Exercise motivation interview: Reporter – Hayley Dunning (**HD**) and Researcher - Wendy Rodgers (**WR**)

**HD:** You measured the time it takes to get into exercising in terms of people's motivation over an amount of time. How did you measure motivation?

WR: We used an instrument that assesses what's called people's 'self-determination' for exercise. It comes from a theory called 'self-determination theory' that proposes people can do things for a variety of reasons that range from very extrinsic pressure; 'I have to' kinds of motivation, some call it external, to very internal or more self-determined motives, the highest point being intrinsic 'I really like it', and just below that 'I think it's important', 'I value it', 'it's part of my identity'. It measures the extent to which people endorse all those kinds of motives, and then through statistics we can see how well the different categories of motives associate with their behavior. What we want to see is that the more self-determined motives are the things that are more primarily associated with behavior, because that's associated with longer persistence.

**HD:** How many people did you study in this, did you study them over a period of time or did you just take a cross-section sample of people?

WR: The particular paper you're talking about is actually a secondary analysis of five other samples. So, one of the samples of regular exercisers had over 1000 people in it. Then, the five studies that looked at initiate exercisers, so these were people who were previously sedentary who joined a program to become more active, they ranged in size from about 30 to about 300 I think. And we studied all five of those longitudinally, for different lengths, so the longest one was 6 months, which is how we came up with the 'it takes longer than 6 months', but there are 2 or so in there that were around 12 weeks, which is 3 months. So the shortest was 10 weeks and the longest was 6 months: there was one 4 month, so that means there was one 3 month. They were all longitudinal analyses, with cross-sectional you can't come to these kinds of conclusions; with cross-sectional you have to follow the people over time to see how much they change as we're going along.

**HD:** How do you define people who have been long-term exercisers?

**WR:** Those are people who have been involved in exercise or physical activity, so it could be a sport or dance or something like that, regularly for a minimum of 3 times a week for a minimum of one year. But the average time of our people was 8 years I think. You probably know someone like this, who has exercised their whole lives, then there's the

sporadic ones who do something on and off, then there's the sedentary ones, who never really get into it.

**HD:** Do you have any statistics on how many people in Canada or in Alberta fit into these kinds of categories?

**WR:** We know that in Canada about 60% of Canadians are physically inactive, and we know that around 30%, but a little bit less than 30% reach guidelines for physical activity. So that's one of the reasons why we are really concerned with improving physical activity levels because physical activity is so associated with other positive health states, and physical inactivity means 60% are inactive, which means they're probably not doing much of anything, and there's about 20% that are doing a little, and fewer than 30% are doing enough.

**HD:** So the results of your study are that it takes more than 6 months to be positioned across the spectrum of motivation that associated with long-term exercise. What do you recommend for people who are going into exercise, what advice do you give them: stick at it?

WR: Yup, basically that's about it, there's a little bit of a belief system that's been put forward by older research that by the time you've stuck with a new exercise that within 6 months you'd really be in the maintenance stage, so you'd be ready to just carry on, and don't really need to pay much special attention or do anything special about it. So, one of the strengths of our research is it's not just one study, it's 5. It shows that even after 6 months, motivationally speaking, what we have are people who are still in endorsing less self-determined motives, so more extrinsic reasons, 'I should', 'I have to', 'because somebody made me'; these kinds of reasons, more strongly than we would like. And those reasons are more strongly associated with their behavior. So everybody goes and exercises sometimes because they should or they have to or because somebody made them or they have an obligation, everybody does that, but in what we call the 'lifer' exercisers the main reason that they exercise most of the time, what's most strongly associated with their behavior is the intrinsic reasons, 'because I value it', 'because it's important to me', 'because it's part of my identity', those kinds of reasons. And we're still not seeing those kinds of reasons endorsed highly enough even after 6 months.

So if you're just starting off exercising, I would say for probably up to year you're going to be talking yourself into it a fair bit, it's going to take a while, you're probably still

going to have some lapses, where something happens, you know exams, holidays, you hurt yourself, anything can happen, too much work to do or something like that, and you fall off, it's going to be hard to get back going again and you have to expect that and people think they're going to get to the point where they love exercise and it's going to be easy, and they'll really miss it while they were having their exams and be anxious to go back, probably not! You're going to have to talk yourself into it, try hard, I would say for at least a year, but we don't have enough data to know, so we don't really know how long it takes, just that it takes longer than 6 months. Which is a novel finding, because most people would say 6 months is good enough, we would say not, you've got to keep working at it.

So yeah, just expect to work at it, for possibly up to a year.

**HD:** Do you have any plans for follow-up studies to see how long it takes?

WR: Based on this we'll probably do a lot more longer-term follow-ups of our study participants. So there's quite a large research group because it was 5 studies, it was myself and some colleagues from the University of Western Ontario, mostly. We do quite a lot of studies where we bring people in and teach them how to exercise, and they're usually with us for a training program of 10 or 12 weeks: the longer term studies the 4 month and 6 month ones are a little more rare. But even after that we probably need to be checking back in with the people every 3 months or so up to 1 year or 2 years even, to see what's happening to them motivationally. The risk is if we keep our gaps too big that they'll fall apart and we'll lose them before we do the follow-up. And the ones that turn over to those more internal motivations more quickly probably don't need to hear from us as much, so it's finding that balance. But we'll definitely be following people for longer.

**HD:** Do you have anything you'd like to add?

WR: I'm glad you guys are interested, because people that are right around 20 years old, that's a nice time to start building on those skills and to not be discouraged, because students also have a very up-and-down schedule where it's alright for a little while then it's terrible for a little while, and just understanding that it's going to be hard to come back from those things, but come back, because it's important for their long-term health. We say that this is the period when you are gathering life skills that are going to enable you to carry on later. SO encouraging them as much as possible is important I think.