking forward to hearing from Sharon. She'll take us through some of the contemporary aspects of good work design and its practical application.

Professor Parker is the Winthrop Professor in Management and Organisation at the University of Western Australia's Business School. She is recognised as the world leader in the field of work design. She has more than 100 publications to her credit and her work has been cited over 6,000 times across the area of management, psychology, sociology and engineering. So will you please join me in welcoming Professor Sharon Parker.

(Audience Applause)

**Sharon Parker:**

Thank you Jennifer. Good morning everybody. I'm very pleased to be here today. Thank you for coming along to the session.

Okay. The average Australian adult spends about 90,000 hours in work and if you ran that back to back that would be about 11,000 days of work. So it's unsurprising that good work or bad work has a major impact on our lives and in aggregate across all of us a major impact on the economy and on civil society. So work really matters for people.

This is the plan for this morning. First I will talk a little bit about what is work design. Second I will introduce you to the principles and describe a little bit about where they came from. Then I'm going to unpack the three sets of principles that we have - the ‘why’ principles, the ‘what’ principles and the ‘how’ principles – and finally I'll make some concluding comments.

So let's begin with “What is work design?” Work design – this is my own definition – is about the content and organising of tasks, activities, relationships and responsibilities within a job or role or a set of jobs or roles. So if you consider for example the work design of a Police Officer job, the sorts of questions you might ask would be "Well which tasks should be in a particular job?", "What should be the variety of tasks?", "What should be the number of tasks?", "Which jobs should go to the Police Officer?", "Which should go to the civilian support staff?" and questions also about organising the work. So "Should those jobs be collectively organised as a team,or does it make sense for those to be more individual jobs?" Those are the sorts of questions that are at the heart of work design.

When we talk about work design the language that we often use it to talk about particular job characteristics or work characteristics and the four focused on here I will develop a little further in the presentation. We can think about physical characteristics of work. We can think about biomechanical characteristics, cognitive characteristics and finally psychosocial characteristics. Let me unpack those a little further for you.

So physical characteristics first of all focus on physical aspects of work like working at height or dealing with toxic chemicals or dealing with biological substances. So these are obviously fairly simple to understand. In 2011 there were about 120,000 serious workers' compensation claims and 75% of those pertained to injuries and accidents related to these physical aspects of work like slips or falls or body stresses. So these are very important and here's a simple example. Working with chemicals can expose you to potentially toxic chemicals.

The second category is biomechanical characteristics of work. So here we're talking about those aspects of work that relate to your body and movement of the body. So aspects such as how much variety in posture do you have in your work for example? And obviously these biomechanical aspects of work can have major implications for musculoskeletal disorders and risk. And in fact Safe Work Australia in 2011 surveyed 4,500 workers and found that nearly all of those workers were exposed to some type of biomechanical risk. And the risk was particularly acute for some groups of workers such as young workers, male workers, workers at night. So biomechanical risks are really important and we need to give attention to how we think about body movement in the workplace.

So here is another example. A construction worker for example might lift heavy loads repeatedly which can cause lower back strain.

The third characteristic is cognitive characteristics. So these are harder to see because these are about the mental challenges or the cognitive demands of a job that arise from how complex or boring in fact the information is that needs to be processed. This is becoming a more important characteristic of work. So if you think about a lot of the physical tasks are now being absorbed by new technologies so we're actually seeing an overall shift in work towards more cognitive demands. That's a very important aspect to consider.

So as an example of the sort of risk one might see I'm doing some research on cyber security agents. They spend a lot of time staring at a screen looking for cyber security risks. So that constant vigilance and focus actually can cause quite a lot of stress for them and of course can enhance their possibility of error.

And the final set of characteristics are psychosocial work characteristics. So these are the more psychological aspects of work and we can typically think about them in terms of demands or psychological demands that are placed on people for example excess workload or conflicting expectations or unclear expectations, not really knowing what's required – these sorts of demands in the workplace. But also we can think of them in terms of resources or a lack of resources for doing the work and by resources we mean things like control. So having control over important decisions in your work turns out to be a really crucial feature from a psychosocial perspective.

And another really crucial resource in work is having social support from people. Most people especially if you're having to deal with challenging demands need and benefit from having support in the workplace. So an example of this type of characteristic might be that you have a manager of a social worker who micro-manages everything that the social worker does which means that the social worker cannot give high quality care to their clients, which causes that person to experience strain and also probably is very demotivating.

So that's what work design is all about – these four characteristics.

What I'd like to do now is introduce some of the principles and how they came about.

So these Work Design Principles sit within a bigger picture. So as Jennifer mentioned the bigger picture is the Australian Work Health and Safety Strategy and this strategy focuses on achieving healthy, safe and productive working lives through seven action areas and you can see those around the outside of this circle. One of those action areas is called 'Healthy and Safe by Design' and this is where work design sits. Healthy and Safe by Design focuses on two aspects. One is about the structure and the plant and the substances – so designing machinery for example to be safer – and the other is about the design of work processes and systems and that's really where the work design focus fits.

So as part of this focus on Healthy and Safe by Design, Comcare, Workplace Health and Safety Queensland and Safe Work Australia have identified ten core principles for thinking about work design and this is the handbook that will be published very soon.

The ten principles are all evidence based, hopefully easy to understand, they're all interconnected so they need to be thought of as a whole and also of course we've had to limit the number of those principles because otherwise it gets too unwieldy for being practical. And it's important to note that there's been a lot of consultation. Some of you I know were even involved in that consultation process to make sure that the principles sit comfortably with the many different stakeholders that are interested in or expert in work design.

So there's three categories of principles. The first principles are what we're calling ‘Why Principles’ and these are really "Why would you even care about work design?", "Why does it matter?", "Why should an organisation or a business pay attention to this topic?" The second set of principles are ‘What Principles’. So if we care about work design and are persuaded on that, "What is good work design?" And the third set of principles of course then is "How do we go about getting good work design?" or "What are some of the process considerations?"

So let's unpack first of all the ‘Why Principles’.

The first principle is that good work design gives the highest level of protection so far as is reasonably practicable. Hopefully some of you recognise that principle as being derived from the Work Health and Safety Act. The bottom line is that there is a legal requirement for employers to care about people's work design. So workers and others should be given the highest practical level of protection against harm to their health, safety and welfare. So protection from hazards and risks that might arise from work. And one thing that's important and is going to become more important is recognising that when we talk about health this includes physical health but also mental health. And the way that the Work Health and Safety Act identifies how people can be protected from harm is through the elimination or minimisation of the risks that the work might give rise to. So persons conducting a business or undertaking have a duty of care to protect workers from risk so far as is reasonably practicable. So the first principle is basically we need to care about work design because there's a legal obligation to do so.

Some of you will recognise this which is the Safe Work Australia's Code of Practice and this is about how do you achieve the best minimisation of risk and basically this is the hierarchy of controls. Ideally the level one, the preferred strategy is to eliminate the risk. If that's not possible then the next strategy is to substitute or isolate or reduce exposure to that risk. And then if that's not practicable then the final strategy is for there to be rules or procedures such as wearing equipment in the workplace. So let me just demonstrate that with some examples.

Imagine that there's dangerous machinery in a workplace. The ideal, the level one strategy would be "Let's remove that machinery." Okay. That may not be possible. It may be absolutely essential to the work. So what might one do then? The next level might be to replace it with slightly safer machinery. There might be a better way of doing it or an equally good way of doing it that's safer. You might isolate the hazard. So you might lock the machine in a room and have workers remotely operate it. You might put some engineering controls in. So put some guards on the machine. So they would all be good strategies, perhaps not quite as good as getting rid of the dangerous machinery altogether. And then if none of those controls were feasible or practicable then you might consider training the workers to get them to operate the machine safely or you might focus on that they need to wear gloves and goggles and that would be more of a level three strategy – not the ideal because it relies on compliance from the workers. It only works if people follow the rules and wear the equipment, which increases the risk.

Let's look at that in terms of long work hours, a more psychosocial work characteristic. So you could redesign the hours. So for example in the UK, trainee doctors were working extremely long hours causing all sorts of problems with burnout and patient error. So the UK government introduced a policy that trainee doctors should only work 48 hours a week. So that's an attempt to eliminate that hazard at the source. Actually there have been lots of complications and it hasn't really worked out that way but the intention was there. So it may not be possible for whatever reason to reduce the hours. So then what might you do?

You might change the shift structure. So people might still work long hours but you might only allow them to do that for three days in a row and then give them a decent break in between. You might say "Well people are going to have to work long hours but let's look at the other demands that exist in the job and see if we can reduce some of those?" Or you might say "Okay people have to work long hours but let's at least give them some control over when they work those hours." So change another aspect of the work design to help manage the potential risk. And then of course there are level three strategies – most popular with organisations – and these would be things more around "Let's train people to deal with the long hours. So let's send them on resilience training” for example or "Let's give them all coaching in time management." They would be strategies that are aimed at trying to change the worker to better manage the risk. Or "Let's make sure we've got a good EAP system or support or counselling available so that if people are stressed as a result of the long working hours they can get some help."

So I guess work design is all about trying to be at the level one and two end of this hierarchy of control by trying to change and modify the work to eliminate or reduce the hazards. Let’s go back – and there's a lot of evidence that this is more effective. So for example a review of 90 job stress interventions found that primary prevention (and by "primary prevention" they really mean level one strategy), level one and two strategies were the most effective in reducing work stress. Sometimes there was value in combining the level three strategies with the primary prevention. So for example redesign the work but also give the people some time management training. There's some evidence that that is good, but I guess this evidence suggests that just the level three or what is in the stress literature referred to as a "tertiary intervention", just those interventions are not as effective for dealing with work stress.

So returning back to those examples that I have how might we redesign the work to reduce some of the risks? For example with the first one, working with chemicals, well we might just eliminate those chemicals or change the chemicals so they're not toxic, for example. With the repetitive lifting of heavy loads we might rotate the jobs. It might not be possible to get rid of that job but let's rotate it so that the person who's lifting the cartons off the truck all day gets a chance to go and do some other task that uses different muscles. The excessive vigilance such as a cyber security agent - maybe what we need to do there is build in decent breaks for that person. So a five minute break every 30 minutes or something like that. And finally with the example of the psychosocial work characteristic of not enough autonomy maybe we need to be training the supervisor to delegate more autonomy and give people more control over their work.

So that's the first principle fundamentally about upholding the Work Health and Safety Act.

The second why principle, "Why else would we care about work design and want to embark on it?" is that good work design enhances health and wellbeing. So the World Health Organisation defines health as "a complete state of physical, mental and social wellbeing and not merely the absence of disease or infirmity." So we're quite comfortable with this notion when it comes to physical health. Just because somebody is not sick does not make them healthy, okay? We would normally expect them to have a reasonable level of cardiovascular fitness. We'd expect them not to be drinking three bottles of wine a night or whatever, okay? They would have healthy behaviours and we're quite comfortable with that notion of physical health. But the same also applies to mental health.

Good mental health isn't just the absence of burnout or the absence of anxiety and depression. Good mental health is also about people at work experiencing good wellbeing, having a sense of meaning, feeling confident, believing that they're learning and so on. Now there's a great deal of evidence. If we think of health then as having these elements of ill health but also these aspects of wellbeing or what I call active health there's a great deal of evidence as I've just discussed that good work design prevents or reduces ill health. But it also promotes or enhances this wellbeing and this active mental health.

Some examples – enriched work design promotes self confidence which in turn enhances proactivity. So if you want a workforce where people are proactive and use their initiative and make things happen, good work design is a driver of that behaviour. Also evidence that good work design enhances creativity. So if innovation is important for your organisation, good work design can be a vehicle for achieving that. Work resources such as job control, support, information, directly influence teachers' levels of engagement. Job autonomy promotes commitment to the organisation which means employees are more likely to comply with safety procedures. And this is just the tip of the iceberg of a huge amount of evidence that shows that good work design isn't just about the prevention of harm but it's also about the promotion of this more active health and wellbeing.

The third why and the final why principle is that good work design enhances business success and productivity. So three paths by which it does this and the first is that as we've just said good work design prevents ill health, stress and injury. In 2008 and '09 work related injury and illness were estimated to cost $60.6 billion to the Australian economy which is almost 5% of GDP which is a huge amount of money. And some of the costs that are tied up with illness and injury at work are things like compensation costs, the costs of replacing people including recruitment, advertising, the loss of knowledge when people leave, the costs of early retirement, the costs of EAP and health care and of course the cost of reputational damage. If there are fatalities for example in an organisation, that has a big consequence for the reputation of the organisation – as it indeed should. And so good work design affects business success partly because reduces these costs associated with illness and injury.

The second pathway is as I've just said good work design promotes active health and wellbeing and there are a lot of performance benefits that derive from that. And I mentioned innovation, proactivity, creativity as some examples. So there's a lot of evidence that good work design enhances job performance and enables you to retain your most talented staff and that of course flows on to have effects for the business.

And a final pathway I haven't talked about yet but is also relevant is that good work design is often just more efficient. It enables the better use of the skills that people have. It promotes learning and there's a lot of evidence about that and often it enables a faster response to a problem. The classic example if you're at the checkout queue there's a problem, you know, the person has to go and get their supervisor to unlock the key with a special code. You know, that’s a lack of control of the checkout operator that slows down service and is inefficient, and there are many, many examples that we could point to. So these are three of the pathways by which good work design enhances business productivity and this idea is recognised by others. The World Health Organization says "There is no trade-off between health and productivity. A virtuous circle can be established” and there's a lot of evidence. I won't go through it all.

One – here's an example of some anecdotal evidence. Let's say you have a very dictatorial CEO and this is a real case from the Health and Productivity Report. So that causes a loss of morale. Okay. Twenty-eight percent of middle managers leave because they've got this over-controlling CEO. Of course they take with them all the corporate knowledge that they've got. Meantime all the staff are left there and they're uncertain and there's chaos and nobody knows who's managing them and that causes a loss of morale to them. That turns out to cost about $176,000 to replace those staff who've left and about $440,000 in reduced productivity assuming that there's about a 10% decline in productivity. So the total cost is around $616,000. Now that's just anecdotal but gives you an example of how one feature can flow – have a ripple effect in terms of cost.

But there's also more systematic evidence, for example a meta analysis which is an analysis of lots of studies. So a meta analysis of 116 studies basically shows a link between work design and the return on investment and the return on assets in companies, and you can read that paper later.

So to summarise why should we even care about work design? Well it matters from many perspectives. Certainly it matters from the point of view of legal compliance and the prevention of harm but it matters for many other potential outcomes that are important to organisations.

So those are the ‘why’ principles, why we should care about work design. Now I want to move to the ‘what’ principles. So what is good work design?

So the first principle in this category – principle four – good work design addresses the physical, biomechanical, cognitive and psychosocial characteristics that I've already discussed, together with the needs and the capabilities of the people involved. So one of the first points to make is that – and I guess I've given examples of how you can consider these work characteristics – but there is a tendency for people to just look at one set of the characteristics and that's partly because the interest and expertise in these different aspects have come from different disciplines.

So the physical characteristics may come more from engineering for example. The biomechanical characteristics might be more the province of physiotherapists and ergonomists. The cognitive characteristics again the domain of ergonomists and then psychosocial tends to be more organisational or psychological disciplines involved. So the interest in these characteristics has come out of different disciplines which can mean that when experts get involved in designing work they may tend to focus just on one particular perspective. But it's important to consider them together because they can sometimes be in tension with each other. So for example many of your jobs I'm guessing and hoping would be good psychosocial jobs. So you would have some decent autonomy, some meaning, some challenge, some support. So from a psychosocial perspective really good, healthy jobs.

But maybe there are some biomechanical risks associated with that. For example, maybe you sit at your desk for 10 hours a day absorbed in your interesting, challenging work. So on the one hand, a good work design from a psychosocial perspective. On the other hand presenting a risk from a biomechanical perspective. So we need to look at jobs fairly holistically. And when these tensions exist between these characteristics they need to be considered and they need to be managed. So let me give you another example.

So I'm from Perth and in Perth we have in the past few years seen the growth of automated mining centres. So basically operators operate the mine from Perth in places just near the airport and the mines are thousands of kilometres away. So you can imagine that this is a positive change in terms of physical risks. They're not out there driving hundred-tonne trucks. So it reduces those risks but actually there's quite a lot of cognitive demand and vigilance required in these jobs which is really different for these people that actually came from a different background of work. So it can be quite cognitively demanding and stressful work for people and it changes the biomechanical risks. Whereas maybe the risks before were around lifting and moving big, heavy tyres and things, now the risks are sitting, sitting all day long. And a lot of evidence now that extended periods of sitting invoke considerable risks to people's long term health.

The other component of that principle is to think about the aspects of work design together with the needs and capabilities of the people involved. So work design can't be a one-size-fits-all strategy. It needs to accommodate the needs of the people that are in the work. Just a very quick couple of examples. We know that people who do work that's very emotionally demanding – think about a nurse in the intensive care unit – very emotionally demanding work but we also know from research that people with lower self esteem tend to be more affected by emotional demands. So this might be something that we need to take into account when thinking about emotionally demanding work.

Here's another example: from a biomechanical perspective we also know that mature or older workers are going to be more affected by heavy lifting. And an example of that: a German car manufacturing company that I am connected to, their average age now is approaching 50 of their production workers. So they are having to experiment with "Are there ways that we can make cars with these workers that are less physically demanding?" So they're having to accommodate the abilities of the workers in the design of their work, and good work design takes that into account.

In the same way that good work design takes account of the person, good work design also takes account of the situation. So the context, the business needs and the broader work environment. So if you imagine a person there in the magnifying glass doing their work, you know, people have peers around them. Sometimes they have to work really closely with those peers. Sometimes they don't. They have a leader. Companies vary in terms of their management style. They use technology and the technology varies and changes. They have payment systems that can be different across different organisations, and of course different organisations have different strategies. So all of these things need to be thought about when configuring work design.

If you're designing work in a company where innovation is crucial you might come to a different conclusion if you're designing work in a company where cost reduction is the primary strategy. So these factors need to be considered when designing work and in a sense this is Systems Theory if you're familiar with that. What it means again is that you need to design the work that's fit for the purpose, for the strategy, for the context, not just adopt an off-the-shelf solution or copy what someone else is doing.

What it also means is when you're designing work you need to often take account of the broader factors. So many times organisations will embark on a work design; for example they might decide to introduce team work and then discover that everybody is paid an individual bonus according to their individual performance. So straight away there's an incompatibility there between the work design focused on team work and the payment structure focused on individual behaviour. So when configuring work one needs to look at those broader factors.

So let me give that example of team working and it can be very tempting for organisations to say "Well they've got team working over there. We should have it too. So let's have team working." But team working only really makes sense if the tasks of the team members are interdependent. In other words if there's a reason for the team members to actually cooperate and work together to achieve a collective goal, if there's not then there's no need for team working. If you're going to have team working you're going to need to have team members who've got quite good interpersonal skills. So that needs to be considered and do the organisational systems reinforce team work?

So I gave the example of pay but it might also extend to things like recruitment for example. Are we recruiting into our organisation people with a teamwork approach or not? So these are the sorts of factors that need to be considered and if you get it wrong it can have consequences. So my colleagues and I did a study many years ago in a wire manufacturing company and we found that where they tried to introduce team work in a situation where there wasn't very much interdependence between the task members. Basically these were wire makers that were drawing very long pieces of wire and it really didn't make sense. It really wasn't even possible for them to collaborate with other wire makers. That actually caused the employees to experience stress and dissatisfaction because they were expected to work like a team and yet it didn't make any sense and they couldn't do that. So this principle is about aligning the work design with the bigger picture of the organisation.

The next ‘What’ principle is that good work design is applied along the supply chain and across the operational life cycle. So first of all recognising that businesses can shape the work design practices along the supply chain. And for example the National Heavy Vehicle laws have this idea of a chain of responsibility about the responsibility of people in the transport chain to care about the work design of all of the people in the supply chain. And another example some of you may have watched the *Four Corners* program on the ABC a couple of months ago looking at the suppliers of supermarkets and this is a quote from the program: "The slave-like conditions found on some of the farms supplying the supermarkets." So it's important not only to be thinking about the work design of your organisation but if you have control and influence also be thinking about the work design of the suppliers.

And in a similar vein work design can be relevant across all stages of a product lifecycle, of a service lifecycle or of an organisational lifecycle. So here imagine an organisation starting up. Work design can apply in thinking about "Well how are we going to lay out the processes?", "What sort of machinery are we going to have?", "Who are we going to recruit to do this work because if we get a good fit of the people that do the work with their skills and abilities that's going to reduce risks and so on?" So it applies at the start-up end. Of course during the organisation's growth work design issues apply and we know that from your own personal experience. And even if an organisation downsizes or closes work design can be relevant. So let me give you a little, quick example of that.

So I worked with a chemical processing company that downsized by 40% over three years. Now when an organisation downsizes by 40% you could imagine that the survivors – the people that are left in the workplace – are going to have higher demands, right, because the same amount of work still needs to be done but there are 40 fewer percent people to do it and that's exactly what happened in this organisation. The demands increased but at the same time that the organisation downsized they introduced a program, an empowerment program aimed at increasing the autonomy of the workforce and increasing the workforce's engagement in participative decision making. And so ultimately – and we tracked this through surveys – there was no net increase in stress for the survivors over the time and actually a decrease in stress for some. And for the company as a whole improved performance and also improved safety performance. So by paying attention to work design, by thinking about "Well how can we deal with the fact that people are going to have higher demands?" the organisation managed the downsizing process with fewer risks to the people that were left.

In the last 10 minutes I'm just going to talk through very quickly the ‘how’ principles, the “how do you get this good work design?” and the first principle is probably fairly obvious and that's about engaging the decision makers and the leaders in this process. So at the end of the day work design or work redesign is going to be most effective when there is support and endorsement and this needs to be genuine, active, visible support. It's no good just having the sort of rhetoric without the reality and I'll give an example of that in a minute. And that's partly because even though work design might on the surface appear to be free because it's not – it’s not a whiz-bang new machine that cost $5 million, – it's changing the work. Actually to do it well there needs to be an investment of time and energy in the change process and potentially in training people and of course in changing these broader organisational systems. So it's not free. So you do need the commitment of leaders.

Let me give you a very quick example of an organisation that we worked with introducing lean production. Again we tracked this change over time with surveys. First of all there was very little engagement of employees in the process and the surveys pre- and post- for a particular group that we focused on, a pilot group, showed that compared to comparison groups they had lower job control where they introduced this particular moving assembly line, they had less variety, they had increased depression, reduced commitment and I could go on. Bottom line: bad work design.

We gave the feedback of course and then the company decided to introduce this particular initiative across the whole organisation. So this is a case where the leaders were not genuinely committed to work design. Actually their company mission statement says "We are dedicated to exceeding customer expectations… in an environment of employee involvement and commitment” and some of their values on their website talk about the importance of workers, and yet you see this big gap between their espoused values and their enacted values. So it's the genuine commitment of leaders and decision makers that is important.

The next principle is yes, you need to engage the leaders and the decision makers but you absolutely must actively involve the people who actually do the work as well, including those in the supply chain and the networks if necessary. At the very least you need to consult, ask people "What do you think of what we're doing?" at the very least. But ideally you should really go beyond consulting to actually involve people in the design of work. Involvement and by that I mean if you're redesigning people's work they can help. They can get involved and help come up with options. They can get involved in the evaluation and so forth and that's going to give them ownership and engagement. So it's actually going to mean you get better decisions because who knows the work better than the people that do it themselves? And of course involvement is a protective factor in and of itself. When people are engaged in making decisions, that enhances their wellbeing.

And if you're going to ask people to be involved in the work design of course you then need to share information with them so that they can make good and sensible decisions. So hand-in-hand with involving people is ensuring people have the information to make those good decisions. And this is in fact highlighted in the Work Health and Safety Act. So this is part of the responsibility and part of the duty of care of an employer.

There's a lot of evidence that this matters. So for example a review of 26 studies of interventions to reduce manual handling problems, the evidence shows that direct involvement of workers is a critical success factor. Those interventions that work tend to involve the workers and the same in the stress field. Those interventions that work tend to involve people and facilitate that participation.

The ninth principle is about identifying hazards, assessing and controlling risks and seeking continuous improvement. And this really again comes out of the Code of Practice from Safe Work Australia and ties closely to the Work Health and Safety Act. This actually recommends a particular process and I'm just going to describe it from the point of view of some physical characteristics and also from the point of view of psychosocial characteristics. So the first step is identify the hazards. What might be the hazards in the workplace? Now with physical characteristics it might be as simple as looking around – okay – observation because you can usually see those things.

But with psychosocial hazards you can't necessarily see them. So you might need to do something more like surveys or analyse exit interviews or look at attendance records and see if they've changed. But you probably need to do a bit more detective work in a sense, because they are not necessarily as visible as the physical hazards. And then after that of course having identified "Okay there might be a potential hazard here” "There might be” for example, "a possibility of bullying and harassment indicated in exit interviews." The next question is "Well what risk does that impose to people?", "Maybe the bully has left and it’s not a risk anymore but let's assess the risk” and that's the second step. And then the third step of course is then to put in place some processes to control that risk and those are the things that we've talked about – the level one, two and three strategies.

But what's important is that there's a good diagnosis phase, so not leaping straight into the solution but a good checking out of what is the situation. And the final step for some reason is not showing up there, is to evaluate what has actually happened. So you've put in place these controls, you've put in place a bullying program, you've got rid of the bully or you've removed the machinery, whatever, what's the effect of that? and it's really important to do that evaluation.

And the final principle is the importance of trying to learn from experts, evidence and experience.

If needed, there are many experts in work design who can be sought and what ideally is people need to work together – different experts need to work together and learn from each other. So this is a quote from Chris Clegg: "Most design processes are dominated by people with partial forms of expertise such as the design of technology being dominated by engineers and other technical experts. Consideration of people, human and organisational issues is neglected which means that the full range of organisation and job design choices that may be possible are typically under-represented." So in another words ideally more than one stakeholder, more than one expert should be involved in shaping the work design so that we don't get this under-representation of the options. There is often more choice for work design than people recognise.

I won't go into the detail but we've been doing some research looking at how do people design jobs, what we call "naive job designers" which is basically just managers and everyday people. How do they design jobs if given a chance? and our research basically shows that people design very bad jobs. People slip into designing Taylorist sort of jobs with very little variety, very little autonomy. So if you just leave it to people to intuitively design work it's not necessarily going to deal with some of the hazards that might occur.

The second aspect to this principle is there's also a lot of evidence. I've just reviewed the literature on work design. There's more than 17,000 articles on work design in the published journals and 4,500 in psychology and management alone. Nobody expects organisations to read all that. So there's two things that can help. Experts can help translate this evidence, but also there are a lot of reviews and syntheses and Safe Work Australia and Comcare and also other similar bodies in the UK like Health and Safety Executive, they've got beautiful synopses of this material. So there's a lot of guidance available to help.

And finally it's important to learn from experience. So experts and evidence are helpful and useful and we would totally recommend them but also as I said work design needs to be tailored to fit the situation and to fit the people. So it's really important to try things out and see how they work for that organisation and gather the data and do the evaluation and see if the experience is suggesting that they are helping to manage the risks. So this is the importance I guess of good monitoring and good evaluation of the changes that you might make.

To summarise we've talked about the importance of why you might design work differently and yes, it's about legal compliance and that's absolutely critical. But it's also about creating work environments where people have good wellbeing, where they're learning and thriving. And it's also about creating efficient organisations where people are maximally productive and innovative and creative. And work design is a vehicle for all of those agendas. What is good work design? Think probably the most important message to come away with is that it's that holistic approach of looking not just at the physical aspects or not just at the psychosocial aspects but looking at all of those aspects in relation to the person and the needs of the person but also in relation to the business and the needs of the business.

Work design can sometimes be pretty straightforward. It might be as simple as an injured worker is coming back to work and the doctor and the worker negotiate with the boss to make some changes. It might be as simple as that but many times it's more complicated than that because work is part of that bigger system of an organisation and as I said it's intimately related to other systems like payment and selection and so on. And because of that it's really important to sort of think about the change processes. And so the ‘how’ principles are all about how do you get that sort of larger scale work design actually embedded and working effectively in an organisation? No matter how small or how big the work design it's fundamentally important to involve the workers in the process.

So I want to conclude. As I just mentioned I've just done a review of work design research in the past 100 years and in doing that I found an article written in the *Journal of Applied Psychology* which is one of the most important journals in my field that was actually written almost 100 years ago about the importance of job design. So I just want to share with you a quote from that paper. "Every man should be more of a man for having worked." Sorry, "Every man should be more of a man, a better man for having worked a day. The humdrum shop operated by humdrum workmen managed by humdrum superintendents, dominated by humdrum ideals should be banished to Humdrum Land if for no other reason than to save the men."

I suggest we still have a fair number of humdrum jobs in our workplaces not just affecting men but also affecting women. So hopefully by taking on board some of these principles we can indeed banish those jobs to Humdrum Land and those 11,000 days that most of us spend in work hopefully all of those days can be safe and productive and make us better people.

So thank you very much.

(Audience Applause)

And questions, comments?

Yes?

**Audience Member:**

Thanks Sharon for that interesting presentation. I'm Amanda Day from the CSIRO. My question is I'm looking for what would be your advice to people looking to apply and implement these principles for the first time?

**Sharon Parker:**

For the first time? I guess the first piece of advice would be to read the handbook which – we've had to sort of rush through the principles a little bit today but the handbook involves lots of examples of different applications in different sorts of industries and the handbook also signals to other sources that people go to. So I guess I'd start there with first of all there's a nice summary in there. Start with that and then that will refer to many other sources that can help. So, you know, learning from other organisations that have gone down this path or experts that can help and so on. So I guess I'd say to an organisation thinking about this for the first time use the resources that are there and that have been developed. Thank you for the question.

Any more questions? Yes? It's – Howard – here we go.

**Audience Member:**

Thank you. Fantastic Sharon. Thanks so much for that. Just really interesting to see that involving sort of picture.

**Sharon Parker:**

Great.

**Audience Member:**

And having been in work health and safety since the ‘80s which is quite a long time I feel that whole thing of we're standing on the shoulders of giants and I'm quite interested because I sort of cut my teeth in safety management systems, you know, management commitment, hierarchy of control, supervision, consultation and I see so much of it. But I'd just be interested in your concept of how it links in with this.

**Sharon Parker:**

Yeah. Great question.

**Audience Member:**

Thanks.

**Sharon Parker:**

And I mean – I guess the principles have been deliberately designed to be underpinned by the same core messages that many health and safety systems already have. And as I alluded to – and a couple of the principles focus explicitly on things that are in the Work Health and Safety Act such as the hierarchy of control. And most people in this area are familiar with that and they understand how that works. And I guess what these principles are trying to do is say most people are familiar and understand how they work in relation to the more physical aspects but they can also work in relation to the psychosocial aspects. So let's also think about those and have that more holistic perspective. So hopefully the principles are very tightly tied to what organisations are already thinking about who are focusing on the health and safety aspects.

Thank you.

**Audience Member:**

Great.

**Audience Member:**

Aileen Conroy from Human Factors and Ergonomics Society of Australia. Thank you Sharon. My interest is particularly when it comes down to the new job that's just about to be created. I work in a hospital and it's a very complex system and what I see is that say the government says "We need this statistic to be gathered in this hospital” somebody just says "Okay how are we going to do that?" and they create a job. They don't actually think about any of this. Is that what you mean by "Taylorist"?

**Sharon Parker:**

Yes.

**Audience Member:**

Yeah.

**Sharon Parker:**

I think what happens is people tend to design jobs that sort of fit with their assumptions about what work should be and even though we're probably not conscious of it, people sort of intuitively hold this idea that, you know, simple – jobs that have all the same tasks for example put into one are going to be more efficient because they're more specialised. And that's a fairly pervasive idea that's sort of in people's heads that's very Tayloristic and that might be the best way of doing it. I don't know. But the important point is to open up the options and say "Okay that's one way of doing it but maybe a person searching for statistics all day long or whatever is going to have some risks of boredom or whatever. Would it make more sense actually if they also were liaising with the customer or they were also, I don't know, gathering some primary data or whatever?” But ask the question at least.

A lot of the time the jobs that we have are just taken for granted and we don't even see that they could be configured another way and when there's a new job it just slots into the existing without saying "Is there a different way or a better way we could do this?" So I guess part of the agenda here is hopefully just for people to ask that question. "Is there a better way we could configure these jobs or what we're calling a job? Should we have a think about which tasks really should be in there to make it more meaningful and fewer psychosocial risks?" So it's asking the question. Thank you.

**Audience Member:**

May I drill down just a little bit further?

**Sharon Parker:**

Sure.

**Audience Member:**

So if I go in to do the work station assessment and I think "Okay this person's reporting symptoms but I don't think it's actually to do with the way their work station's set up. I think it's to do with the psychosocial aspects of their job” and this has actually happened to me as you can kind of see. And I put in their report this section and then their supervisor takes umbrage about the fact that I am actually suggesting that the job design was a problem and this person shouldn't have three different supervisors who don't work together and things like that. For those who work actually on the ground have you got a suggestion for something we could point the supervisor towards? Would you say the handbook would be the way to go?

**Sharon Parker:**

Yes. So what you're describing actually is a classic role conflict and in fact the evidence suggests that role conflict is one of the most stressful psychosocial work aspects. If you've got three different people telling you to do three different things and there's no schema for prioritising it's a classic cause of stress.

So hopefully you would be able to go to the handbook and say "Role conflict appears to be a challenge for this job and here's some tips on how to address it." And then if perhaps you were presenting the supervisor first of all with a language for talking about it because sometimes that's half the challenge and second of all with some ideas about how to address it, perhaps then it's not quite so threatening because there's that – and it's also recognising that this is something that many people face. It's not the supervisor's fault necessarily. You know, they just probably inherited the management of this job but it gives you a language and a way of talking about it hopefully.

**Audience Member:**

Thank you.

**Sharon Parker:**

Great question. Thank you.

**Audience Member:**

Wendy Elford from Now to Next. My question is when we do the job design quite often it's done in a pilot in a small team. When the job is rolled out it's exposed to everything that changes in that job over a long time and quite often the pilot is done with a small team that can see the results quite easily. Once it's out in the wild all the results are particularly hidden particularly if you take in some of the issues to do with the built environment which are controlled by people who are often not HR people and not connected with the job designers. So how do you keep it together and keep it real over the long term?

**Sharon Parker:**

Yeah. Great question and I mean what you're describing is a classic problem with the change strategy of pilots and then rollout, because what happens with a pilot is everyone's invested usually in making it work. So there's a lot of attention, there's a lot of resources and sure enough it works, right, because it's had all that attention and resource and fine-tuning and tailoring to that particular pilot. And then when it's cascaded out there's not enough resources for the same level of attention and then issues emerge.

So I guess it's – I guess it comes back to what I said earlier that changing work is not necessarily free. It requires resources. So I guess in that case it might be important to set up some people whose responsibility it is to manage the process of the rollout knowing in advance that there are going to be some challenges and some issues. Just because it's all worked in the pilot it's not going to necessarily work for everyone else. So I think as long as people are entering into it knowing that and there have been perhaps some roles to set up to support that rollout then you could be managing some of the risks associated with that. So put in place some controls I guess in a pre-emptive type of way.

It's a very good problem and very classic. You try something over here in this hospital and it works and then it's – and partly it's the way it is cascaded out too, because often people try to then take what was learnt in that particular setting and codify it and make it standard for everybody else, when part of what happened in that particular pilot was that people adapted it to work for themselves. So I think the participation principle would also be really important there as well, that even if it's cascaded out and you're trying to do something that's applicable to all there'll still need to be some tailorisation that comes out of full participation. So great. Thank you.

Yes?

**Audience Member:**

Thank you very much Professor Parker. It's been a real eye opener and fascinating. Helen Righton from Safe Work Australia. You've talked a little bit about a couple of the challenges historically in applying these principles.

**Sharon Parker:**

Yes.

**Audience Member:**

Maybe you could just talk a little bit more about some other challenges that you see in applying those principles please?

**Sharon Parker:**

Great question. Thank you. I think one of the major challenges that we face particularly in the area of work stress is the temptation of organisations to focus just at level three. So there's a lot of organisations that have invested in providing EAP services. There's a lot of excitement and interest around training workers to be more optimistic and resilient. And those things are important but they frequently do not deal with the root cause of the stress. And that's a harder message for organisations to swallow. In some senses it's easier for organisations to send everybody off on training than it is to change their shift structures or to, you know, look at the micromanaging behaviour of their leaders. So I think one of the challenges is getting organisations to go further up the hierarchy when it comes to psychosocial risks. I think they get it with the physical risk because it's sort of almost intuitive. If there's a dangerous machine try to replace it. It's harder to grasp that concept I think with psychosocial risks.

So that's probably one of the challenges and the other challenge I think is getting organisations to believe that psychosocial risks matter. Again with a physical risk, a toxic chemical, no one's going to argue that that's bad for people. Okay. But things like role conflict as we just discussed or long work hours, you know, there will be some organisations that say "Well that's not our problem. That's just the worker is not up to the job” or, you know, that "they just need to be tougher." And so getting them to actually – getting organisations to say "No look, if people here are routinely working 12 hours a day that is something we should pay attention to and thinking about the expectations we're placing on people." That can be challenging.

So I think getting people to recognise that psychosocial risks are just as problematic as the physical risks is a challenge. But one that hopefully organisations are going to be listening to more because of the rising incidence of work stress and the problems of mental health. It's becoming more and more spoken about and evidenced. So hopefully that will change.

**Audience Member:**

Thank you.

**Sharon Parker:**

Yes?

**Audience Member:**

Thank you. Professor Parker my name is Alex Allars and I'm also from CSIRO. I'm interested in the notion of what an individual employee can do in this space. A lot of the job design that's been discussed is about an organisation doing something to employees. It has to be fit for purpose and it has to involve them. But what role can they realistically play?

**Sharon Parker:**

That's a great question and actually in the work design literature, there's been a lot of interest in this concept called "crafting" or "job crafting" and the basic idea being that most people, given a little bit of latitude, craft the job, especially professional jobs. You know, you craft the job around your expertise and your interests. So personally as an academic I have three responsibilities in my job – research, teaching and leadership. You know, I craft those responsibilities to best fit my preferences and my expertise. So in many jobs there's some scope to do that.

You probably need some autonomy to do that too. So some jobs that are very lacking in control there's no scope to do that whatsoever. So employees can shape their own jobs and they can do it in many different ways. They can do it just through a sort of natural evolution of what they focus on. They can do it by going to their boss and saying, you know, "I would like more decision making responsibility in this area” or "I feel I'm experiencing conflicting expectations. When I experience this please tell me what I should do. Which should I give more priority to?" So people can absolutely take responsibility and try to make their job a better job and people do.

I guess what I would also say is that that's important and we should encourage that but it does not dissolve responsibility for the organisation to create jobs in which people can do that. So in the crafting literature there's a bit of a temptation to focus on crafting as a solution to everything. I mean I happen to think if you work in say a call centre where every single word you speak is crafted by someone else and you cannot deviate from the script, I happen to think that crafting is not going to help you much. Okay. Maybe the job needs to be changed too. So both things should ideally go in parallel but great question. Thank you.

Okay. It looks like that's all the questions.

So thank you very much guys for your very thoughtful questions and participation in the workshop.

Thank you.

(Audience Applause)

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