**Let's Talk Fleet Risk - Episode 3**

**Dr Gemma Briggs from the Open University.**

**Simon:** Welcome to Let's Talk Fleet Risk - a podcast for those who manage drivers and their vehicles, and want to reduce road risk in their organisation. I'm Simon Turner, and I'm the campaign manager for Driving for Better Business. In this episode, we're going to discuss the thorny issue of driver distraction with Dr Gemma Briggs from the Open University. Gemma is an applied cognitive psychologist who has been researching driver inattention for over 15 years. She's lectured and written extensively on the attentional and perceptual issues caused by phone use when driving, and has worked closely with several road safety charities to promote and share her research findings. Gemma and I are going to discuss why a driver on the phone will suffer from inattention blindness; what the science says about our ability to multitask and take a call while driving; we look at the shared responsibility between employers and drivers, and their social responsibility to other road users; and we also discuss how management can very often undermine the whole process. And finally, we look at some of the free resources that are available to help employers and drivers understand and combat distracted driving.

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**Simon:** Hi Gemma, and welcome to the podcast!

**Gemma:** Hi! Thanks for having me.

**Simon:** So Gemma, perhaps you could start by just telling us a little bit more about the type of research that you do.

**Gemma:** Sure. I'm a cognitive psychologist, and predominantly I'm really interested in how people pay attention, and how they perceive dynamic and changing scenes. The biggest application of that theoretical basis for me is looking at mobile phone use by drivers, so I'm really interested in what happens within a driver's brain while they engage in a secondary task, such as having a conversation on the phone. I'm interested in what they do with their attention - do they try to divide their attention? Now research has looked into whether that's actually possible or not - or whether - more likely perhaps - they shift their attention between those two tasks, and what that means for their performance in both tasks. How does their driving performance deteriorate? How does their performance in the phone conversation cope? How well do they cope with that situation - and what do they get out of it? What we've been able to share, which I'm sure we'll talk about in more detail later anyway, is that it's a really big problem in terms of driving performance. When we try to divide or shift our attention in this way, we can come unstuck.

**Simon:** Yeah. I doubt there's anyone listening to this who doesn't know that using a handheld phone while driving is illegal, but using a hands-free phone is legal. The implication of that for many is that hands-free is safe - or it wouldn't be legal. So is it safer? What does your research show?

**Gemma:** Sure. So in research terms - it's certainly not just my research or my collaborative research that's looked into this - but what we do know is that hands-free phone use offers no safety benefit over handheld phones. So regardless of whether you're physically holding your phone or not, you're 4 times more likely to be involved in some kind of incident or crash. Your hazard perception ability vastly decreases. Your eye movements will change - so you'll look around the scene less, and that can have implications for what you see and you don't see. And those hazards that you do notice, you'll take significantly longer to react to. So our research that I've done collaboratively largely with Graham Hole from the University of Sussex has looked into some of the specifics of that.

We wanted to identify - we know this is a problem, but why is it a problem? And it seems that it's cognitive distraction that's the issue. It's not really whether you have both hands on the steering wheel and both eyes on the road ahead, because what we've been able to identify is that you can be in that situation - hands appropriately on 10 to 2 on the wheel and eyes looking at the road ahead - but if your mind is elsewhere, on a phone conversation, then you can miss things that happen right in front of your eyes. One particular experiment that we carried out put drivers in a driving simulator, and we tracked their eye movements. And we had this theory that perhaps the mobile phone conversation is drawing on cognitive resources that are actually needed for the driving task, and that's why there's a problem in terms of noticing and reacting to hazards. So, we asked some of our participants to complete a secondary task - a phone task, hands-free - which induced imagery. We asked them things like "true or false: in a rowing boat, a rower sits with his back to the front of the boat?", "do cows have hanging ears?". All of these kind of things that in order to answer, you probably have to conjure up an image in your head. We had another group of participants who weren't distracted, and yet another group of participants who were distracted by non-imagery inducing statements - things that you either know or you don't know, and they needed to verify. So, "the capital of Spain is Madrid". Things that you probably don't need to picture. And what we found was that it seems when people have a mobile phone conversation, they tend to picture their conversation partner; where they are, what they're discussing, what they're talking about, and you spontaneously create these mental images. The same brain areas that are needed for visual perception are also needed to create these mental images, and that can explain why a driver can look directly at something - and we know they've looked directly at it because we've tracked their eye movements - yet they've failed to react to it. When you ask them later, they say they didn't see it - so in that particular experiment, those participants who were distracted by imagery inducing statements noticed far fewer hazards than any other participants. Those who were distracted by non-imagery were also worse than those who drove undistracted. But those distracted by imagery showed the worst performance overall. So, they either didn't spot hazards, or if they did, they took up to a second longer to react to them, even if that hazard occurred right in front of them where we could demonstrate that their eye was directly pointed and trying to take in that information. It demonstrates a phenomenon known as inattention blindness; looking without seeing, so from that research - and we've built on that, and many others have done relevant work in that area - we can say that drivers on the phone, whether handheld or hands-free, can suffer from inattention blindness. They can look directly at things, yet not see them – and because they don't see them, they don't react to them.

**Simon:** So is that because the brain can't physically hold two images at once? It can't process the visual information from what's going on in front of the driver at the same time as creating this mental image - it's kind of one or the other?

**Gemma:** Kind of. I think it's probably fair to say that the brain can attempt to process both things at once. But I think the issue is that we tend to try and think of our brain as being similar to a computer, in the sense that we can have multiple streams of information being processed at the same time, and that we can divide that beam of attention - but actually, what we know, is that we tend to switch between tasks, rather than divide our attention. That

shift can be very quick, so much so that we don't necessarily notice it ourselves. But there will be points in time when our brain isn't actively processing the driving scene ahead of us - the information that we're taking in - because it's busy processing something else; a mental image, whatever that might be. So, it's competition for cognitive resources for these two tasks. Both tasks are drawing on this same pool of resources, if you like, and like in any competition, one task tends to win. So, if it's the phone conversation task that wins, and takes those visual resources away from the driving task, then the driver's eyes can be on the road, but they're not processing that information all the time.

**Simon:** So that sounds like we're talking about, effectively, multitasking there, doesn't it?

**Gemma:** Exactly.

**Simon:** And many people believe they can multitask - "I can drive and I can use the phone at the same time" - is that not true?

**Gemma:** It's not that it's not true, it's that I think our understanding of what multitasking is, is distinct and different to what we know about how the brain works. What we know about multitasking is that yes, sometimes we can maintain a couple of tasks at the same time, but what we're doing is we're shifting between those two tasks. We're not keeping them going at a constant level simultaneously. We're shifting. What we also know is that when we multitask, generally speaking, both tasks will be performed worse than if we tried to do them individually. So it's far better, cognitively speaking, to focus on one task and then do another, rather than trying to do them simultaneously. Of course, that's not practical all the time in everyday life. So we talk about multitasking, and we talk about the importance of multitasking, but our understanding of what that means is quite different from what our brain can actually achieve.

**Simon:** So, if drivers who haven't had an accident while they're on the phone - and there are obviously many of those - it's kind of believing that they're a bit invincible. They think "I haven't had an accident so far...". It sounds like they're not recognising the fact that they've missed so much of what's been going on while they've been on the phone. They don't perceive there's a risk, because they haven't been aware of the risk while it was happening.

**Gemma:** Absolutely – that taps into a really key thing in this whole piece of research, which is that around 80% of drivers consider themselves to be better than average at driving - which, statistically is possible but is also highly unlikely! Someone needs to be average, someone needs to be below average. So, if you're driving along and you haven't had a crash, you haven't been involved in any kind of incident, you tend to be - if you're distracted - unaware of how unaware you are.

What will happen is other road users - whether that be other drivers, pedestrians, whatever - will be compensating for your lack of awareness. So, in the absence of any kind of catastrophic crash - which you obviously become aware of - a distracted driver, generally speaking, will be unaware of how many near-misses they've had, how many times they've driven too close to the vehicle in front, if they've veered out of their lane - so it's kind of like a confirmation bias for these drivers; the majority think they're better than average, they've never had a crash, they've never had an incident whilst using their hands-free phone, therefore they're fine. And what's interesting is that same group of drivers - the majority - will comment that they fully support laws banning mobile phone use, banning handheld phone use, and many will even go so far as to say "any type of mobile phone use is really a danger and I can understand that, and other people shouldn't do it - but not me, because I'm better than average, and I've never been involved in any kind of incident".

So it's a real tension, because you present data such as ours, empirical data that looks at reaction times and eye movements and all of those kind of, if you like, geeky areas of research that can explain why it's a problem cognitively. But we're all human. So when we communicate that to people, it's quite common, in fact it's extremely common that there's a defence of that. You know, this is really inconvenient research. People don't want to be told that they can't multitask, because that's what we're told we should constantly be doing. And they don't want to be told that hands-free mobile phone use is any different to talking to a passenger in the vehicle, because this stuff is all pre-installed in their vehicles, and they're expected to use it by family, friends, employers or whatever. So there's a real tension between what we understand about how our brain works, and how we can communicate these messages in a convincing way, so that people can't just say "no, sorry - it's no different".

**Simon:** You mentioned passengers there - one of the most frequent excuses or challenges to this is "well how is phone distraction different to talking to a passenger in the car?". How is it different?

**Gemma:** Well it taps into what we said about imagery but also it's an issue of shared environment. So, a passenger within your vehicle can obviously see what you can see, they can see the challenges that you are facing and can regulate their conversation accordingly. By that, I mean hopefully they will stop talking if they can see that you're facing a particularly challenging driving situation. Or they might even help - pointing out a vehicle that you haven't perhaps spotted - whereas someone on the phone doesn't have the benefit of that shared environment, so they're going to continue to demand your precious attention. In fact, if you stop talking - which is a common thing; your brain will say I need to process this information, I'm going to stop responding to another task - if you stop talking momentarily on a mobile phone conversation, your conversation partner is likely to say "are you still there?" and demand your attention back to them, so, this issue of shared environment is a big difference in terms of the distraction imposed by a passenger compared to a mobile phone conversation.

**Simon:** Yeah. I want to delve a little bit now into what employers can do about this. This is one of the major driving at work risks for employers - and I don't think there are many employers that don't see it as a risk - they just don't know how to manage it effectively. And, I had Mark Cartwright on the show recently from Highways England talking about Operation Tramline, which is where the police roam the motorways in unmarked lorry cabs taking film of poor driving behaviour. And one of the most common offences that they see - whether it's truck drivers, van drivers or car drivers, because it catches offences in all of those different vehicle types - is phone distraction. And a lot of handheld phone use - so employers clearly need to set down rules, and that means putting guidance on mobile phone use in their 'Driving for Work' policy. What do you think that guidance needs to include?

**Gemma:** It's a really tricky one, because obviously, if you're driving for work, for a living, then your employer has a responsibility to keep you safe - but of course, it's kind of a shared responsibility as well. The first thing I always say to people making policy for workplace driving safety is that you need to be aware of that shared responsibility. Your employer needs to be very clear on their position on phone use - and of course, handheld phone use is illegal, so that position should be clear, but it can still be even more clearly communicated - if you are found to be texting at traffic lights, or checking your next drop, or doing any kind of handheld activity on a phone, you will lose your job.

From the flip side, of course, from the employee's side, it's your driver's licence. It's your job, so there's that shared responsibility. But in terms of what the policy needs to set out; whether there's a ban on any type of phone use - which many companies are now taking on

board - or if it's just a ban on illegal phone use - you would hope that the existence of the law would cover that, but as I've said, it doesn't.  As you've said, it demonstrably doesn't.

I think there's a lot to be done in terms of policy relating to education, so explaining why it's an issue, not just that it is, or that you'll get sacked if you're caught using it. There needs to be a level of accountability, but that needs to be explained and made clear to drivers - evidence-based education such as ours can help with that, but in other clear policy terms, we need an agreement between managers and drivers about what is acceptable and what isn't acceptable. If you have an all-out ban on any type of phone use by your drivers, then you as a manager should not have an expectation that your driver will answer a phone call at any time that you call them. You have to have a clear policy that says 'at this time in your working day, you need to be parked up and available'. There are big challenges there when we talk about delivery drivers, for example. They have multiple drops, and they need to get updated routes and information like that, so, I'm not naive to the fact that it's actually a massive challenge if we try to ban any type of phone use in this area - but individual companies must have a really specific, clear policy on what is and isn't acceptable, that is followed by all members of that organisation. It will sound really obvious, but we know from the Driving for Better Business survey that came out a couple of years ago is that there is a real disconnect between what management expect and what employees expect, and how that ties in with company policy.

**Simon:** Yeah. I've spoken to a number of fleet operators now who have introduced zero tolerance phone policies, and the most common argument for not doing it is that "our staff need to be contactable, we need to be able to update them". But most of the companies I know that have instigated a zero tolerance phone policy have been able to make it work. They have times when the drivers can stop and get updates. The drivers understand when a safe time to answer the phone and when to update is. And it doesn't impact their productivity if managed correctly. But I think the key thing in this that you've mentioned there, and the survey that we did, showed that 49% of senior executives expected their drivers to answer the phone while driving - and many of those had policies which told the drivers that they weren't allowed to answer the phone.

So it's so important that everybody in the company leads by example - if you've got the executives disrespecting the policy and phoning up the drivers, then the drivers have no respect for the policy either, do they?

**Gemma:** Absolutely. A company policy has to apply to every employee, and if there's even a whiff of the fact that senior executives are allowed loopholes, then you won't get compliance from other employees because it's a demonstration that the policy isn't effective and won't be enforced. So that comes back to another thing that we know from psychological research - you need a clear policy of course, but if that policy is broken by any employee, you need an appropriate approach to dealing with that. Because otherwise the policy doesn't work as a deterrent to doing what you shouldn't be doing. As long as there's a clear policy, and it's backed up by deterrents in the sense that "if you're caught doing this, there will be a consequence, regardless of who you are - the CEO or one of the delivery drivers - there will be consequences". But in order for that to happen, there needs to be a credible threat of being caught. If drivers know that there's no way of it being detected that they're sending a quick text, or they're answering a phone call from their manager and their manager said "it's okay, I won't tell anyone", then it's not going to work either. It's a real challenge. You need that kind of threat - which sounds strong - but you need a threat in order for deterrents to work, and that needs to be backed up by education. So as you're saying, those companies where they have got an all-out ban, and it is working, and drivers understand why it's in place and understand when they can stop and take calls, I would assume that that's because they've got a clear policy, and they've explained why. People want to know why.

**Simon:** The resources for drivers - educating drivers is a really good point. We've just produced something called the Van Driver Toolkit, which is a series of safety updates for drivers which are free to access for employers - and one of those safety updates is around mobile phone distraction. And it shows the consequences of doing it, there are some helpful tips on how to not do it, it explains - in very simple terms, in a very short piece of collateral - what the drivers need to know so they can make their own decisions, informed decisions, around that. Employers are free to download those and share them with their drivers, so I'll share the link to that in the show notes at the end.

So, we talked about the survey Driving for Better Business had done earlier, and something else that came out of that survey was that - and I was quite staggered by this statistic - 1 in 6, so 17% of those who drove for work - having surveyed over 1000 drivers; it was a professionally conducted survey - 1 in 6 of them said they'd been involved in an incident while on the phone to their boss or a colleague - so we've got the proof that this is quite clearly a problem for businesses. Now, many of those wouldn't have been injury collisions. But it just shows how reducing phone use can reduce the chance of even damage only incidents, which then disrupt the business and result in expensive damage repairs. I mean, that's another reason for businesses to look seriously at curtailing phone use while driving, isn't it?

**Gemma:** Absolutely. In terms of costs, of course. As you say, not all incidents will involve contact collisions, or they might and you've got damage of course. But there's also the level of social responsibility for companies. Of course the company wants to save money. Of course the company wants to keep their employees safe. But equally, they've got a social responsibility to keep other road users safe from their potentially distracted drivers, so there's a reputational issue as well, of course. You know, all of us who use the roads have this social responsibility to interact appropriately on the road network. Now, again, that might sound very naïve, but that's how the system ultimately has to work, and when it breaks down it can have quite catastrophic impacts of course. So yes, it's certainly in the interests of individual companies, as well as wider society, to tackle this problem, because we do know it's a growing problem; not just amongst people who drive for work, but amongst the general public. Self-reported phone use - handheld and hands-free - is on the up. It's increasing, and so are the number of police-recorded incidents that are attributed to distraction - so it's a real problem.

**Simon:** Yeah, it is. And we've seen that from our research as well, and as I say, the Operation Tramline footage that we've seen. Gemma, have you got any resources that we can share with listeners that might help them manage phone distraction among their drivers?

**Gemma:** Yes, certainly - because I'm based at the Open University, we've got an online learning platform that's entirely free, called OpenLearn and myself and my colleague Dr Jim Turner have created a couple of interactive activities that are freely available that sit on OpenLearn. These are evidence-based activities. They're gamified, if you like. The idea is, it takes about 10 minutes to complete. You go along and you experience distraction for yourself. In the first one that we've got, called 'Are You a Focused Driver?', you watch a very quick series of clips - some of which may contain a hazard - and you're asked to look out for those hazards. And at the same time, you receive a phone call from a very demanding friend who's giving you a shopping list of things that you need to remember. The idea is that you're engaging in a cognitively demanding task, as well as driving - as well as looking for hazards. You're then asked a couple of questions about that phone task, about what you remember, because we want to know how you perform on both tasks. And then you're asked about which hazards you notice and which you don't, and people are given immediate feedback, so they get a score for their phone conversation answers and they get a score for their hazard perception. It's been done by thousands of people. What we've found is that people tend to do well in one task or the other, not both. Which is entirely backing up the research

that we've done, and many others have done too, so it's a nice little fun and non-judgmental approach to education, and once you've completed the task, there are further links where you can find out more information. There's a video of me talking about research in this area, and again, explaining why it's a problem and why you might have just completed this and not done too well.

The second one we launched at the end of last year. It was called 'The Mobile Office Challenge' and this one might be particularly relevant to people who drive for work of course. The idea is that, obviously a lot of people drive for work, so their car does in effect become a mobile office. And in this one we were quite interested in looking at driver confidence that you've noticed all of the hazards, and that you've performed well in that phone conversation. Without giving too much away - you are put in the position, you're told that you're a wedding planner driving between appointments and you receive a phone call from a couple whose wedding you're planning, so that you can plan their wedding appropriately. At the same time, you need to look out for hazards, and then you're asked some questions along the way; how confident are you that you've noticed all of these hazards? How confident are you that you can meet your client's needs. Again, unsurprisingly, we found that people tend to do well in one or the other task. In this one, there's a nice distinction because you get to first complete this hazard perception task with a phone conversation, and then you do it without a phone conversation, so you can compare your own performance between being distracted and not being distracted. In terms of hazard perception and how well you do, unsurprisingly, those doing just the hazard perception task tend to perform much better. And then again there's more information and more links and FAQs at the end. The idea is that these are freely available, they've been adopted by various police forces who have used them as roadside education tools, for example. The idea is that it's explaining why it's a problem - not just that it is - and allowing people to witness their own distraction, which means they can't then say "yeah, but this doesn't mean me".because they have seen their results themselves.

**Simon:** Those sound fantastic. I've seen some of those myself and we've got them on the Driving for Better Business website, so I'll make sure all of the links to those resources are in the show notes, so listeners can access those and download them. Gemma, phone distraction is obviously one of the key things that employers and fleet operators have got to manage - I really appreciate you sharing your insights with us. That has been fantastic, thank you so much for being on the show.

**Gemma:** You're welcome, thanks for having me.

**Simon:** And thank you everyone for listening!

(transition)

**Simon:** If you manage drivers and their vehicles, and you face similar issues to those discussed in this podcast, there are links in the show notes to some useful resources on the Driving for Better Business website. And these are all free to access. If you enjoyed the conversation, please don't forget to hit subscribe - so you know when the next episode is released. And please also give us a 5 star review, as this helps us to get up the podcast rankings, and makes it more visible to others who might also find it useful. You can follow us - that's Driving for Better Business on Twitter, Facebook and LinkedIn. And most importantly, please help us to spread the word. All our resources are free for those who manage fleets and their employees who drive for work. Thank you for listening to Let's Talk Fleet Risk, and I look forward to welcoming you to the next episode.