

Behavioural Approaches to Policy
Policy Forum, Department of Premier and Cabinet, Government of Victoria

Professor Colm Harmon

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Transcript

Behavioural economics is challenging the traditional orthodoxy of rationality as the basis of decision making. For policy-makers facing challenges such as crime, obesity, pension/financial decision making or environmental sustainability, behavioural approaches to policy offer a potentially new set of tools.

On Friday 7 May Professor Harmon explored the influence of behavioural approaches to public policy at a policy forum for staff of the Department of Premier and Cabinet, Victoria. The discussion also considered the data needed for better decision making in public administration, and the evaluative processes to ensure reliable assessment of effectiveness.

Speaker: Colm Harmon (Colm)

Moderator: John Daley (John)

(Music playing)

JOHN: Thank you very much, Maria, and it's a pleasure to be here. For those of you who haven't seen much of Grattan Institute, we are an independent think tank, it's been going for about a year and a half with I'm very pleased to say substantial support from the Victorian government, as well as the Commonwealth government in terms of providing an endowment. That means that we can do our thing and work on a number of issues that we see as being of importance to public policy and hopefully contributing to national debates and national thinking and hopefully ultimately, national progress. We've got a number of programs running including in productivity growth, school education, energy, water and cities. But there's a couple of themes that cut across those issues and one of those is around behavioural approaches to policy. In particular, there is increasing evidence and increasing work, particularly out of the psychology disciplines, and increasingly out of the economics disciplines. I regret to say that my own discipline of political theory is perhaps a little behind on this. But nevertheless, a lot of work going on that says you know what, people don't make rational choices all the time, and indeed we can predict when it is that they're not going to make rational choices, and that has a lot of implications for our public policy because our kind of dominant paradigm for the last 30 or 40 years has been if people choose it, it's good. And the job of many policy frameworks is simply to give people the choice and the ability to choose the right thing and so long as we do that, our work as policymakers is done and we can all sleep in bed at night. And I guess these approaches are essentially saying life is a little more complicated than that and maybe we need to bring some slightly different perspectives. That's not to say that people should never choose, it's not to say that choice is not very important, it's just that life's a little bit more complicated.

So we were delighted that Colm Harmon agreed to come to Grattan Institute for a couple of weeks this year. Colm is a distinguished Professor of Economics and Director of the Geary Institute at University College Dublin. The Geary Institute is a fascinating institution which I'll leave Colm to do a little more talking about. I guess its closest analogy in Australia would probably be something like the Melbourne Institute, although you will see its research interests are slightly different, and particularly revolve around applying the discipline of economics to a whole series of social policy questions including things like education and welfare benefits and so on. So a fascinating way of looking at the world, bringing all of the tools of economics and all of the rigorous analysis of that discipline to some of these problems, and Colm has been a leader in his field in terms of bringing these kind of behavioural approaches and other economic approaches to these kind of very important social policy questions. So, we're delighted to have you with us Colm, we are marginally less delighted that we can't have your beautiful slides on the screen, but nevertheless at the point where we need a pretty graph I'm happy to kind of wave my arms and make that happen. And in the meantime, thank you for coming, and we're looking forward to what you have to say on behavioural policy and its importance for policymakers.

COLM: Thanks John, thanks folks for coming I appreciate it a lot, and yeah it's a pity you can't see the pretty slides. Let me just say something very briefly about Geary just to set the scene as to what I'm interested in, it's as John said a research institute at University College Dublin that was established back in the days when Ireland had money and the Irish government was willing

to invest it, and we're sort of on the go about eight or nine years now. I've been director for about five although I was part of the original team that put the funding proposal together to donors and so on to get the thing off the ground. As John said what Geary does is somewhat ... Melbourne Institute's a good reference point in terms of style and approach perhaps. There is a difference in the sense that Geary is in a sense brings existing faculty from the universities in Ireland and indeed overseas together around different problems. As I describe it, it's kind of anchored in economics although not uniquely so, so there's one departure point perhaps is that it's not just an economics institute. I think it's much better described as being sort of focused on quantitative social sciences. You know so that includes epidemiology for example, criminology, parts of sociology and social policy. A lot of the work is kind of big data sets and number crunching and econometrics and all that kind of stuff.

Our broad focus is around the microeconomics, so it's focus is on the micro-agent, individuals, firms etc. And on very, very big kind of public policy questions, although I think from a particularly interesting snag, in getting something off the ground one of the things we tried to do is well you know, places like the Melbourne Institute do exist and they do things wonderfully, and there's no point in us trying to plough that same field so let's look at areas, or look at things slightly differently. So the bringing together of those quantitative social sciences was one, but moving into areas like at the frontier of the disciplines, like behavioural economics was another, and I think it's reaped dividends if not just in terms of excitement of the work program.

So we work in kind of four main research areas, education and innovation we call it, health and behaviour, labour markets and kind of institutions and political behaviour. And they're pretty porous, I use them as kind of really just reference points, I'm going to talk about reference points quite a bit in this talk. But they are pretty porous, I mean people work between them, I mean I work in three or four of those areas at least, three of them, there's only four, I don't work in all of them. Our funding is almost 90% of it is kind of peer reviewed academic grants mainly from Irish, EU and North American sources, and we kind of cover a lot of bases from neuro-economics, which is amazing stuff where we have people running around brain scanning and ... well they don't run around with brain scanners in fairness, they kind of sit in brain scanners and get asked questions about themselves. We have a wonderful study of the student body along the juvenile tracking of the sort of first year freshman through to post-doctoral researchers, and a sub-sample of that are wearing devices and taking cortisol samples and we're able to map the things like stress levels to physiological responses to their stress levels, and look at ways in which these kind of people's episodic recall of things that are affecting their wellbeing, match up to their reporting of that and their physiological responses to that. So we're actually starting to incorporate, you know biological measures and psychological measures into models of economic decision making, and again I'll talk very briefly about some of that work as we go through this talk. Another big area is risk communication. Our health economics program is not really health economics perhaps as you guys might know it in terms of you know modelling, kind of pharma-economics or modelling health service delivery models, but rather it's kind of looking at behaviour and health. It's looking at why people make particular choices and why they do that. In terms of our work within the hospitals, we have what I call a lab that resides within ... UCD has three general hospitals kind of attached to it, and we have a social science research lab sitting within one of them. So example, horrible topic of colonoscopies, but we have this wonderful research program which is looking at the ways in which patients interact with that procedure. Don't want to know. But looking at the ways which we can improve it, and improve the process. And that has real economic benefits. I think the point that came up in a lecture we talked about last night, one final point to say yeah we are economists, I always describe it as like being Alcoholics Anonymous, hi I'm Colm Harmon and I'm an economist, and (laughter) if you find something like kind of 12 steps or something to kind of get through life. But our approach as economists is to examine questions with a very sharp focus on causality. I think that's what ... when economists talk ... get into areas that don't look like their natural territory, it's either just because they have this imperial nature as a discipline, or else it's you know our ... what we're adding to the issue is a sharper focus on the kind of putting a metric around the sort of size and shape of a particular problem, and what causes it. And in a sense we then need the other disciplines, we need also the other methodological approaches like qualitative research to get inside those issues. And I think Geary sits firmly in one part of that spectrum. So that's the sort of short lesson. I'll leave my fancy talk with Maria so she can kind of distribute it to you all at some point, when I get the fonts to work.

I think my take home message really is that in my view policy research and the things that you guys do for a living, is sort of under powered now in its understanding of potential issues and important issues of how people act and react to policy problems. I mean I think the key thing for me is, and this is a real problem for you guys at the coal face, is that I think the policy research environment can look to a lot of people as kind of pretty pedestrian and stable, and in fact it's racing ahead. The methods that people use in econometrics for example have raced ahead and have firmly rooted themselves in kind of experimental type approaches to uncovering results, and we'll talk about that today. Like I said we've just got into this world of incorporating psychology into our thinking. We've just got into this world of incorporating biological issues into our thinking. There's a huge class action for example going on in the US right now, looking at people who live in the flight path of JFK in New York who are using all of the methods I talked about, day reconstruction methods, episodic recall, health and physiological outcomes, to model the economic cost of their lifestyles. So once the lawyers get hold of these methods, then you're going to be behind the curve, and it's a very important thing for policy folks to catch up. So I think one of the things I'd like to see evolve here in Australia and every other place, is a sort of greater embedding of these methods into how policymaking decisions are framed, but also how policy researchers like me think about problems. And what's nice about that is that it creates a very nice two-way street between the two domains of work. It's essential that we understand the problems you face in delivering a program for our insights into these things to help reshape and redefine how you do it.

The other thing is that, lots of things I'm going to talk about seem kind of obscure, but they're all things that we can measure, and measurement is a kind of a constant theme of a lot of what I do right now. It might seem like we can't measure how someone values the present over the future, their discount rate, but we can, and we can do that in such a way that we incorporate in lots of different aspects of their behaviour. The other thing is all policy design needs appropriate and careful evaluation, and it's sort of a separate issue almost in some respects, but I'm going to blend the two, that evaluation design is an incredibly important thing, and you've got some terrific people in Australia working on this, and that's going to be a really important point. And that's very much the stuff that people like the Melbourne Institute guys do. And I'm going to focus on a little bit about the evaluation issues but more on the things that we can measure and things that we can kind of design in terms of policy, very focused on social issues. So please shout at me, interrupt me, ask me any questions as I go along, I would have been expecting that had I been standing up talking.

So I think the frontiers of social sciences in my mind right now, hit about five different areas. It's characterised by a much greater use and understanding of longitudinal data and its power. It was interesting talking to the head of ABS last night who was talking about kind of really getting some sort of serious longitudinal research going here. Melbourne guys have Hilda for example which is a terrific resource, and more of them, please. But longitudinal data can be very large scale big things, or they can be very frequently taken but smaller scale tracking type studies, and I'd encourage both.

The second is that we need greater innovation about how data's collected, merged, how administrative records are used. It's really we're at the point I think with the emergence of you know things like personal health records and so on, that the volume of data that's been evolved and gets used in policy design for social policy issues is going to be enormous.

Experimental research is absolutely key, I mean experimental in two ways, experimental in terms of let's try and think of a way of doing something and experiment with it, and secondly let's roll it out in an experimental design from an evaluation point of view. So I think experiment with your thinking, but also experiment with the way in which you do the work.

The wonks like me need to get involved in much more robust statistical methodologies, I'm not going to talk about them today, but I'm just going to flag it that I think the action that, for example, I'm involved in, you'll see it in the periphery, one of the things I'm going to address. I don't know why I'm waving at the screen (laughs) but the ... is about kind of overcoming deficits which might get in your way. So you want to do something like an early child intervention. Incredibly expensive to do on a very large scale, there can be ethical problems, you don't want

to do it on a normal scale, and yet you want to do something that's robust, empowered as we would say, to do a study. So do you need 1,000 kids or could you do it on 300 kids? You could do it on 300 if you had the right statistical methods to analyse the data and ensure that you get the right designs. So again it's very important, in fact critical, but not something that I'm going to address today. No hieroglyphics today. I have a talk at RMIT at noon if anybody wants to see the Greek letters in my equations.

And finally, greater interaction between the psychological, biological and social sciences. I mean the really cutting edge work in health economics is going to see clinicians and economists working together, I have no doubt about it, to address problems. But of course all alongside of that empirical work is that the economic theories are also evolving.

So let's think about why we'd want to do all that. Well I think these innovations are critical. Anywhere where you want to establish causal determinants, you need these approaches. I mean economists, for example, have tended to rely a lot on secondary data sources, we use the Hilda's of the world to try and get at some of these things. Now I think you know, what's been exciting over the last three or four years of my career, is we're actually collecting data for the first time. We're starting to kind of design new surveys and collecting information, we're designing new evaluation strategies. Let's think of what that can mean from a policy point of view. So we can get a better understanding for example of how the labour market works, if we could look at retirement decisions, health behaviour and utilisation of health services to promote wellbeing and in the workforce. Higher education decisions, I think of all decision, if you think of it from my point of view as an economist, why does somebody drop out of school? Well the sociologist will have their reasons. To an economist, they dropped out because they valued now over the future at a much higher rate. The reasons they do that are what we need to understand, but that's the fact, that's the bit that in a sense is the economists' contribution here. And the role of a policymaker is to figure out a way of changing somebody's valuation of the future, which is very hard without a deeper understanding of what they do.

We could have a better and deeper understanding of institutional determinants of economic outcomes, which is a very kind of overlooked area in economics. So like for example, cross cultural factors influence decision making, they influence policy framing and you know that I guess you've got a myriad of kind of departments of the Victorian government represented here, how you work and interlink is as important as to what your output is produced. And then a greater understanding for example of how we measure key economic constructs. I mean do we ... when we measure consumption or expenditure to use so we can kind of measure things like wealth or you know track inflation, what does the kind of question mean if somebody's asked how much did you spend in the last week, well is the week the last seven days? It's now Wednesday so it's the week to Wednesday? I mean what does that question mean when I ask it? And it turns out when you probe these kind of questions, survey design issues and so on become very tricky issues from that point of view, and very important 'cause it means you could be underestimating or overestimating all sorts of key economic decisions.

I thought I was going to kick off ... it works a little bit better in the slide show, with a very specific example. Does this makes sense to you, John, from a ...

JOHN: I'll draw the pictures.

COLM: Yeah, yeah (laughs). But in the couple of discussions and meetings I've had in the last couple of days I this comes out as a kind of thing that ... a nice way of anchoring some of these things. So a good example of a program that we're involved in, in Dublin is something called *Preparing for Life* which is an early childhood intervention scheme. He is actually going to draw them!

JOHN: I really can draw the pictures, here you go.

COLM: There it is (laughs). Fire ahead. So if we had age on the X axis, John, and vocabulary or you know something like a measure of literacy or function, one of the key important observations is that at the very early stage if you had high, middle and low SES kids, they're up to kind of age 20 months or 24 months, there's almost no discernible difference in their kind of

intellectual development, but by then they fan out and the differences would be ... one example I'm looking at here, would see high SES kids having a score of ... if the axis went from zero to 1,200, have the 1,200, and the low SES kids have a score of 200, and the middle SES kids, not quite in the middle, but in fact in the lower third at about 450, 500. So by 36 months, this thing has fanned out totally, and at the very early stage there's absolutely no difference. Ta-da (laughs) absolutely no difference very early on. So that captures very well I think the sort of problem that a policymaker faces, right. The whole notion of the early intervention literature is that you know if you capture it early, you stop those trajectories from forming. And quite which one you push everybody onto is a key point, you don't want to drag the high SES kids back either, but at the end of the day, that fanning out effect that we observe, really doesn't exist until about age two, and then by age three it's all gone pear shaped. There's a very rapid change in the sort of developmental trajectory with kids.

So one of the responses to this is to look at kind of intervention studies, and they've been done you know ... well they haven't been done a lot, but there's been in fact quite few of them, but they're a targeted kind of early prevention program instinctively comes to mind as the sort of thing that you'd like to do here. To provide sort of enriched environments for young children, and that's what is a kind of pretty common aim of early childhood intervention, that kind of providing this kind of protective influence to compensate for the risk factors that emerge, and that compromise the healthy child development issues.

So you know what do economists bring to that picture? Well I think they bring a couple of things. They bring for one a sort of a framework as to why this is important. One of the most cited, and I've certainly seen it in government (pause) there we go ...

JOHN: Keep talking the slide will come up.

COLM: I've certainly seen this in work that you guys have produced in this department, which is attributed to Jim Heckman, who won the Nobel in economics, and Jim actually has a co-appointment at Geary, so I always like saying that I'm his boss which is kind of fun. Having a Nobel Prize winner as your kind of minion is ... sorry I'm recording I shouldn't be saying that. I've said it to his face, he gets a laugh out of it. So you've got a kind of rate of return, an economic return and by kind of age, and essentially the Heckman curve as people kind of like to call it, like I said I've seen this in documents you guys have produced, it looks something like that. Somewhere in the middle is a horizontal line that is, in a sense, institutional rate of return, like an interest rate. So think of this as the market rate of return or some rate of return that you guys as policymakers expect from your investments. So the point of the Heckman kind of curve is that you know, you get really, really high returns from the kind of pre-school kind of period, you get some return from the middle bit, from schooling, if you like, high school, and that the further out you go in terms of the age post-school university, or in particular job training, you get very, very low social returns. Now I think you know this has been taken by lots of different groups as meanings. So the early childhood groups love it 'cause it shows these huge economic returns, the universities vice chancellors hate it 'cause it seems to suggest stop investing in higher education. And the job training folks despair because it kind of suggests that job training is almost like palliative care for folks. And unfortunately that's, and Heckman would agree, that this is in a sense an unfortunate over simplification that he's used himself, because it should be seen as a point in time response, ... if you took a static snapshot as to what happens then that's probably true. But the question really is, if you have a very well structured education system where you make the early investments and, particularly in a targeted way, so you rescue folks in that early stage, and you can kind of carry that through well structured, high quality primary and secondary school and on into kind of you know really well resourced universities and so on that have that structure, then that curve starts to shift. At every level the social rate of return to education can change, and my lovely assistant has just drawn this beautifully. So in a sense by making the early investments, you've said in kind of a motion sort of an effect, and the butterfly flaps his wings and the thing pushes out. And that's what an economist, I think, brings to the story, that's the sort of in a sense, the ultimate productivity enhancement effect. So there is a real return and ultimately it's about productivity.

I talked a little bit yesterday about a wonderful document I think you guys could get a look at which is the cabinet office in the UK produced something called 'Getting on, Getting Ahead',

which was their white paper on social mobility, and a group of us were brought in as kind of expert witnesses almost to sort of review that proposal by the government folks, and you know flown in from all over the place, sat in a room and asked us to rip this thing apart. One of the things we all ... over a two-day period we sat down and the first thing they said was you know, early childhood, pre-school, job training, we're going to do all this stuff over a life cycle and the aim is to improve inter- and intra-generational mobility and the ultimate aim is productivity of the economy. And all the economists in the room went oh you're over-stretching completely. The education stuff's great, has its aim in itself, stick with that, don't worry about it, stop making this jump to this knowledge economy stuff which we find hard to take. But they did it, and then they did it on the basis of this kind of structure, that by ... you can kind of deal with a bunch of problems now that are kind of in a sense current generation problems, but by ratcheting it upwards you get this shifting out, and if you make parents better parents then the kids will become much more assured, much more likely to see education as a good thing, much more likely to value the future over the present, as they grow older. So you deal with a sort of an intra-generational effect, but in doing so you create this inter-generational mobility. And that ultimately pushes the kind of production possibility frontier of the economy out, if we buy this kind of knowledge economy, innovation led economy argument.

JOHN: Colm, if we try and make that a little more concrete, I mean I wonder if you might talk about the kind of early intervention program that you've got running in Ireland and, which I guess has had some slightly unusual results in terms of not being what we'd necessarily expect, but a good illustration of this.

COLM: Yeah delighted. So the logic as we've said is that it's much harder economically and indeed biologically to fix these problems later. So the idea of the intervention programs is to fix that. So the *Preparing for Life* program is a community led initiative, it was sponsored by the philanthropic group, Atlantic Philanthropies, whose founder lives in Brisbane most of the time I think, and contributes a lot to the Queensland economy for all I know, and the Office of the Minister for Children back home. And essentially *Preparing for Life* is a school readiness initiative. This is a community of north Dublin called Darndale. Darndale is everything you could imagine about a sort of a deprived community, with two exceptions. One is that during the boom period it got left behind, but what didn't change during the boom, and that's a common characteristic of a lot of pockets of deprivation in Ireland, the boom had a great effect on big chunks of Dublin or Cork or something, but left lots of places out of the picture completely. But what didn't change is that the ethnic composition of Darndale didn't change, so unusually 'cause it's a relatively well settled, community housing kind of estate, it didn't have a lot of spare capacity to absorb relocated folks who arrived in the country and were given social housing. So it's pretty Irish if you want to call it that. And secondly as the boom sort of left it behind, so it always had much higher unemployment rates relative to the rest of the economy, much higher levels of teen parenthood and various other things, which meant that the school readiness was a problem. Kids start school at age five and we've just been taking as part of the baseline study for this work that the sort of measures of school readiness that have been these scales, and the average school readiness if you like of the current cohort, is about age three and a half. So these are going to school at five with sort of reading ages that are much lower than that, and therefore you have this problem, that fanning out has happened and you have this real catch up to play. And so that meant we have to sort of rectify that. So the intervention program essentially takes the folks, the mums to be, as they are to be, so 95% of births happen in one maternity hospital in Dublin. So when they come in for their 12 week booking visit, one of our researchers follows them around with a netbook or you know as they go from physician to physician doing their various things and talks to them about the program and tells them all about it and recruits them into the program and the PFL participants of which there's about 200 altogether, there will be, is essentially all pregnancies in this area over an 18- to 24-month period. We're looking to get about an 85% acceptance rate into the program, and so far we're on target for that. So we started recruiting about 18 months ago, the first births are about nine months old now and they're still having babies, over the next six months will be the last of our PFL babies. At the hospital, they essentially hit a button on the computer, and they're randomised into two groups. A blue and a green, they don't know what that means. They're told about the experiment and that it is an experimental program, and all they're told is congratulations, you're in the blue group, or congratulations you're in the green group, and that sets in motion a process. So half of them are in the blue group, which is a low dosage group,

and what that means they get facilitated access to enhanced pre-school at the appropriate time, they get a lot of kind of literature, public health information and so on, they have a contribution of about 100 Euros in educational materials, toys, videos, various other things, and there's a community support worker that's available to them there. So that's in a sense an enhancement over existing welfare provisions, public health provision and so on. The green group are the high dosage group. They get all of the above, but in addition they get a home visit by a mentor who's a trained developmental psychologist, and it's between a half an hour and two hours a week, so you know, that's why we don't tell them which group they're in, 'cause you're going to get a two hour visit from a nose nurse. But the home visiting from the mentor is the intensity difference, and there's also a group parent training program, about eight hours of the year for the first three years. So the home visit, the weekly home visit and the access to a group parenting program are the two differences. We start sampling and taking data at sort of T minus six months, and we follow that through to age five when the kid starts school, and the key outcome at the end will be the readiness score, how has that changed in the experimental group. As you notice in a sense we've got a dosage experiments, and we also have another community in Dublin which is matched statistically to this one on demographics, and we collect baseline data from that community, so you think of that group as being in a sense the status quo. It's the welfare only standard provision. The low dosage in a sense is a layering on top of standard, and the high dosage is an additional, and very substantial, layering on top of that.

As I said that's the nature of the sort of intervention. The focus is on five main areas in the high dosage material. So pre-birth, there's a lot of mentoring through pregnancy, things you should be doing, things you shouldn't be doing etc. Then after ... right the way ... then nutrition and ... and good health behaviour by parents, rest and routine and you know good parenting skills, cognitive and social development of the child, and the maternal support structure, looking at the nature of that. And they're, in a sense, the five areas or domains that the group works on.

End of recording