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If you tend to find you are too cold in the office, it could be because you are not a 40 year-old man. According to a new study, office air conditioning often uses a standard designed to keep 40 year old men comfortable - but what suits their metabolic rates does not necessarily keep everyone else warm. So does the approach to the workplace temperatures need to be updated? BBC correspondent Audrey Tinline speaks to Dr. Boris Kingma and Max Fordham's Dr Neil Smith about the study's findings and possible solutions:

Audrey Tinline: Do you always get chills when you are in the office? Well there might be a reason why. The chances are if you feel the cold it could be because you are a woman or you are an older worker and that's because we all have different resting metabolic rates. Now a new study of what's called 'thermal comfort levels' has found it's time office temperatures were brought up to date. Dr. Boris Kingma from Maastricht University Medical Centre is an author of the new study.

Dr. Boris Kingma: If you look into the standard tables as an engineer or architect, if you want to determine the heat loads or comfort levels of the people of the building you are designing or going to renovate, those tables show a value that is actually based on an average male. And we know that for females it can be 20-30% lower.

Audrey Tinline: But it is quite difficult in most modern offices to make local changes if you are a huge open plan building like the one here at the BBC, we all have to accept this same air temperature I think whether we are men, women, young, old.

Dr. Boris Kingma: I think that is a consequence of the current standard. If we have a better view of how this metabolic rate of people differs and the implications that is has to thermal comfort then we can have a pin point better of the thermal demand of individuals and also have a more accurate thermal supply. And if you better balance thermal demand and thermal supply you have less energy waste. You don't have, for instance, in summer have to cool the entire building that much and locally supply cooling for those people that want that. I think then it is a challenge for engineers and very smart people to come up with very nice solutions to that.

Audrey Tinline: So there is some way to go then on modern office design?

Dr. Boris Kingma: Yes, definitely.

Audrey Tinline: Dr. Boris Kingma. Well Neil Smith is a partner at environmental engineers Max Fordham and he is one of those people that come up with smart solutions to office design.

Neil Smith: We want to give people more control over the environment in which they work. This is important for well-being and for satisfaction in your working environment. We encourage in the design of our buildings for some form of user control or user adaptability to their space, however small. So, you know, even the likes of turning a knob on the wall, to say, wanting the temperature to

go up or down helps. Opening a window, adjusting a blind, being able to move from a cooler space to a warmer space all helps in terms of health and well-being for occupants in buildings.

Audrey Tinline: But the way offices are going seems to be bigger and more open plan, much less controlled. You are lucky if you even sit next to a window sometimes with a blind you can control. Is this a trend where it is actually very hard for the individual to get any control?

Neil Smith: Yes it is and I think the key to very large open plan offices is to zone the office floors in manageable chunks, adjust the environment conditions, you know even if it's by one or two degrees which is possible and that helps. I mean you are right, it is when you are on a massive floor plate and you are far away from a window or far away from a wall it is difficult to see how you yourself can alter that environment. But even in those scenarios there are ways of doing that through the control system.

Audrey Tinline: So in terms of whether you are dealing with the large cooling of the whole building or individual zones, which ones are actually going to give you the best outcome in energy terms?

Zoning buildings is always going to be more energy frugal than keeping the whole building temperature the same because generally you find that most people are happier with a slightly warmer temperature that will follow the seasons outside than it being the same temperature all year round. So it makes sense for building owners to be able to vary temperatures from one area to the next. So you are not wasting energy by just trying to have a sort of single temperature that fits all. Where we possibly can with most of our building designs, if you can have some form of natural ventilation or even mixed mode ventilation where part of the year you can naturally ventilate the office floor for when temperatures are either for the summer or winter don't allow natural ventilation to operate then mechanically ventilate will heat and cool the building. These methods make the energy bills of the operators lower and improve the wellbeing of the users. So these little techniques that we're sort of looking to implement into modern building design to both benefit energy and benefit user health and wellbeing.

Audrey Tinline: And that was environmental engineer Neil Smith