TRANSCRIPT OF PROCEEDINGS

THE HON JULIA GILLARD AC, Commissioner

THE ROYAL COMMISSION INTO EARLY CHILDHOOD EDUCATION AND CARE

WEDNESDAY, 25 JANUARY 2023
AFTERNOON SESSION

This transcript is intended as a guide only and as an aide memoire with respect to the audio-visual record, which constitutes the official record of the hearing on 25 January 2023

SARAH ATTAR, Counsel Assisting

< HEARING RESUMED AT 1.31 PM

COUNSEL ASSISTING

I call Professor Sharon Goldfield.

< PROFESSOR SHARON GOLDFELD AFFIRMED

COUNSEL ASSISTING

Uh, Professor Goldfeld, are you a qualified paediatrician and public health physician?

PROFESSOR GOLDFELD

Yes, I am.

COUNSEL ASSISTING

Uh, in 2003, I believe you were r awarded a PhD from the University of Melbourne.

PROFESSOR GOLDFELD

That's correct.

COUNSEL ASSISTING

Uh, do you also hold a graduate diploma in epidemiology and biostatistics along with a medical degree from Monash University?

PROFESSOR GOLDFELD

I do.

COUNSEL ASSISTING

Are you a fellow of the Australasian Faculty of Public Health Medicine and the Royal Australasian College of Physicians?

PROFESSOR GOLDFELD

I am.

COUNSEL ASSISTING

Uh, is your present position Director at the Centre for Community Child Health at the Royal Children's Hospital in Melbourne?

PROFESSOR GOLDFELD

Yes.

COUNSEL ASSISTING

And I believe you've held that position since 2019?

PROFESSOR GOLDFELD

Correct.

COUNSEL ASSISTING

I believe you also hold various other current uh, roles, including theme Director, Population Health and co group leader, Policy and Equity at Murdoch Children's Institute?

PROFESSOR GOLDFELD

Yes, that's correct.

COUNSEL ASSISTING

Uh, you're also a Professorial fellow at the University of Melbourne?

PROFESSOR GOLDFELD

I am.

COUNSEL ASSISTING

Is it fair to say you have a longstanding history of involvement with child health research?

PROFESSOR GOLDFELD

Yes. That's fair.

COUNSEL ASSISTING

You've been the recipient of several awards in relation to your research, including the Rue Wright Award for best community child health research. Is that correct?

PROFESSOR GOLDFELD

Yes, it is.

COUNSEL ASSISTING

And you've been invited as an expert to participate in a range of professional and government advisory groups?

PROFESSOR GOLDFELD

Yes.

COUNSEL ASSISTING

Have you also published over 171 peer reviewed original manuscripts?

PROFESSOR GOLDFELD

Yes, I have.

COUNSEL ASSISTING

And have you presented widely on your work both nationally and indeed internationally?

PROFESSOR GOLDFELD

Yes, I have.

COUNSEL ASSISTING

Uh, is it fair to say that your research background has been informed by your unique expertise as a paediatrician, a public health practitioner and policymaker?

PROFESSOR GOLDFELD

Yes.

COUNSEL ASSISTING

We'll come back to your work at the Royal Children's Hospital in Melbourne in a moment, but is one of the research projects that you are presently involved with called Restacking the Odds?

PROFESSOR GOLDFELD

Yes, it is.

COUNSEL ASSISTING

Uh, and have you provided a written submission to the Commission along with several attachments?

PROFESSOR GOLDFELD

Yes. I have

COUNSEL ASSISTING

Feel free to refer to those materials if you need during the course of your evidence today.

PROFESSOR GOLDFELD

Thank you.

COUNSEL ASSISTING

Before we come to dive into the work done by Restacking the Odds, is there a large body of literature in the fields of both child development and early childhood education and care?

PROFESSOR GOLDFELD

Yes, there is.

COUNSEL ASSISTING

And are there a large number of studies that have been conducted mainly overseas in this area, but some in Australia?

PROFESSOR GOLDFELD

Yes, that's correct.

COUNSEL ASSISTING

And are you familiar with that body of literature and also with many of those seminal studies?

PROFESSOR GOLDFELD

Reasonably familiar,

COUNSEL ASSISTING

Does the literature and, and those studies consider what has been shown to be effective in early childhood education and care when it comes to quality of programs along with duration and hours and over what amount of time?

PROFESSOR GOLDFELD

I think that's a question that needs to be considered more wholly, cause I think the research is variable and it's quality and it's precision in all answering any or all of those questions. All of those comments.

COUNSEL ASSISTING

Perhaps, just as a base proposition is there literature in the, in the area that considers what is quality?

PROFESSOR GOLDFELD

Yes. I think there's a broad range of literature that considers the quality and exposure issues for children early childhood education and care. But as I said, it's robustness is variable.

COUNSEL ASSISTING

Yes. And that's something that we'll speak about throughout the evidence today, particularly around the work that Restacking the Odds has done with respect to our National Quality Standards. Before we come to that though, is there any consensus in your view on any key principles when it comes to early childhood education and care?

PROFESSOR GOLDFELD

Um, I think there are some key principles around what's important. Um, and this refers to the work we've really been doing and Restacking it's quite simple really it's um, is there sufficient to be able to meet the needs of the population? Is it of the highest quality based on the evidence that we currently know and our children getting sufficient exposure? And I think while the answer to that might be somewhat variable, I think the principles behind each of those are quite clear

COUNSEL ASSISTING

Generally then, is it fair to say that there's consensus that early childhood education and care is important?

PROFESSOR GOLDFELD

Yes. I think there is consensus on that.

COUNSEL ASSISTING

Uh, and that early intervention is most effective

PROFESSOR GOLDFELD

Yes, of which is broader of course, than just early childhood education and care,

COUNSEL ASSISTING

Uh, against that, that background and your considerable experience with the various literature and studies why the need for Restacking the Odds and what is it?

PROFESSOR GOLDFELD

Um, it's probably worth if I, if I may to start a little bit broader and bring us down to Restacking the Odds. And the, the real question on the table is, and I think this is a particular issue for Australia is how do we ensure we have equitable outcomes for children?

So we already know by the time children start school, that is by the time they're five, but they already have inequitable outcomes. So that's preventable inequalities and that's been shown through the Australian early development census. We've sort of had tram tracks of the differences between the highest and lowest income areas since its inception in 2009. And then if you look at grade three and NAPLAN results, those inequities, in fact, don't diminish and sort of get worse over time as children progress through school and those lead to poor adult outcomes and that's bad for us as a society.

And so the question on the table is what can we do so that kids are what we call kicking goals by the time they get to grade three. So if you are engaged in school and doing as well as you can, you actually have a different life trajectory to those children who don't. And then the question on the table is what can we do to actually make a difference for those inequities?

And what's become clearer and clearer is that there are no single interventions, even though we are going to be talking quite a bit about three year old preschool and early childhood education and care, the reality is none of these single interventions on their own are going to address that equity gap. And so the question is what are all the things that we need to bring to bear? And we call this idea stacking the sorts of things we need to consider at the child level, the family level and the community level that when all brought to there might be able to address that equity gap.

And that's how Restacking really started its life, which is trying to understand that it's built on the work of James Heckman, who's a Nobel prise winning economist who spent a lot of his career actually showing the benefit of early intervention. And in particular focus on some of the work I'm sure you've been referencing around early childhood and um, early childhood education and care and preschool, but his more recent work looks at human capital and this idea of dynamic complementary or what we would call mutual benefit.

The idea that if you go to one, exposed to one service and then the next service, they should actually amplify each other and create mutual benefits. Such that one on one is three, rather than one on one is two or sadly what we see, one on one is sometimes a half. And that idea of being able to stack and create mutual benefit is really behind Restacking the Odds. And we said to ourselves, if kids are going to sort of kick goals, by the time they get to grade three, what are five things we might get right?

And you can imagine there's probably 55 things you could put on the table, but we just said five things taking into account. This idea of continuity of service exposure. So antenatal care, early childhood education and care, and the first three years of school, if you like a kind of universal exposure for children and parents, and then what targeted things might we do that would particularly address equity for which we felt there was reasonable evidence base. And that includes sustained nurse home visiting built on our universal maternal child health or CAFHS system here in South Australia and parenting programs again, for which there is a reasonable evidence base.

And as I mentioned previously, the kind of triple bottom line we put behind Restacking was what are the kind of metrics we could use to drive the system based on, is there enough? Is it any good and do the right children come with the understanding that really, we were unable to describe that in most services across this country.

So whilst we had some great data say through the Australian early development census, the idea of what services should actually do next, that will take them on that pathway towards those outcomes is quite opaque. So this was an idea of putting lead indicators in place indicators that would help systems and services understand what they could do next. And that's what we've been doing with Restacking the Odds.

COUNSEL ASSISTING

And has some of that work particularly surrounding, well, first of all, what do you mean by lead indicators?

PROFESSOR GOLDFELD

So in, in the way we think about it, there are kind of lag indicators, those that are slower and longer to change. And for example, the Australian development census is one of those. It is a slower moving indicator.

Lead indicators are those that go a little bit faster and they kind of tell us ahead how the system is actually tracking. And those are the sorts of indicators that you can change more immediately. We're particularly interested in these indicators that a service could stand up and go, ‘Hey, what could we do tomorrow that's different from today?’ that we can be pretty sure is taking us on a pathway to improving children's developmental outcomes and to date that's been very difficult

COUNSEL ASSISTING

Can we dive into one of the most difficult of those areas? And that is what is quality or as you put it, is it any good?

PROFESSOR GOLDFELD

So we've done a fair bit of work across all five of those strategies, but I know we want to talk particularly around early childhood education and care today. Um, but we've actually asked

ourselves that question for all five of those, because we've been looking for indicators that tell us about quality for all five of those with, with varying success.

I have to say in the early childhood education and care space we particularly focused on the national quality framework because of course that exists and there's been a huge amount of work by some very expert people to draw that together. And as you would know, Australia's one of the few countries around the world that actually has an accreditation system for our early childhood education system across Australia, which we don't have for, for example, our education system, which is interesting in and of itself.

COUNSEL ASSISTING

Can we pause there and can I ask you to provide an explanation for those who are unfamiliar with what the National Quality Standard is and how it fits within the National Quality Framework?

PROFESSOR GOLDFELD

Um, so essentially the National Quality Framework was designed to give services, and the standards that sit below it - so it has a number of areas of interest and they include such things such as the educator child relationship, the ratios the health, the way the health system, the health of that childcare centre, for example, sanitation, all those sorts of things, so there are various kind of standards that sit in there; and services are obliged to be able to consider how they're doing across those standards and to monitor themselves.

But in fact, what the Australian quality standards or quality association is able to do is actually come in and externally review each of those in a service and to give a service what they call accreditation. And this is very important because it helps services think about their own quality and what they're doing. It helps create a more objective view of how that service is doing, and it helps parents understand how is that service doing?

Um, when objectively measured, there are some challenges because of course that service only gets accredited maybe every three years. And so the owners really is on that service to consider its own quality over time. So that framework includes all of those standards related to the educators, themselves, their relationship with the child and the way they actually deliver that service.

COUNSEL ASSISTING

In essence are the National Quality Standards, part of what we call the National Quality Framework that provides a national approach to regulating, assessing, and, and trying to make quality improvement for early childhood education care in, in and across Australia?

PROFESSOR GOLDFELD

Correct. And I, I think one of the challenges is the what you've mentioned there in terms of the quality improvement, because it is a quality improvement system that relies very heavily on

services, really improving themselves because objectively people only come intermittently. And I think therein lies the challenge of how do services actually do that in a way that they have their own sense of control of that.

So not that someone's going to come in and measure this, but actually we care about this. We have the data regularly, we know how to use those data. And we use those data to look at both quality, what we are delivering. And the other thing which I think is really vital, which is accessibility are people actually coming

COUNSEL ASSISTING

When you speak of people coming into assess a service, by that do you mean that the states generally in Australia have regulatory bodies, which periodically may attend a centre and conduct a, an assessment as against the National Quality Standards?

PROFESSOR GOLDFELD

Correct.

COUNSEL ASSISTING

Are there seven broad areas in terms of the National Quality Standard or categories?

PROFESSOR GOLDFELD

Yeah, but I hope you don't, I don't remember them all.

COUNSEL ASSISTING

I won’t ask you, I'll list them and you can give us a little bit of a layperson's description. Is the first one educational program and practice.

PROFESSOR GOLDFELD

Yes.

COUNSEL ASSISTING

Uh, we've heard the word pedagogy this morning already. Uh, what does that word mean?

PROFESSOR GOLDFELD

It's a really interesting word. Um, and I'm not an educationalist, so I'm not going to try and explain it from an educationalist point of view, but essentially it's the kind of framework or paradigm that an educationalist will use in order to be able to deliver some sort of program of interaction with a child.

And most of us think about it in the way of schools and the way that just learn, you know, how you're going to teach children in a way that has a theoretical construct behind it. And then a way of kind of operationalizing that so that the teacher knows how to engage with the child, knows how to teach literacy, for example. And it's exactly the same in these early years. although I think the theoretical constructs that drive it have a developmental focus and that there are, I think probably mixed views about how that actually looks. Um, and you'll probably hear that throughout the and as I said, I'm not a I'm not an expert educationalist, I'm a developmental paediatrician, but I think it is essentially the scaffolding that educationalists use to be able to deliver quality early childhood education care to children.

COUNSEL ASSISTING

That's so that's the first area of assessment for the National Quality Standards. Is the second children's health and safety, and what's being assessed there?

PROFESSOR GOLDFELD

So that's the kind of basics, you know about whether the service itself is delivering a hygienic service. Um, are they actually considering how to manage outbreaks of certain sort, you know, gastroenteritis, for example, COVID was a good one. Um, are they considering other sorts of things such as immunisation for children? Are they considering when they should ring a parent about Panadol vs. bring, take them home, all of those sort of health and hygiene sorts of issues.

COUNSEL ASSISTING

The third is physical environment.

PROFESSOR GOLDFELD

So that's the physical built environment. And within that, there are sort of rules and regulations about the amount of actual size of rooms and the number of children that can be in that right through to the way the playground should be established, aet cetera, to, to provide, I guess, the best sorted environment for children's development.

COUNSEL ASSISTING

Uh, I'll ask you to describe for us, what's being measured with respect to number five, relationships with children, and number six, collaborative partnerships with families and communities.

PROFESSOR GOLDFELD

Um, so the relationships with children, which I think is a really interesting one, which is essentially the educationalist ability to be able to connect with a child in such a way that they're actually I guess, transmitting things to them, if that, if I can use that word, but it's a, two-way

when it's done well, it is actually two-way and it is actually at the heart. I think of good pedagogy. I'll use that word for the moment, because it's really about the skills, one needs to not only be able to have the knowledge of learning, but it's ability to be able to connect with a child so that that child is actually part of that learning process. And often I think there's a kind of one-way view of it. Um, the educator, you are the child I'm transmitting to you, but it's actually a two-way transmission. The child is learning. The educator is working with that child and that, that relationship and their ability to be able to do that we have found is highly predictive or predictive in research projects that have been done to date of how kids actually end up developing. And that's not surprising is it?

COUNSEL ASSISTING

That ties in nicely to where I'd like to focus on now in that has Restacking the Odds conducted some research, really looking at the National Quality Standards we use here and having a look at them as against the national and international literature and studies to ascertain, which have the most robust evidence for child development.

PROFESSOR GOLDFELD

Yes. And I, and I think we did this not suggesting that all the standards don't have a role. Cause I think that would be unfair cause of course they do. If you're going to, you know, all those aspects are important, but we were particularly interested in the ones that are most associated or where there could be some research that were most associated with children's positive developmental outcomes.

And they were around issues such as you know, where there is some evidence about the ratios. I mean, how many children there are to an educator, the qualifications of that educator, that relationship and the sorts of partnerships, aet cetera that can be formed both with the family and also with the community. That's not to say others don't matter. And I know leadership is one of those standards it's just looking at, it's simply just looking at the evidence. One would imagine out of all of this and hopefully going forward, filling some of those research gaps will be important.

But I think it's interesting that there is this opportunity to shine a bit of a light on those standards are one, four and five without necessarily moving everything. But recognising that a service, I guess if it was really focusing on the sorts of areas that were most likely to be associated with child development, those would be the ones we would start with.

COUNSEL ASSISTING

And just so we've got them all in the forefront of our minds the NQS assessment one is education program practice. Number two is staffing arrangements. And number five was relationships with children.

PROFESSOR GOLDFELD

It's one, four and five.

COUNSEL ASSISTING

Oh thank you. Uh, we could spend a week on the work that Restacking the Odds has done and, and I commend anyone who is interested to peruse the material that Professor Goldfield has provided with the submission but to use the time wisely today
I'm going to ask you to help us try and understand and tease out from some of the literature what we know works when it comes to those three, three main areas that you focused on in terms of educational program and practice staffing arrangements and relationships with children.

PROFESSOR GOLDFELD

Yeah. Um, I think one of the things that's probably worth starting with is that a lot of the research we looked at is very what we would call associational research. So it's not, these are not trials that have been set up and tested one thing over another. So what we are doing is saying these are the sorts of things that we think will make a difference, but essentially you'd need to do trials to actually sort it out.

I'm a bit wary of drilling too much into each of these because I'm not a specialist in those areas. My specialisation is really thinking about how these each of these areas circle back to children's learning and development and the engagement of children and their families into a quality service.

And so I'm not going to drill into, you know, one pedagogy vs. another cause that's, that's not, I'm not going to be able to deliver on what you need in that. But what I will say is it makes perfect sense. And this is I don’t know if we're going to talk about this a little bit later, cause we've done this work, looking at some of the barriers to children actually coming.

What I will say is that parents have a really good sense of relational practice. So in other words, parents will come in and want to feel like that educationalist has a relationship, both with them and with their child. And that's actually at the heart of everything is absolutely the heart.

The second thing at the heart of everything is the qualifications of that person. And I don't mean ‘big Q’ qualifications, whether they've got a PhD, but whether underneath all of that, they understand child development and learning pathways so that they can both meet that, that child's learning needs and progress it in a way that actually makes sense. So to me, they're the main things. And then how one supports one staff in doing that of course is a process issue.

COUNSEL ASSISTING

If we can focus for a moment on some of the key aspects about what the literature you're familiar with can tell us what generally does the evidence say or how strong is it with respect to the ability of educational programs and practice to impact cognitive and social emotional child outcomes?

PROFESSOR GOLDFELD

Oh, this is such a vexed question, and it's a vexed question because and you'll see this from the own, your own literature review that you had commissioned, it's kind of variable in quality. So there's quite a lot of literature. There's two sorts of literature. There's one sort of literature that does this, what I call association literature that shows this kind of predictive ability. So this kind of exposure to this amount of quality leads to this sort of gain as an association, it seems to be an association, but that's very different to say some children get this and a random other children get this and we follow them over time, which is what we call randomised control trials.

So there've been some very neat randomised control trials particularly in the United States, but they've been small. And once you start taking things to scale, this is where the wheels tend to fall off. Um, as we, as they do with most things we try to take to scale. And so what we find is that even though those small, very intensely research programs seem terrific and fantastic taking it to scale has just not occurred. And every time it has been taken to scale, we're just not seeing those same results. And that's because the, attention to implementation when you scale things often falls away and people start making shortcuts and we don't have the same structures to support the fidelity. Um, and, and what we see is what we call the voltage drop off. There's a very nice book, if anybody's interested by quite a famous economist now um, John List about this idea of the voltage effect and what happens when you try and take things to scale and things like the Perry Preschool and the Abecedarian, great examples of what happens when you start to take things to scale.

COUNSEL ASSISTING

Could you give people an idea as to what the Perry project involved? I believe that was early 1960s in America in a particular social and ethnic group.

PROFESSOR GOLDFELD

Yes. In Chicago. So and it led to things like, so Perry preschool was essentially a small randomised control trial. I think it was four and five year olds. Um, and then they were followed up into school, some very interesting results. And I think some really great learnings, the first learning was initially they had sort of IQ benefits. Everyone was very excited. Um, and then those benefits actually fell away and they fell away.

Not because the children got less smart, but actually the control group just caught up and over time people thought, well, that was that then. And then when they actually followed them all the way through what they found was, and essentially this is a really important lesson. The kids in the intervention group were more engaged with school and stayed in school. And that, that resulted then in better employment possibilities, they had better life outcomes, et cetera. So that got everybody very excited and it led to things like what they call early Head Start, where they again did a zero to three version of what was the Perry preschool. And again, tried to follow these kids through with some initially good results. Um, and the Perry preschool project became Head Start, which is a very famous program now focusing and targeting very poor children. Nice, great principles, focusing on a high quality program, focusing on engaging with families, all the things that we know are really important.

It's just two things that we need to be mindful of. Number one, when you go to scale things fall away, three things, sorry, number one, things fall away. Number two, highly targeted programs are problematic. They're problematic to scale. And every time you target, you're always missing quite a number of the kids who would probably benefit, which is the benefit of universal and what we call proportionate universal or targeting from a universal base. Um, so that's a, that's a the second really important thing.

And the third thing is four and five is just probably too late in terms of really make a difference. And actually there's a fourth thing, which is, again, moving away from, let's just do this one thing really well and ignore else. And we see this time and time again. And if you stand back and even think about it logically, and some of the adversity that children in our country are experiencing and then think, well, we'll just kind of waft 15 hours of something over them for one year and then expect those equities to be changed. It doesn't even make sense if you even understand anything about child development, not to say it shouldn't be part of a really important stack, but we do need to be careful that we don't place all our eggs in that one basket.

COUNSEL ASSISTING

Uh, are there any lessons that the Royal Commission can draw from the literature about what balance of skill focus and child initiated activities or what uh, program looks good?

PROFESSOR GOLDFELD

Probably I'm not really going to drill down into it too much, mainly because as I said, I'm not a specialist in pedagogy, but it's quite clear that the benefits around two areas are particularly important. And I, and I'll tell you why there's been some really nice brain development research that looks at the areas of the brain that are particularly sensitive to adversity. So I'm really wearing an inequity hat here. I'm really saying if we're going to do this universal stuff, well, we need to understand adversity and we need to understand how a system can be geared to address that adversity and the literature and the, and the brain development research, and particularly using new imaging techniques that are all very cool these days show there's two areas of the brain that are particularly sensitive to disadvantage.

One of those areas is the area responsible for self-regulation. So, and that to do with executive functioning as well. And what that really means is the ability for a child to sort of regulate themselves, you know, sit on a mat, listen, attend all those sorts of things are really important. And that leads to the sorts of things about them being able to take in information and do something with it if you like.

The other area is oral language, which is the other area that's quite sensitive to disadvantage and that's children's ability to develop their vocabulary, their communication skills. And of course, that's the scaffolding for literacy and reading. And what's really interesting is those are the two areas that I think early child education and care, particularly preschool really are so strong, can be so strong because it's really about starting to put in that sort of structured environment for children.

There's some very nice analogies about the idea of oral language and this idea of playing tennis, the to and fro of language and how important environments are for children for that to and fro be that environment in one's home or anywhere else. And I think those two things that toing and froing like a tennis match to and from is really important both in terms of oral language, but also in regulating, because if someone's around you doing that regulating for you, it really helps. So that doesn't take away from the importance of children being able to play. It doesn't exclude the importance of doing specific things with children, but I always like to take it back to brain development and what we're actually, underneath all of that learning, what we're trying to do is grow healthy brains. And I think in particular, we want to grow healthy brains for children who are living in some form of adversity,

COUNSEL ASSISTING

How might the approach differ for three year old provision as opposed to four year old provision?

PROFESSOR GOLDFELD

Look, probably not greatly to be honest. Um, I think obviously children's development is different at three than at four. I suspect, depending on who you spoke to, they might have different views about that, about how much you think four year old is much more about getting kids what I would call transitioning to school successfully. Um, those sorts of skills you might need, but essentially there it's a developmental and learning continuum actually from birth all the way to school. And you're just kind of slotting in kids along that continuing and continuum and creating a kind of program that makes sense, but it also has to make sense for the kids who are coming in through your door. And I think the cultural overlay, the understanding of the population that you are serving is really important as well. So I do want to make sure that we consider all of those things in considering quality that those things are important as well.

COUNSEL ASSISTING

And does that highlight the difficulty in trying to pick up a study such as the Perry program and try and overlay what we know from that into an Australian context in 2023

PROFESSOR GOLDFELD

Absolutely. I mean, you don't want to sort of throw away international studies and go, well, it doesn't apply to us at all because we are in Australia. So you don't want to throw that baby out with the bath water. But I do think you want to say, what are the opportunities we have in Australia to generate our own research? And I think that’s very important because of our specific needs, because of our specific opportunities as well, that a number of other countries don't have, and because of our specific cultural populations. And that population is like, you could do that at a macro level - what's the population of South Australia? - but actually the micro level's really important because I suspect what one area of Adelaide to another area of northern South Australia would look like would be very different in terms of meeting those

needs. So the question is kind of, what's the core offer that everybody should have and what are the specific things that need to be considered depending on the population you're serving?

COUNSEL ASSISTING

Commissioner, were you going to interject, I thought you might be …

COMMISSIONER

No, no, that's right. Keep going. I've got a few formulating, but keep going.

COUNSEL ASSISTING

Uh, you've mentioned several times child ratios, group sizes and staffing qualifications. Uh, what insights does the work of Restacking the Odds have to share with respect to optimal or quality when it comes to staff, child ratios, group size and qualifications?

PROFESSOR GOLDFELD

Yeah. So, so again, we are going on literature, that's not purist and somewhat vexed. Um, so there's certainly a general sense from the literature, depending on the age groups, of course, these varied across the different age groups that the ratios are important. And that just makes sense from it, human point of view, the more children you have to one person, the harder it is to provide that sort of, I mean, it just kind of makes intuitive sense, common sense. Exactly. Exactly. I don't, I don't think anyone would go well, one to four is dramatically different to one to five. Um, and that these kind of thresholds are still really debated within the literature.

Um, and similarly with educational standards. And this is a very interesting area because there's such radically different educational standards for educators across the world where, you know, some, you know, in some of the French ones, you have to have a PhD in Australia, it's a cert for, you know, so there's all the differences. But as I said, I think we have to be careful that we don't drown in qualifications, but actually think about what are the skills that educators need to be able to deliver great quality care and education. And my own sort of personal biases,

what sort of data do they need about that child and that system that will tell them how they're doing and how to course correct. And I, I fear that we don't have enough of those data. Um, and we rely too heavily too heavily on I guess maybe a combination of skill intuition, which is still important, but I would always think the third leg of that has to be data as it would be in any business that we run.

COUNSEL ASSISTING

Uh, the current ratio in South Australia, I believe is one educator to five children for 24 months to 36 months. And then one to 11, I think from 36 months to school age. Does the literature have any particular nuggets of wisdom with respect to whether different ages benefit from different ratios for example?

PROFESSOR GOLDFELD

Yeah, I mean, there is certainly you know, kind of consensus view that for the younger children, they require ratios that different differ to older children. And that's for all the things that you can think about. So younger children require more hands on care, you know, you need to lift them, you know, touch them, hold their hands, those sorts of things. So you actually need that.

And, and I think underneath that is also the understanding that from a child development and child learning perspective, there are different ways that one needs to communicate and spend time with children because children, so developmentally children parallel play when they're younger, so they don't play with each other, they just kind of play in parallel. So the educator is having to actually have kind of much more one-on-one sort of interactions with children to order to have that sort of developmental benefit as children get older, they get a lot of benefit from actually being with each other and the interactions with each, each other.

So that makes, that means sort of providing a service for children who are older, has a different sort of slant. It's much more about how do you bring groups of children together? How do you facilitate that? How do you still have an interaction with those individual children, but actually the game changes as kids get older and they're actually interacting with each other. So that means the service needs to look different. If you're asking me, does it, is it one to 11 vs. one to 12, one to nine? I think, you know, I think you probably need to ask other people who are more expert than me, but also I, once again, I think this issue of ratio dose, all these things are there contested

COUNSEL ASSISTING

Before we come back to dose specifically uh, you've mentioned relationships with children several times, and that's the quality area, five with respect to the NQS does the literature support there being positive associations between staff development or sorry between staff relationships with children and then the quality of their behavioural and cognitive development, or again, is that a vexed area?

PROFESSOR GOLDFELD

So these are all, all of these are least associations, although in some of those smaller trials that were going on, that was definitely the focus. And you would've heard probably from other people today that that ability to develop that relationship with the child is seen as really central to a quality program and thought to be the ability to be able to connect around those oral language issues, those regulatory issues. It makes sense doesn't it, if you have that relationship with the child. So, you know, my personal view would be as a developmental person, rather than as a pedagogical specialist would be that makes perfect sense that that would be the epicentre of a high quality program, taking into account. it's no easy thing to work out how to do that at scale with large groups of children.

COMMISSIONER

Interesting.

COUNSEL ASSISTING

No doubt. We'll return to quality. I'll leave the Commissioner at plenty of … would you like to engage with that now?

COMMISSIONER

No, you keep going.

COUNSEL ASSISTING

We'll return to quality, but I want to give you the opportunity to speak to accessibility and some of those barriers and facilitators, and then we can return and the Commissioner can flesh out some of those issues.

Uh, I believe Restacking the Odds has undertaken some work with respect to looking at some of the common or more prevalent barriers, preventing access and done a little bit of work around thinking how we might improve uptake. Is that correct?

PROFESSOR GOLDFELD

Yeah. So if I go back to what we are, kind of, you know, those three things that we're interested in; 'Is there enough? Are people coming? and Is it a high quality?', the accessibility issues are a really interesting one, because of course you can have the greatest program, but nobody comes, nobody gets it. It, it's not surprising that those things are interlinked. Because of course, if you really do have a high quality program, people will probably come.

But we did it. We were very interested in this question of what are the barriers and facilitators. And we took a very interesting view because we didn't just ask the providers. We also asked parents what they thought were some of the barriers and facilitators to accessing early child education and care and look for both convergent and divergent kind of issues around that. So it won't surprise anybody that cost was one of the biggest issues that was on the table, but not just the cost of the service itself, although that was on the table. And it was thought to be a barrier by both the providers and the parents, but what the parents really talked about that the providers didn't really talk about as much was these indirect costs, transport costs, for example, where it was a big one, how do I actually get there? So the benefit of what a service you can walk to vs. a service you have to get on a bus all the rest of it.

Um, the other thing which is really interesting is the flexibility of that service to be able to provide care at hours that make sense for families. And this is something that I think will likely come out through a number of these kind of processes that are going on around the country, including the Commonwealth's own attempts that this is, how do you create a service that can sort of sort of stand up, in other words, can, you know be a business, cause that's essentially what it is still, provide high quality, but also provide some flexibility. How does that sort of

work? And I think that's really challenging, but that's what parents want. They want to be able to have some of that flexibility.

COUNSEL ASSISTING

I might ask for slide four to be put on the screen, if I can, this is one of your helpful sites Professor from one of the presentations Restacking the Odds has put together on this topic and that might be a useful framework.

PROFESSOR GOLDFELD

It is a useful framework and I don't have to memorise it. It's very useful. Um, so as I said, we looked at these kind of individual interpersonal program and policy barriers. Um, but I, I wanted to sort of bring some interesting ones that perhaps people hadn't quite appreciated.

So this one about parent attitudes or beliefs, this was quite surprising. So what we found there was this mixed views amongst parents about whether children should even go to early childhood education care or a three year old or four year old. And the view that children actually get the best benefit from being in the home. And that was less appreciated actually, as you can see in the program and service level barriers the programs and services themselves didn't really appreciate that as an issue. So I think that's one of this really interesting divergent areas and will go to potential.

COUNSEL ASSISTING

Do you have some theories as to why that might be?

PROFESSOR GOLDFELD

I think we've just probably underestimated and the importance of understanding parents' beliefs and attitudes. And what we know is that actually parents' beliefs and attitudes from research actually from a woman called Dana Suskind in the US, but parent beliefs and attitudes are actually quite stable. So you kind of think they're quite all over the place, but actually they're quite stable unless you actively disrupt them. So if you've got families who think actually childcare is not for us, we think the family, then, then it's not trivial to go, oh, we'll just send them a pamphlet and then they'll know to go to, to early child education care.

And I think might be a really important thing for what you're looking at here in South Australia is there's an assumption that if we build it, they will come or they might not. And I think that sort of attention to detail around what's the kind of social contract you need with families and the clear benefit the families want to know ‘what benefit will there be for me and my child if we're actually attending’ and the service’s ability to actually be able to articulate that benefit. So I think those are some really interesting things.

There was the, the issue around skills and what's needed and you can see that actually came up from the program itself, which I thought was very very interesting. Um, and I said the

flexibility is already in there. So, so they were really the main, I think they're the kind of main findings.

COUNSEL ASSISTING

And were these findings gleaned from work done by Restacking the Odds in terms of directly interviewing providers and, and families, correct?

PROFESSOR GOLDFELD

Yeah. So, so, so small, I mean, these aren't giant numbers, they're small numbers and this is qualitative work, but I do think they really are some interesting themes that obviously going forward, you could explore a little bit further, but they do point to, if one's going to set this up, what are the sorts of things one needs to consider given that it's not like, or everyone goes to four year old and it's kicking goals and it's equitable. So we've already got a universal system in place that currently does not deliver equity for children. And we we've done a study looking at this is just on the AEDC. So it doesn't take into account quality and access. It's just, yes, no, whether or not a child went to preschool and again, association, but essentially whether if you went to preschool, your developmental vulnerability was less, but it doesn't close the gap and all it doesn't even hint at closing the gap.

So everybody benefits, but they benefit the same where you'd like to think that we have equity in place and those kids who most need to get a higher quality, maybe a higher dose. And I think that's the thing to think about because four year old … three year old would just otherwise be another, a replica or four year old. And I suspect with the same results. So this is an opportunity to address those equity issues much earlier. So it's a drill down into these kind of issues in regard to both barriers and things and facilitators as well as keeping an eye on the data.

Because even if I have a look at, I've got some data just looking at the accessibility or the use of four year old in South Australia, just using one of the software programs, there are a number of services. They're not only every service, but it's, it's still, for 15 hours, only 50 to 60% of families. So if the aim is a hundred percent of families should access a universal system, then it's really, what's our ability to tick off every aspect of the barriers and address them properly. And then evaluate obviously both at the service level and at the system level, are we actually addressing, addressing those barriers.

And in, in that skills and educators um, the skills that they need is, is so the cultural aspects of this are so important, you know parents, if they, if you ask parents about what they think about a quality service, they don't say, 'well, the practitioners have read the latest evidence based guidelines they're provided'. That's not what they say. They say, 'I want to come into a service and feel welcome and it's warm and I feel safe'. Those are really, we barely measure those things, but actually that's, that's the real quality of the service from a parent's perspective.

COMMISSIONER

If I can just … you said on the parent attitudes or beliefs, and it did there's a table in your material 'Barriers rated very or extremely important by respondent type'. And I think this is, is drawn from that. And it, this factor on the parent side came up second to cost. So very significant. Um, just want to see what you would have to say about any evidence around the disruption of those attitudes or beliefs.

We got evidence earlier today that Western Australia seems to be doing better than it used to on the Australian early development census. And that one reason that people thought that might be happening is that they've had a lot of campaigning around the benefits of early childhood education, which I guess may have disrupted these attitudes or beliefs. Do you have a comment on that or anything else you've seen that does that?

PROFESSOR GOLDFELD

Um, so as I said, I've been really interested in this kind of idea of these attitudes and beliefs cause they, they, they're not just about whether or not I should send my kid to early child education and care. They're the whole parenting stuff about how you communicate with your child, all of those sorts of things, and ways of doing things that we know are beneficial for child development and ways of doing things that probably aren't beneficial for child development.

I think, and we've talked about this, you know, way, way back at the beginning of this conversation, which is these, these things get laid down early. So it's not, let's wait till children are three and then bestow information upon parents. They're set down really early. And I think the question is, what are the systems?

I mean, I've got a view about campaigns. You have to be careful cause they do tend to target middle class families. But what are the sorts of things, all the services that touch children need to think about in terms of understanding where parents are at and understanding parents' attitudes and beliefs about parenting. And you get into all these kind of tricky areas like parenting and punishment and all those sorts of things, but you also get into areas of how parents can talk to children.

You know, we know a lot of families and where parents have had relatively low educational levels themselves will actually talk quite a bit to their children, but they tend to be quite transactional rather than the richness of what children actually will benefit from in terms of early language. So I think there are all these opportunities.

To your point, I don't, as I said, I don't know if a campaign would be it, but, but I do think in that zero to three space, what are the touch points and what are the ways of eliciting those, you know, even asking people what they think and then having those conversations. But we, we were pretty, we were kind of a, I don't know, if blown away is quite right, quite right. But we were surprised how strongly parents sometimes felt about that were you kind of know, oh really you don't even think it's a good thing for your child.

COMMISSIONER

And something it's kind of intriguing about all of this is you would intuitively think many of these barriers are sort of, yes / no stage gates. You know, if you if you think it costs too much or you've got real difficulties paying the fees, then you, your child wouldn't go at all. Or if you think the benefits are unclear, then your child wouldn't go at all. But marrying this with the attendance data it must be that these, these barriers come up some, but not all of the time. So, I mean, for some families, it means they never go, but they're correct. Must be high numbers of families where the explanation of infrequency, which is a little bit harder to kind of grab hold of isn't?

PROFESSOR GOLDFELD

Absolutely. And, and I think the challenge is because it isn't like cause and effect like, you know, there's, so exactly what you're saying, these issues are all moderating, how parents interact with the service. And the service, don't forget, is also interacting with the families. So services that make their effort to go out and talk to families and maybe attend the local playgroups and talk about the benefits of why going to three year old or four year old or whatever is important. It's not just the parents being told, it's actually a service being able to engage with them. So if your aim is wow, we, we are trying to be universal here, which means our numerator and denominator have to be the same. You know, the children who are enrolled actually come. And if they're not, then the question is why.

And as I said, it might be because in, in that area, it turns out that the number four bus goes the opposite direction. And that's why, or it might be because those families actually come from countries where they wouldn't usually come to ECC. And that's, so all of those things will be very localised and important to understand which is why these barriers are not like just tick this one.

Um, although obviously cost is one of them, but you know, lots of families still send their children, but they, they, that cost is significant. We know that's being looked at at the Commonwealth level, but I think from a State point of view in preschool, I think that will be an interesting challenge.

COUNSEL ASSISTING

When the families and providers were asked to speak to what might facilitate some of these barriers, what was the feedback that was given?

PROFESSOR GOLDFELD

When the family, sorry, can you say that again?

COUNSEL ASSISTING

Were asked to speak to what might facilitate some of these barriers? What was the feedback given?

PROFESSOR GOLDFELD

Yeah, there, there was different sort of feedback. I mean, the first thing that came back was just cost make it cheaper or free. But as I said, some of these things like services being more willing to come out and talk to families services reaching out the, the facilitators, I can't remember. These are just the barriers. I think there's a facilitators …

COUNSEL ASSISTING

We have slide. Yes. The previous slide, please.

PROFESSOR GOLDFELD

That would be great. Otherwise I'm just trying to remember all I did swot up, you know, but you only remember so much. I think it's interesting that the facilitators list is just short, isn't it? The barriers, this, which is probably not surprising. Um, so in some ways it's the opposite to what we talked about is barriers in terms of the beliefs, et cetera. And in other ways they're just the logistics sort of stuff that we talked about you know, being able to get there.

But I really like the program facilitators because in there are all the things that actually make for high quality program, which is, you know, the, the staff skills, the communication.

This was really interesting. You know, this idea that staff and services should actually be actively communicate, not like 'here we are', but actually communicating with their families cause it's not. Just remembering, it's not just the people in the communities, families enrolled, but don't attend. So who's not coming? And that's why involving the families, again, co-design with families, we know that it's so important to design a service that actually meets the needs of the families who are attending. So there's nothing in here that you'd go, 'wow, that's, you know, blown my mind' sort of stuff.

But I really like that it sat in the service level column because it's, this is actually what a high quality program would look like. And anybody would tell you, these are the components of a high quality program and, and this kind of highlights the dissonance between what we know is good and then doing good. And that's the implementation challenge. And that's the implementation challenge when you're just one service let alone, when you're trying to do it across a whole State.

COUNSEL ASSISTING

What did parents or caregivers value in terms of facilitators as opposed to what providers might have valued?

PROFESSOR GOLDFELD

So I think as I said to you before parents really value that communication stuff. As I said, they're going to be less, they like the, the fact that the parents had the, that the service had the staff skills, they like that. But actually they really like the communication. That's kind of really at the heart of it.

Um, I think services had that there, but they probably would've ranked skills above communication. So I think to me, that's kind of part of that dissonance. What do parents actually want out of a service and what does a service think it should be doing? But you know, they're not wildly divergent.

COUNSEL ASSISTING

In your experience how might that communication be better implemented within practice and service delivery?

PROFESSOR GOLDFELD

So this, I think this goes to the heart of a service being within a community. I think that's, it's a real challenge for a lot of our standalone for profit services. And even the not-for-profit when they're kind of standalone. So how do you become part of a community that's kind of at the heart of it? And once you are part of a community, then the question is what's our role in that community in meeting the needs of those families.

And then how do we find out how best to do that? And what's increasingly clear if you look at all the literature is that co-design seems to be a really important part of that. And there's different ways of doing co-design there's everything from, you know, consultation right through to true co-design of everything, including the actual program that's being developed.

But it's quite clear that parents are more than just a sort of uber service for the children. They're, actually a really important part of that child's life. And also an important, should be seen as an important part of that service and, and how that service engages with those families is really important. As I said, say what we want about those older randomised control trials, but each of them included a really substantial parent engagement aspect of their service.

COUNSEL ASSISTING

And what form did that take? Can you give us some examples?

PROFESSOR GOLDFELD

Um, so different forms. So first of all, it was simply engaging with families in different sorts of ways. And that's often going to where the families are as opposed to waiting for the families to come to you. Um, we've done some work in Victoria working with some of the Aboriginal services and things like picnics and barbecues and you know, things that are not about can you come into our service, but can we come together as a community and start having those conversations with you?

And you can, you can see these are not simple processes. They're not simply just send out more flyers. They're actually purposeful thinking about how to engage with families, where they understand the culture, understand, 'Wow, do we look the same as the community we serve? Do we need to think about who's actually in our service?'.

Those are the sorts of things that become really important and they're, they're quite hard. They're quite difficult for a service to do. And, and can I add, they're often not what a service is funded to do. And I would, I would like to put on the table that we don't fund what I would call the glue.

So we fund a person to do X hours of service delivery, but actually we don't fund them to think about data. We don't fund them to go out and do barbecues. We don't fund them to think about how they actually establish themselves, to actually have a role with the family and code. We don't fund any of that, in essence. And this is, this is the bit I think that's probably missing. And if we enabled people to have those sorts of gluey bits to the service, then, then in fact, we would start to be able to see how do we actually engage with families. And, you know, my own personal bent is have the data available to understand who is and isn't coming and what do we do?

You know, there are playgroups, there are often cultural playgroups or other playgroups out in the community, find the playgroup, talk to the families all of those sorts of things. So I think there's lots of ways of doing that, that locally people know what they're doing, but there isn't a kind of formula for it, but there also isn't, as I said, often, either the skills of the service or the encouragement or the funding that says, actually, this is an essential part of what you need to do. That's not to say some services don't do a fabulous job at it, but it's not the kind of, we're not set up to do that.

COMMISSIONER

Can I just I know time's really short, but just a, a few questions for me looking at the, the program format bit of this. I mean, there is a conundrum, I suppose, between access, attendance – dose, as, you know as it would be referred to in the material - and this convenience, flexible hours bit.

So any insights you've got for us about how to weigh that up you know, clearly there's, there's evidence about the best way of delivering programs to children at four years old and at three years old which does not necessarily link well with flexible hours to enable parents to come and go, can you just talk to us about the tensions there and some potential ways of resolving them?

PROFESSOR GOLDFELD

Yeah, so you've absolutely right. There are a number of tensions and, you know, I, you know, we can't be naive to a number of these being businesses for people. Yeah. They have to be able to pay people. Um, and so you have to be able to pay people for a certain number of hours. And so how do you run a service that both is flexible, pays people to be there still can make a profit for some of our people and is still high quality, still does the gluey stuff, you know, all of those sorts of things. Those are real tensions.

And I think the question is what's the role of the State in terms of being able to build in some of that flex. So that services are still able to employ people, but still provide some, you'll never provide perfect flexibility cause that's just not possible.

So there are things that just are not possible in the real world, but I do think, I wonder if there's a role for the State in being able to create some way of funding, and I'm not a funding specialist, but some way of funding so that there is ability to kind of flex the system as needed to be able to meet the needs of the population. Um, but with some ways of actually working out through data, et cetera, not like tick box KPIs, but real KPIs in terms of 'Is this system actually working? What are we learning from this? How do we spread those learnings?'.

So I think the way to address some of those tensions is to learn, rather than, you know … Far be it for me to sit here and say, 'You know, thank goodness we're all here. We've solved everything'. But wow, what an opportunity to learn. 'How do you do this? What is the role of the State in this funding mechanism? What is the role of local providers in actually understanding their population and course correcting to meet the needs of that population? And what is the role of, you know, all the experts that you are gathering around pedagogy, et cetera, to provide actually a high quality service? And how will we know (we, the Royal we) how will the State this State know whether or not that's actually made a difference over time, either on development overall, but particularly on equity which I think is probably at the heart of it all?'

COMMISSIONER

And if I can just flip from this discussion, your Restacking the Odds work obviously takes you, you pick the five interventions and one of them is child nurse checks. Um, I put that like the child was checking the nurse, but you know what I mean, the other way around.

We had, I don't think you were here, but we had a discussion earlier about some of the consequences of South Australia currently operating a very targeted model for those kind of checks and that the State government has made available new resources to try and look at that area from, from your work and, and thinking about how it stacks into this work. Is there anything you would want to recommend or refer to there?

PROFESSOR GOLDFELD

I would. So this comes back to this kind of idea of it's really from antenatal onwards and from a brain development point of view, that's really clear those first thousand days definitely are important. And again, it comes to this idea of what are the kind of mutually beneficial things we can do. So in, in Restacking, we purposefully focused on sustained nurse home visiting, but we didn't focus on it as a bolt on program that comes, you know, wafting somewhere in the system, but is actually part of a, what we'd call a proportionate universal nursing system. Or we would, the other way of calling it is kind of 'well childcare'.

That essentially what it is, is building a system, you know, you know, I've kept saying this and you'll hear it all the time, that has a family centred approach. It's about relationships with families. It turns out everything is about relationships. Um, and it's all about these relationships

with families. So if you just kind of say, ‘Hey, Hey, go and get a check’, no one's going to go. They just won't.

But if they've got a relationship with someone they trust and we have found, there is a literature that suggests that health is the least stigmatising of those doors to go through because, you know, nobody likes to go through a targeted door. You know, Victoria has something called the orange door, which is, which is a service for families who are experiencing family violence, which is important, but people don't like going through orange doors. So people like to go through universal, you know, the best way to capture all the families you really want is to have a non-stigmatizing universal platform.

And what we talk about in this ‘well childcare’ platform is something for everyone. So there's for everybody all of the time, which might be a light touch. And we already got actually in this in this State, these child health checks but they're over time and they're over time purposefully so that you can build a relationship and keep coming back. Cause it turns out children's development changes and family circumstances change. They're not static. So you want to be able to come backwards and forwards. You want to have a series of tools that you can use.

They're all flawed, all the tools. So it's not like I'll come in, do the check and I'll know exactly what's going on with your child. They're all pretty flawed. They're all going to pick up some kids that don't have problems and miss kids that do have problems. So you need to do them over time and you need to have a conversation with families and what's going on for your family, because you know, your ability to be able to seek and respond. so families come to a service and then wow, we can respond. That's a game changer, cause if you just seek and refer, then you just push people out into a system that doesn't exist.

So this is the beauty of these opportunity around the check stuff, which is, can you build it out into a kind of ‘well childcare’ system that intersects with ECEC cause that's the other universal platform – universal-ish platform. So you've got the ability to do some, all of the people all the time, then some of the people, some of the time, so where this is the flexibility, in the system to be able to actually respond, ‘Hey, you've actually got a sleep problem. Actually we can do something about that, come back and we'll talk through it or a parenting issue or whatever’. So that's that ability to flex up and provide a response.

And then right at the top of that is for some of the people all of the time, there are some families whose risks we can identify in the antenatal period for whom we know that if we build a fence at the top of the cliff, we will stop them falling off that cliff. And that is sustained nurse home visiting. Sustained nurse home visiting is not an ambulance once they've fallen off the bottom of the cliff onto the bottom. It's actually at the top, it's actually about prevention. It's, it's the same stuff. It's development, it's family relationships, it's all of those sorts of things. But just with more intensity and being delivered at home, we've focused on that because it's useful to focus on it, but if you don't have everything else underneath it then you don't really have a really proportionate system. And that's the opportunity I think here in this State to be able to consider that aspect of it as well. But if you just talk it into a bunch of checks, you know, you won't get the families that you really want coming.

COMMISSIONER

Last question from me, you talked about the problems of scaling, which of course um, well, well known in all sorts of literature on certainly familiar from the old days with them in school education interventions, but I mean inherently the exercise we're involved in here is one of, of scaling. Uh, so what words of advice would you have about that scaling challenge? Is it related to what you said about the glue that often in, in well studied pilots, there is this look at, at the glue and the outreach and all the rest of it and that's lost on scale or is it about staff skills, staff motivation and that's lost on scale or is it that you start going to harder to service population cohorts as you scale? What, what would you point to?

PROFESSOR GOLDFELD

It's probably all of the above. Um, there's a few things there's a few benefits to scale as well. Yeah. So obviously there's the reach issue around benefit in this State because you don't have everything, anything really, in this space, the benefit is the ability to be able to set this up as a proper trial and actually do it in such a way that you know whether or not you're making a difference.

And there's a certain methodology called a, a step wedge design, which is sort of sounds technical. But the beauty of it is it's very good for policy interventions because underneath it, you can improve.

So it's not like often when people think about studies, I think, okay, everybody's going to get a blue box and we just want to make sure everybody gets that blue box. But this is not, it's kind of everybody gets something that sort of looks a bit blue, but what we want to do is make sure we're improving and learning. And the thing with scale is you got to have improvement and course correction within it because if you don't have those data for improvement, learning and learning because you are, everyone's learning like, do we know how to do this world maybe, but you know, and how do we learn? So how are we learning from everybody? How are we improving? And that's right at the nub of scaling anything is and there's different sciences, there's improvement, science and implementation science. There's all sorts of different sciences you can bring to there, but at the nub of it all if you're not using data to drive that scaling or underpin that scaling across the things you're saying, like, how do you get a workforce? How do you get them skilled up? How do you get them caring? How do you all of those sorts of things? Um, but at, at the nub of it all, if you're just going and popping it out there, you'll, you'll never know. And I think to me, that's, that's the, both the opportunity and the challenge around scaling. But we should scale because if we're not scaling, we won't have, we won't have impact.

But what we know is anything universal that gets scaled always gets disproportionate uptake by the middle class because they're the ones most able to actually mobilise to utilise it. And so what you find is that for many, many universal services, you actually inadvertently increase inequalities. And since four year old has not ever decreased inequalities, the same risk sits in here in the three year old space, unless some attention is given to those implementation issues and making sure that the service is actually designed to meet the needs of the population it's serving.

So in some three year old services, it'll just be easy, you know, to take on some three year olds and off you go in others, it'll be, ‘wow, how are we going to do this? If we really want three year olds to come through the door?’ And so they might need more glue than some other services, their, you know, their amount of glue might be different.

COMMISSIONER

Thank you.

COUNSEL ASSISTING

Just very briefly before we finish your session this is covered more in your written submission, but can you just share with us some of the key insights in your experience as to whether there is differential benefit between full-time vs. part-time attendance and whether that might be different for three or four year olds?

PROFESSOR GOLDFELD

So it depends what you mean by full-time and part-time um, and so, you know, the magic figure is the 15 hours depends what you mean by that. Um, so there's, again, a lot of, some of the literature has come out of the UK and Ted Melhuish has sort of led quite a lot of this. Again, it's this association literature as best you can do, but it is association literature looking at the relationships between the amount of hours and then the sort of outcomes that seem to be seen. So there's a few things.

First of all, a whole lot of crappy stuff is just crappy. So more hours of things that are bad are actually bad for children. So you can’t, it can’t just be about more hours itself.

COMMISSIONER

We might have to make that a title somewhere in the report. ‘More hours of crappy stuff is just crappy’.

PROFESSOR GOLDFELD

I could have used harsher words, but I, I kept, I kept myself nice. Right. Um, so that's the first thing. So quality underpins all of this. So there's no point getting all excited about exposure and dose, if you haven't got quality.

The second is for families who are living in more adversity, it's probably likely that a higher dose and more of something good is probably a good thing. And particularly for families where the families themselves are struggling to provide that high quality environment. Remember high quality environments matter. It's not who you are, it's what you do. So we shouldn't just say just cause it's, you're poor, you can have a, a bad environment at home. But it's really important to understand those environments and what might ameliorate some of those adversities on child development. And then, so that's the thing.

But we don't know the actual answer to the question you're asking, which is, you know, where's a threshold issue for that. And, and also 15 hours in two days vs. three hours a day for five days? It's likely if you just think logically that having something every day might be better for children, but I don't think we know. And as again, I think it's up to you guys to decide if you want to sort of test some of those things out.

And I don't think anyone in this room would be naive to understanding the costs with all of that. The more hours you're providing it costs more, there's got to be threshold issues, all of those sorts of things, but I don't think we'd want to sort of magic and go, well, 15 hours is the, is the magic dose. And that's kind of where it's been, cause that's what the literature said, you know, kind of been saying, but there's an opportunity to re-examine that.

And it will be conflated by people's needs around employment as well. So the reality is and Victoria has been, is an interesting place to look because we've had these standalone kindergartens, one of the few states that still has this, these standalone kindergarten. So you literally have kids going to kindergarten from like nine to three and then, but being walked over to the local childcare centre because actually, you know. So it's, how do you embed this in essentially, you know, the old term is long day care, but how do you essentially do this in a way, you know, should they get high quality program for the whole day they're there? For part of the day they're there? Like how do you even make that kind of work? And these are all really important questions. But they're not the answer to the one that you've asked me! And also I think we just need to be careful about part-time or full-time. I have no idea what that means. Um, in terms of, you know, going to three year old preschool doesn't mean every day, half the week.

COUNSEL ASSISTING

And all the more important I take it from what you've said for us to be scaling in such a way that we can assess as we, or as the, as programs are rolled out within South Australia.

PROFESSOR GOLDFELD
I mean, you could test it. I mean, you could offer it, you know, more in some areas less than other areas have a look at impact. Um, but I, but I do think underneath all that, I don't want to be a purist about this. Eventually you have to fund it. Um, so, and it's not, it's not a forever bucket of money.

So I do think it's, it's being careful and clever about what is again, what does everybody need all the time? What, what that dose and what does some of the people need? Um, what does some of the children need and how does one think about that? Um, in terms of thinking about what services might need to deliver for some children and that level of flexibility, that level of thoughtfulness is what we really need to do in the system. And that's tricky and it's really tricky without data.

COUNSEL ASSISTING

I have no further questions.

COMMISSIONER

I, I don't either. So thank you. Thank you very much. That's been very, very useful. I've learnt a lot. That's great.

COUNSEL ASSISTING

I ask that the witness is released.

COMMISSIONER

Yes, we we'll release you.

<THE HEARING ADJOURNED AT 2.45 PM

<THE HEARING RESUMED AT 2.50 PM

COUNSEL ASSISTING

I call Associate Professor Brigid Jordan.

<ASSOCIATE PROFESSOR BRIGID JORDAN AFFIRMED

COUNSEL ASSISTING

Feel free to refer to the contents of your written submission if you need to throughout your evidence today. Are you a qualified social worker and infant mental health clinician as well as an academic and researcher?

ASSOCIATE PROFESSOR JORDAN

Yes, I am.

COUNSEL ASSISTING

I believe you worked at the Royal Children's Hospital in Melbourne for 35 years.

ASSOCIATE PROFESSOR JORDAN

That's correct.

COUNSEL ASSISTING

And are presently employed there as Associate Professor of Social Work?

ASSOCIATE PROFESSOR JORDAN

Uh, no. I was until two and a half years ago. Um, I'm supposed to be retired but I'm still an Honorary Principal Fellow at the University of Melbourne in the Department of Paediatrics and an honorary team leader for infant mental health research at the Murdoch Children's Research Institute. But the evidence I'm giving today is in my role at the University of Melbourne.

COUNSEL ASSISTING

Let's come straight to that work. Is it correct that you are one of the chief investigators in a multidisciplinary team at the University of Melbourne evaluating the outcomes of an intensive early childhood education and care program?

ASSOCIATE PROFESSOR JORDAN

That's correct.

COUNSEL ASSISTING

And that was a program aimed at children living with significant family stress and social disadvantage. Is that correct?

ASSOCIATE PROFESSOR JORDAN

Yes, that's right.

COUNSEL ASSISTING

I'm not sure if you were here this morning. I don't think you were when we heard from Dr. Pilkington about some figures with respect to children in South Australia and socioeconomic disadvantage, but in your experience, why are children's early experiences so important in terms of brain development?

ASSOCIATE PROFESSOR JORDAN

Uh, well, because the brain's underdeveloped at birth and so the brain has to do a lot of growing. There's sort of the potentiality and we have evolved to be primed to have certain experiences and we need to develop certain skills to make our way in life and to make the most of the opportunities that the world offers us. And so, because brain architecture is being really consolidated in the first few years of life, early experience is critical to later outcomes.

COUNSEL ASSISTING

What impact can adverse experiences have in terms of brain development?

ASSOCIATE PROFESSOR JORDAN

Well, there's a few different things. Um you know, one is poverty and poverty experience. I agree with the evidence given earlier this morning that lots of parents do a remarkable job of raising their children, despite experiences of material impoverishment, because they're emotionally rich and they've got emotionally rich family experiences to draw on. But when you've got adversity that impacts on the emotional quality in the home, as well as the available experiences, then children might not get exposure to experiences that drive their curiosity. And that mean that they learn about the world. Uh, but adversity can also impact because it's in the first weeks of life that you learn about emotional regulation.

Um, and so adverse experiences may lead to the child either shutting down and not being available to taking what the world has to offer, or if there's things like family violence in the early weeks and months of life, the child is primed to be alert and alarmed the whole time. And that has impacts on their biological stress response system. Um, as well as the, their emotional experience, the development of their mind, the way they approach the world, the way they approach relationships later on.

COUNSEL ASSISTING

And all of those things in turn, can they then affect development in terms of cognitive and social skills and the like.

ASSOCIATE PROFESSOR JORDAN

Yeah, absolutely. And not just development, but learning because if there's adversity at home or if the child has been primed to be alert and loved the whole time, then they are using sort of all they're bandwidth to be colloquial, to concentrate on trying to feel safe and secure. And so they don't have enough brain space to be curious, to explore the world, to make most of learning opportunities that are available to them.

So then they learn less and they have less emotional flexibility to kind of go with the flow and respond to learning situations. They may also be shut down in larger groups of children. For example, they may be too overwhelming for them to cope with. And so they withdraw and shut down. Like they're multiple different ways in which an individual child can respond to adversity, but whether it's the amplified response or the shutdown depressed response, it has consequences for learning.

COUNSEL ASSISTING

I want to come to the work that you're presently doing now. Can you tell us about the controlled trial that you've been involved in evaluating?

ASSOCIATE PROFESSOR JORDAN

Yeah, so this was a randomised control trial of an early years intervention program that looked like regular childcare from the outside and it targeted children living with significant family stress and social disadvantage. So it was more than poverty. And the program that was

offered was five hours a day, five days a week, 50 weeks of the year for three years of early childhood education and care.

It was, the program, the pedagogy was aligned with the early years learning framework. So in that sense, an enhanced offering under what would usually be involved in early childhood education care. Um, I'm not sure how much you want me to say at this point, should I keep going?

COUNSEL ASSISTING

Absolutely. Can we go back to the beginning and ask you to tell us about the eligibility criteria? How people were selected and where they came from and, and what you knew about their risk factors or the potential for risk factors?

ASSOCIATE PROFESSOR JORDAN

Yeah, so it was in an area that was known to be social impoverished with high levels of socioeconomic disadvantage and to be eligible, children had to be known to the child protection system or have a family services case worker. So that would be like the step below notification, the step below that threshold. They had to be aged under three.

They had to be able to participate for three years prior to going on to school and education care needed to be part of their care plan. And they had to meet at least two risk factors in the then Victorian government best interest practice model list of risk factors, known risks to child development. So things like parent mental health issues, drug and alcohol, the kinds of things that Rhiannon presented this morning.

COUNSEL ASSISTING

And take us through the number of participants you had both in your intervention group and your control group.

ASSOCIATE PROFESSOR JORDAN

Yes. So there was 72 in the intervention group, 73 in the control group

COUNSEL ASSISTING

And a mixture of boys and girls.

ASSOCIATE PROFESSOR JORDAN

Yes. 64 boys … sorry, 64 girls to 81 boys, slightly more boys,

COUNSEL ASSISTING

What did children in the control group receive?

ASSOCIATE PROFESSOR JORDAN

So they had usual care. So whatever their parents wanted to or could access that was available in the system. So we didn't direct that at all.

COUNSEL ASSISTING

And was it fair to say that most or, or a lot of those children had had parents who were experiencing varying issues such as psychological stress, financial issues and unemployment?

ASSOCIATE PROFESSOR JORDAN

Yes. And so a third of the children had two to three risk factors. Um, 36% had four to five and 34% were living with six to nine risk factors nominated at the point of referral by the referral. Um, but what we did was we measured the participants at baseline and then compared their characteristics with the longitudinal study of Australian children, we compared them with the general population, but also with the lowest quarter in the lowest student study of Australian children. And the parents were living with significantly more stresses, high rates of stresses than even the lowest SES group that did include you know, straighten financial circumstances, more engagement with the law, more parent mental health problems.

COUNSEL ASSISTING

Were the identified children, participants vulnerable in other ways, such as low birth weight or

ASSOCIATE PROFESSOR JORDAN

Yes, a quarter of the sample had low birth weight or very low birth weight.

COUNSEL ASSISTING

What else was known about the risk factors associated with those children? Uh, anything around language delay or adapted behaviour?

ASSOCIATE PROFESSOR JORDAN

Well, they weren't known risk factors at entry, but we did baseline assessment. So the children were assessed by a trained assessor. So one on one assessment, not screening, using the Bailey's scales of infant and toddler development. And the children had delays in language delays in IQ delays in adaptive behaviour. Um, half the group who were randomised to the intervention group had an IQ less than 90 and language, less than 90. It was similar in the control group actually from memory.

COUNSEL ASSISTING

. For those of us not familiar with how the IQ is, is tracked what, what significance can we make of that figure?

ASSOCIATE PROFESSOR JORDAN

Uh, yes. So average IQ in the population is a hundred. And so that's like the plum average, if you got a hundred people added up all their scores divided by a hundred, you would get a hundred. Um, and it's a normal distribution curve, which means that the same equal number, less than a hundred and over a hundred and anywhere between a score of 85 and 115 is within average, lower than 85 you start to think about developmental delay labels, but a score of about 90 is very low average. Like it's low.

COUNSEL ASSISTING

Now. I think you mentioned the program for the intervention group was five days a week five hours a day, 50 weeks a year. Is that correct?

ASSOCIATE PROFESSOR JORDAN

Yeah, three years. And I want to make a comment, I've been sitting the whole day wanting to make comments**.** Um, but it's so that, that was loosely based on that's what Abecedarian had had something similar, but I think it's really important, particularly for children living in challenging circumstances and where the parents are for the children and parents to have access to some good quality time.

So, you know, five days a week full time means that at the end of every day, there would be a very tired and ratty child and a very tired and ratty parent. And so there's limited opportunity for the parent-child relationship to kind of flourish in those circumstances. So I think it's very important that interventions such as ours are not sort of taking the child away from the possibility of that relationship improving and the consistency of five days a week does things like help parents prepare for transition into universal preschool or school offerings later on.

Um, it, it also means you don't have to remember what day of the week it is, where am I supposed to be today? Like it just gets kind of bolted in. It's some respite, the child gets a different experience, but then there is, are some hours at the end of the day before you've got all the jobs to do where there can be kind of less hurried time.

So I, I think with a lot of this, this stuff, it's very important to think from the child's point of view, as well as from the adult's point of view or the service system point of view.

COUNSEL ASSISTING

You mentioned the Abecedarian study, we've heard about the Perry study was the Abecedarian study another of these American longitudinal studies?

ASSOCIATE PROFESSOR JORDAN

It was a precursor 1980s in North Carolina. Yeah. And that, that was one of the first studies, well, the first randomised control trial and they did achieve a significant increase in IQ. They, they were different though because they just enrolled African American children. And I think they tested the mother's IQ and the mothers had low IQ. And so that was an entry criteria as well.

And the other thing that my colleague, Dr. Anne Kennedy, who is early education specialist alerted me to is (and it's not well known) is that the educators and teachers were actually African American, which was probably a significant, important ingredient in the success of that. Yeah. But this is the work that Heckman and colleagues have kind of analysed later on which leads to the idea of early investment paying great returns late, you know, later on, as Sharon talked about for the Perry preschool.

COUNSEL ASSISTING

Was some guidance taken from the literature and those studies in reaching that five hours a day, five days.

ASSOCIATE PROFESSOR JORDAN

Yeah. Some, but it wasn't the only story, the other bit was kind of funding and these other considerations about what was in the best interest of the child and family.

COUNSEL ASSISTING

Was there a cost associated for children in the intervention group?

ASSOCIATE PROFESSOR JORDAN

The families did not have to pay.

COUNSEL ASSISTING

Was there any support around transport or, or assisting them to access?

ASSOCIATE PROFESSOR JORDAN

No, not about transport, but engagement. Definitely. And it was a randomised control trial. And so the parents were invited in the trial was explained to them it was their choice, whether they participated or not. Um, it was very interesting.

The parents were pleased to be contributing to policy and they saw it as empowering, even though they had a 50% chance of missing out on free childcare at its most rudimentary explanation.

Um, and now I've lost the question. I'm very sorry.

COUNSEL ASSISTING

We were talking about accessibility.

ASSOCIATE PROFESSOR JORDAN

Yes, In the beginning there was an infant mental health assessment. So part of the staff team, I haven't talked about the staff team, but two days a week embedded infant, mental health clinician consultants. So a senior infant mental health person trained in working and experienced in working with zero to three year olds, not fly, fly out part of the staff team, part of the senior leadership team.

And they did an initial assessment meeting with the child and family talking about the family's hopes and aspirations for the child, any behavioural, emotional regulation issues history of trauma, any separations, you know, child protection, out of home care, that kind of stuff. Um, what was going on at home? What was the important to the parents? An educator often kind of joined that initial interview.

Um, then an orientation plan was drawn up and that was very individualised with the idea being that the parent would stay with the child till the child had developed a sense of safety and security and being in the centre and with the educators. But the gold in that also was that the parents were able to check out the teachers and educators and form a relationship with the teachers and educators. And so it's like an open door policy and it was when you're ready, you go, but you are always welcome. Parents would cancel and fail to attend.

You know, it often took three goes to get them to the first consent interview for the research. So resources needed to be available for a very warm, welcoming reception, rather than, you know, 'you missed your appointment'. Or if families were late, there'd just be a phone call or 'how you going, how's the morning going? Oh, that sounds tough. Oh, well, you know, when you manage to get here, that'll be great. We'll be ready to receive you.' So lots of relationship oriented interactions with the parents.

COUNSEL ASSISTING

If we can break some of that down, the infant mental health consultant then, as I understand it, was involved in an assessment with each child as a first step in participation. Is that right?

ASSOCIATE PROFESSOR JORDAN

Yeah, that's correct.

COUNSEL ASSISTING

And were they able to gain an understanding as to what the child had been exposed to, understanding their emotional functioning, behavioural regulation and parent child attachment issues and the like?

ASSOCIATE PROFESSOR JORDAN
Yep.

COUNSEL ASSISTING

Was that then information that was uh, shared with the educators?

ASSOCIATE PROFESSOR JORDAN

Yes.

COUNSEL ASSISTING

And was that integral to the educators and, and other staff formulating a program for each child's participation?

ASSOCIATE PROFESSOR JORDAN

Yes. So we're trying to do two things, provide high quality relational pedagogy with high expectations for the children. Um, and so we had confidence that they could learn and that they would respond. So it had to be high quality pedagogy, but also to reverse the harms from toxic stress that they'd been exposed to. And so if an educator or teacher understands how a particular child copes with feeling overwhelmed, overloaded the risk of failure being in larger groups of children their past experience of interacting with adults, then that can inform how the teacher approaches the learning situation for this child or what they might need to do to engage the child in a particular activity or how they might respond to sort of behavioural challenges from that child,

COUNSEL ASSISTING

That working relationship was then integral to how the program was designed, is that correct? In terms of the infant mental health consultant and the working relationship with the other staff?

ASSOCIATE PROFESSOR JORDAN

Yes. Yeah. And, and there were other things that that person did as well that the other important ingredient in there was every 12 weeks goal setting with the parents. What do you think is important for your child to learn? What, if you notice they've learnt, this is what we've noticed, what would you like us to focus on for the next 12 weeks? So collaborative goal setting with the parents around the child's learning. And so building the idea for the parents of the child as a learner as well,

COUNSEL ASSISTING

And was the infant mental health consultant at those sessions, or were they …?

ASSOCIATE PROFESSOR JORDAN

Not necessarily, there was also a family services practitioner two days a week, so it really depended on what was required for. Um, so the number one person was the teacher or educator and the parents could bring whoever else they wanted. Um, obviously the child's other parent, but if they wanted their parent or another case worker or somebody else involved with the family to come

COUNSEL ASSISTING

That involvement by an infant mental health consultant, was that a very unique feature of the program?

ASSOCIATE PROFESSOR JORDAN

I believe it was yes. Um, American programs have had infant mental health consultation, but tends to be, come in, do some supervision, do some problem solving or assess a child and kind of go out. But this embedded and being part of the senior leadership team and not providing a one-on-one service to a child and family, but providing that early assessment then reflective supervision and other professional development, but also are kind of eyes on the whole program and import into anything that had particular emotional poency. So well, every decision at a programmatic level has an impact on the emotional experience of the child.

COUNSEL ASSISTING

Can you clarify before we keep going just with respect to the number of educators per children and, and the other staff who sat alongside the infant mental health consultant.

ASSOCIATE PROFESSOR JORDAN

Yeah. So in the leadership team, full-time coordinator, full-time pedagogical lead two days a week, infant mental health consultant, two days a week, family service practitioner, but also very important person, a receptionist and admin support person. So the receptionist was at the front could see a family in the car park or a family approaching they've had the morning from hell could rally to greet them. I mean, they would greet families anyway, but they would know what was required to greet this family, help them settle, help the child settle into the classroom. And there was also room available for parents where there was a computer they could deal with Centrelink or whatever else, you know, was kind of going on. And the staffing meant that was available. Um, in terms of teachers and educators, small room size, small group sizes of one to three for the under threes, then the children aged up over the three years. And once they were over three, it was one to six one qualified teacher in each room minimum. Yeah.

COUNSEL ASSISTING

You mentioned the family services practitioner. What was their role?

ASSOCIATE PROFESSOR JORDAN

Their role was really liaison with child protection and the family services that were involved as the family kind of came into the service activating those resources if required by the family, but also helping the family overcome barriers to using the available services. Like just cause services are there doesn't mean the families experience them as welcoming or able to be used.

COUNSEL ASSISTING

Can you give us some examples as to how that was, how those barriers were facilitated? Was it a matter of helping with referrals to support services or joining a waiting list, for example?

ASSOCIATE PROFESSOR JORDAN

Um, sadly often, but often what's kind of more effective is pick up the phone and see if there's, you know, a way of navigating the waiting list or you know, I've got this phrase kind of 'death by referrals', sometimes families in challenging circumstances get six referrals. It's impossible to attend to all of them. And so saying to the family, do these make sense? Which ones make sense of you, which one for you, which one's going to address your most urgent need, what's the kind of priority list could we rationalise? Um, so helping the family/service system interface. Like a lot of services sort of think colocation is the answer. I've got a different view.

COUNSEL ASSISTING

What's colocation?

ASSOCIATE PROFESSOR JORDAN

So colocation is let's have all the services kind of next door under the one roof or in one building or under one management. So it's easy for families to get to them. There aren't geographical barriers.

Um, that's not necessarily experienced as good by the families because we have a view that services are helpful and families experience services as helpful families with, for example, there was the mention of intergenerational child protection involvement. So if you've had intergenerational child protection involvement, you may not see social workers as your friends. You know, you may see them as the persecutors and/or you may have involvement services and the workers change a lot. And so you've lost faith in them, and you're not sure you trust them, and you're not sure it's worth actually investing in getting to know this new worker and telling them your story over and over again. And by the way, you haven't filled in the forms they want you to fill in yet.

And so I guess I particularly have a strong view that these centres need to be a place for children and families where they don't have to look over their shoulder. And that the important work is to help families be able to be if you like competent consumers of other services and advocates for their children and able to use those services.

And I mean, this is another important intergenerational thing. Um, children who've, well, parents who've grown up as children in adverse emotional circumstances, for example, insecure attachment relationships, don't feel entitled to use what's on offer because they feel less than, they were dismissed as children, their needs weren't attended to. So they kind of have a pattern in life that you don't get what you need, and there's no point asking. Um, and so they need a lot of encouragement and support and someone advocating on their behalf to kind of get in the door of services and that's a skill we would want to develop for people.

COUNSEL ASSISTING

And how effective was the, the role of that family services practitioner then in helping those, those caregivers be advocates and to navigate sometimes complex systems?

ASSOCIATE PROFESSOR JORDAN

Um, well, it wasn't, yeah, it wasn't just the family support worker, you know, it was also the educators because they had the kind of daily contact as well. That's not something we kind of measured, but I can give you an example of a parent going with their child to the pre prep enrolment interview.

And there is a backstory. So the backstory is that the parent had not seen their child as a very capable learner on entry to the centre. And then after a while, they kind of picked up that the educators were making comments on the child's learning and saying, oh, your child's really clever. And they said, really, really you think they're clever? The educator said, yes, look at C and D.

And then over time, the parent kind of changed their view of their child as a clever person that went to the prep enrolment interview. The educator went with them and the principal said, anything else you want to tell me? And the mother said, yes, he's clever. So it's a kind, I know it's one anecdote, but that's the kind of sense of the trajectory of parents experience and their ability to advocate.

COUNSEL ASSISTING

Can I ask you to give us an outline as to what time was prioritised for staff in the program in terms of their own reflection and supervision and mentoring and development?

ASSOCIATE PROFESSOR JORDAN

Yes. So the children participated for five hours a day between 9:30 and 2:30, and the staff were employed for a full work day. So there were two hours at the end of the day for the educators and teachers to spend in planning, planning the teaching, planning the program, but also each educator and teacher had one hour fortnight of reflective supervision to talk about their experience, to debrief, to emotionally refuel, to think with someone else about their work.

Um, once a fortnight, each room had a consultation with the infant mental health clinician consultant. So they could talk about dynamics in the room, particular children. Um, they were

concerned about different points of view in the room about how behaviour should be tackled. Um, anything that was of concern to the educator group. Um, there are also a whole of staff meetings, I think every two months to talk about integrating this kind of infant mental health lens, if you like with what happens in regular childcare.

Um, so for example, you know, regular childcare, sometimes educators would babysit for a family out of hours. Well, you need to think differently about that in a program like this, because what would it mean to the children if the educator's prepared to babysit some children and they're not going to babysit others, cause that family may be too dangerous and they may be too dangerous. Um, so just, you know, bringing together those different ways of thinking and the educators were not therapists, but they were kind of doing a therapeutic reparative task. In addition to the high quality ECEC, well joined up, you can't separate the two out.

COUNSEL ASSISTING

How were the children assessed and can you talk us through the outcomes?

ASSOCIATE PROFESSOR JORDAN

Yeah, so there was assessment by the clinical researcher. So someone trained in interacting clinically with vulnerable children and families. So you know, wouldn't be an alienating experience for them and they would get the kind of best out of them at baseline, one year after enrolment, two years after participation in, three years after participation. Um, and I will just refer to my notes to get the exact score. So after alright, the assessments, so the cognitive and language developed was, was assessed using the Bailey scales of infant and toddler development. Um, and then when the children were older, it was the WISC which is the IQ assessment and social-emotional outcomes were assessed using the BIA, the brief infant toddler, social emotional assessment, or the child behaviour checklist. And again, that depends on the age of the child, but they're all measures, which you could get a continuum across, across the age group.

So the first kind of impact of significance was after one year where the intervention children had increased their IQ of by I think, 5.8 points. And then after three years, the average increase in IQ was 7.7 points, the interesting, or, you know, reassuring thing about that was by then their average IQ was 99.6. So the aim of the program was that the children reach at the end of the intervention that they're equal to their peers. And so with an IQ 99.6, we felt like we had achieved this and that's like half a standard deviation. Um, and most of that was achieved in the first 12 months of participation, language scores improved by average of 6.8 points, an average score of 99.5 at the end of the 36 months. But it took the whole three years for that to be detected. That was the last one to be detected.

The largest increases in language scores were evident for those children whose development was most compromised at the beginning. So the children who had a baseline score of less than 90 in IQ language increased their IQ by an average of 13.6 points and their language by an average of 12.7 points. So their average scores were 98.6 for IQ 98.2 for language at the end of the three years.

Um, so those detriments that were evident at the beginning of the intervention had been redressed by the end of the intervention and there was a large and significant impact on social, emotional problems as well. After 24 months, we were kind of looking categorically just because of the nature of the measure we were using. And at the end of 24 months, the intervention group had 29% fewer social emotional problems.

COUNSEL ASSISTING

What sort of social, emotional problems do you mean?

ASSOCIATE PROFESSOR JORDAN

Uh, well that would be things like behavioural problems I've to scratch my head. Well, anxiety symptoms, you know, depression symptoms aggressive outbursts you know, not following instructions. Um, so covered a wide range. Yes. The CCL has like 99 items. So the kind of it's the measure that's used in child psychiatry settings in those kind of settings to determine if the child has a social, emotional problem.

COUNSEL ASSISTING

In your view, was it a combination of the features of the program or any one key component that led to the results you've just told us about?

ASSOCIATE PROFESSOR JORDAN

I really think it was a combination and my analogy is I say, this is ICU and, you know, I'm often asked well, could you maybe just leave some of it out and just do a bit and which bits made the difference? And I think it's impossible to pass out because all the elements were important. They were … the program was theory driven, conceptually driven, you know, based on educators years and years of experience and this other input from social work and infant mental health and designed around redressing harms from exposure to stress as well as high quality pedagogy. So knowing what we know about how toxic stress impacts on children's learning abilities, I don't see how you can kind of parse out the two bits and the program. Everything was so kind of joined up.

COUNSEL ASSISTING

What are the broader implications we can take from the work that was involved in this evaluation?

ASSOCIATE PROFESSOR JORDAN

Well, I think investment needs to start early. You know, we were working with zero to three year olds and by the time of the 36 month assessment, quite a few of the children, cause this was in Victoria, quite a few of the control group children had actually received some preschool or early childhood education care. So hardly any had been accessed in the first couple of

years, but after the third year there was more and they did not make the improvements that the intervention group did.

And also what we know from, you know, brain science is that the earlier you intervene, the bigger impact that you're going to have. So I think we need to focus on what's happening before the age of three and other witnesses have made the point that you could invest in three year old preschool and just increase the gap rather than redress the gap. So I think that's something that needs careful thinking and it's not necessarily a popular view, but I think services can benefit from being cohort focused for this group of children.

And again, I'm talking about ICU, I'm talking about children who are exposed to much more adversity than the lowest quartile of SES in. And so we know we had a way of identifying them, you know, our screening did enrolled the children who were most vulnerable. Um, so it's possible to identify them.

We've seen data this morning about how there are concentrations of child protection in particular, low socioeconomic areas. And then if you look at those risk factors, which overlap with the ones we used for selecting the children in, you can identify the children. Um, if you focus on engagement, you can kind of bring them in.

There is a concern about stigma. You know, that's been raised today. The families said to us, 'it's a relief to be here'. So we need to unpack this stigma idea. If a family's fronting up to, you know, your local universal middle class setting. And they know they look different, they feel different. They don't feel confident. They remember what it was like to be in school and get sent to the headmaster's office all the time. Like they know that they're on the margins of society and they don't have as much as other people. And also people don't invite their children on play dates. You know, people don't let their own children go on play dates to the, the homes that people with very few resources are forced to live in, in neighbourhoods that middle class people don't venture into.

Like, I think we've got to really stop and think and unpack what really goes on. So what the families said to us was 'it's good. We know everybody's got something going on. We don't have to know what it is, but everyone's got something,. So there, there was a certain solidarity, but also 'I'm not different. There's other people. And this is a program and it's a really high quality program for our kids who somebody thinks deserves the best.'

So it's and again, I use my ICU just because we have public health interventions just because we have GPs and paediatricians doesn't mean we don't fund ICU. Like we should be doing all. And we're very keen for universal services to be well-resourced and easily accessible because we want children after this intervention to graduate into universal services and beyond their way, not dragged back by the legacy of what's gone on in the first few years of life.

COMMISSIONER

Okay. Thank you. Uh, if I can just follow up with a few questions it relates really to the presentation we had before about the barriers that prevent families accessing universal offerings now. Inherently in this model, I appreciate the, the cohort that in the model. So there's

a set of barriers there, but inherently in this model, some of the barriers that were pointed to in the earlier work were taken away. So, no cost, welcoming environment, outreach when people didn't attend, you know encouragement. Factors like, you know, 75% of a child's daily nutritional needs being provided whilst they're there.

Um, with, with all of that, I just didn't see it in the material. What, what was attendance like on average? You know, so if, if the dose (to use the terminology) was five days, five hours a day, five days a week, 50 weeks of the year. I mean, what percentage of the cohort would've been accessing? I mean, I guess the right benchmark is most of that because, you know, kids get particularly kids in this age range get all the little child illnesses from time to time.

ASSOCIATE PROFESSOR JORDAN

It wasn't so great, and in our analysis, we only included children who had a minimum of 60 days attendance over the three years because they had to have some exposure. So I don't remember off the top of my head. I'm sorry, it's in the report. Um, there were challenges to attend and some days, so sometimes they wouldn't attend the full day. Um, particularly in the early months, like building up to overcoming the transport challenges or just the getting out of bed and getting organised.

But once they were kind of in the program from memory, then they kind of got the swing of things, but also the children got very attached to the program and the educators. And I think because the family saw it as a welcoming place. So even if a lot of life was going kind of downhill, there'd just been an eviction notice or whatever the centre was a place you could take that new trouble, not necessarily to be fixed, but there would be a listening ear. And you didn't have to kind of dump the children in order to deal with this. There's a computer there's reception. You get a cup of tea if you missed out on breakfast. Yeah. There's just a bit of leftover, you know, snack there, whatever. So I'm sorry, that's one stat I didn't prepare.

COMMISSIONER

No that's right. It would be, it would be useful to know that I think to help us and it's, it's not it's just going to give us an indication of what may be able to be achieved if some of these barriers are removed for people with, with the most likely to have the most barriers to getting there.

ASSOCIATE PROFESSOR JORDAN

Um, but the other thing to bear in mind, I think is if it's a relationship oriented service, not only relationship, but high quality pedagogy as well, which high quality pedagogy is relationship informed, of course the child is sort of participating even on the day they're not there in a way. There's a phone call to home. 'How are things going? I noticed you didn't make it today. We're looking forward to seeing you tomorrow.' Um, if there's a kind of life crisis going on, there's some discussion with the child the next day about that. So the child and family know they're held in mind, and there's a, you know, there might be a phone call by the family services worker to the family and then some work around whatever the crisis is.

So I'm not diminishing what you're saying. No, no, but I'm saying there's a nuanced way of kind of understanding the continuity engagement and participation as well. And then the children, I've got one anecdote where a by then three year old girl said, 'so mum, you have to bring me every day cause they miss me when I'm not here'. So the child driving the attendance as well.

COMMISSIONER

And, and it would also be good to understand the control group that did access the usual preschool offering. I don't know whether you can break the data down that way, but of the control group that got the usual preschool offering, what was the difference? What was the difference in attainment? So, so you've got the attainment statistics here against the baseline and I think you've got one statistic against the control group for the social and emotional development. But it would, would be good to understand the change overall vs. the control group. And if it's capable of being broken down the change vs. the bit of the control group that access the universal offering.

ASSOCIATE PROFESSOR JORDAN

The problem is the same problem that was referred to this morning. Um, and there was such a mish mash of participation in other offerings, right? Was it family day care, a bit of family day care in one day, and one day a week in occasional care? Was it regular day care? Was it preschool? So we do have a graph in the fifth report, but it's kind of, you know, 10%, 10%, 15%, 10%. And so we don't have big enough numbers to slice and dice to answer that question. Right.

COMMISSIONER

But you would have numbers, intervention group vs. control group, just on the attainment differences, I suppose?

ASSOCIATE PROFESSOR JORDAN

Oh yes, yes, yes. That's what we do have. So for example, on social, emotional, after 24 months, only 12% of the intervention group had social emotional problems and 41% of the control group did. Yeah.

COMMISSIONER

But we've got that stats but I think for, I might have got this wrong, but I think for the other stats, what we've got is the improvement in the intervention group rather than the improvement in the intervention group vs. the control group. So for example, in the language scores.

ASSOCIATE PROFESSOR JORDAN

Yes, it was statistically significantly different. But it actually is impact size. So that means in the language scores, I, I could quickly look up for you, but I think that, that means in the language scores, the control group would've been around about 91, 92.

COMMISSIONER

Right. Yeah, don't worry now.

ASSOCIATE PROFESSOR JORDAN

But it was an impact size. Yeah. So they, they do not catch up and they are more compromised after the three years.

COMMISSIONER

Yeah. I guess I'm interested in these statistics because what I'm trying to intellectually drive to is how your work can inform you know, we've talked today about the universal offering and the targeted offering, how your work can inform the kind of modalities that people, the kind of modalities that might maximise impact in the targeted offering. Um, and you know, of, of the, you know, and correct me if I go wrong, but looking at this of the various modalities that your work seems to be supporting more intensive hours than you would normally associate with the universal offering. So 5 hours a day, five days a week, that's going to be more intensive than a universal offering.

ASSOCIATE PROFESSOR JORDAN

Only if it's high quality. Because Heckman's, the Chicago group showed, that for boys from disadvantaged backgrounds, more hours leads to worse outcomes.

COMMISSIONER

Unless it's high quality. I mean, obviously we're aiming for quality, but if you said you had the, you know, if we had a universal offering and we are looking to increase for a targeted offering, extra high quality hours, obviously is one of your modalities. Um, the mental health component is another of the modalities. The, I think, the quality and consistency of the staff seems to be another one – that you had a very stable staff cohort which often wouldn't be associated with universal provision because you were getting workforce change.

So yeah, I'm just trying to drill down.

ASSOCIATE PROFESSOR JORDAN

Ratios, ratios ratios. Yes. So one to three means that there can be intentional teaching individualised strategies, also small group size, small centre size adequate outdoor spaces, you know, that are well set up for learning as well. Yeah. Um, so the child has to experience it as a safe child friendly space and the relationships with the educators are very important that there's not too much chopping and changing and need to think very carefully about things like

lunch cover, but, you know, lunch cover is actually a period of time when learning is taking place and can be a sizeable chunk of the day as well. So known kind of relief or casual, you know, replacement educators for sick leave for holiday leave. Those kinds of things are important as well.

COMMISSIONER

Right. Okay. Okay. Yeah. So I guess one way of us drilling to that would be to compare the features of, of your system vs. say the National Quality Framework and seeing how much in advance of that this model was so certainly in advance in ratios, in advance, in hours in advance in the number of weeks.

ASSOCIATE PROFESSOR JORDAN

It did get an exceeding rating with the first round of assessment under ACEQAs rating.

COMMISSIONER

And, and then on this stigma point as to whether you bring, so the whole model here was to bring a comparable cohort together, which is not what you would see in a universal service. Um, I mean the trade off there is you would, well, a trade off there is you would only be able to have services like this in a few locations. Um, so you may be making the transport, how to get to it, harder.

ASSOCIATE PROFESSOR JORDAN

So there are different ways of tackling that, and we are kind of thinking about, you know, scaling up at the moment, what the challenges are. Um, so there are certain communities where you could easily put one in and children can walk, you know, because the, there is a concentration, there may be other communities where you may need to tolerate over servicing the kind of the group who are not quite as vulnerable as this, but are living with quite a bit of disadvantage. Right. But it's small centres. So we think probably no more than 48. Um, so yeah, it's a challenge, obviously in rural and remote, you wouldn't just need another model.

COMMISSIONER

And how advanced is your work on, on the challenges of scaling?

ASSOCIATE PROFESSOR JORDAN

Um, so a group of us are measuring the challenges of scaling. And so we um, you know, there's a science about implementation and scaling up. And so we are working with some services that are interested in having a go at doing this and looking at what the challenges are to, for example, getting the staffing continuity of staff. Um, and some of the original investigators are providing professional development and support to an ongoing coaching to help problem solve the challenges of scaling up so that the program doesn't kind of drift away.

So we, we think that the University team think that a model of incremental scaling probably works because then you grow a workforce who are knowledgeable, then they're the resource for an expanded group who are a resource for an expanded group rather than okay. Um, roll it out on a large scale. So you need to kind of build in the regeneration of the expertise.

COMMISSIONER

Yes. Yes. And, and how, how, just where in the journey are you on that? You're at the, at the beginning, at the beginning, looking at scaling factors and starting discussions about this model being in a couple other places.

ASSOCIATE PROFESSOR JORDAN

Yeah.

COMMISSIONER

Okay. Um, that's all very helpful. Thank you.

COUNSEL ASSISTING

The witness can be released.

COMMISSIONER

Thank you. Thanks. Very much. Very interesting. We're continuing to run a bit behind aren't we? So should we press on?

COUNSEL ASSISTING

I think we will. I call Professor Sally Brinkman.

< PROFESSOR SALLY BRINKMAN AFFIRMED

COUNSEL ASSISTING

Feel free Professor to have your written submission before you, if you need.

PROFESSOR BRINKMAN

I've got my laptop. I hope I'll remember it.

COUNSEL ASSISTING

Just some general questions for you about your background before I really hand over the floor to you and ask you to tell us all about the LILO study. Is it correct to describe you as a social epidemiologist with a research focus on society's impact on child development?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

Uh, I understand you hold a Bachelor of Arts with majors in sociology and biology from Flinders University.

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

Uh, you have a Master's in Public Health from the University of Adelaide?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

And you were awarded a PhD from the University of Western Australia in the School of Paediatrics and Child Health.

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

And are you presently a Professor at Education Futures at the University of South Australia?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

And generally, is it fair to say you have a focus on research that aim to improve the healthy development in early learning of young children and similar to Dr. Pilkington this morning with a focus on those living in diverse and disadvantaged to communities?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

Have you undertaken research across Australia, but also internationally? And I believe you have experience in population monitoring like Professor Dr. Pilkington to determine the prevalence distribution in magnitude of child outcomes and experience in randomised control trials.

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

Do you work closely with international governments and other donor organisations such as the World Bank, UNICEF and UNESCO?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

And I believe you currently sit on the Child Development Council also, is that right?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

Your work has been published, I believe in more than 200 publications. Is that correct?

PROFESSOR BRINKMAN

Yes.

COUNSEL ASSISTING

I want to ask you today to tell us firstly, why there was a need for the LILO study and then to help us understand what that involved and what the preliminary findings are and where the study is looking to build on those findings in the future?

Uh, so firstly, how important is language development in the early years?

PROFESSOR BRINKMAN

Uh, so in terms of looking at predicting later outcomes, language development is one of the strongest predictors of later academic achievement and you know, income, a whole lot of other. So out of the different aspects of development, language development is one of the strongest predictors. Some would argue that that's because language development is easier to measure than for example, social, emotional development. But with what we've got so far, language is a very strong predictor.

COUNSEL ASSISTING

Can there be socioeconomic differences in vocabulary? And if so, what do we mean by that?

PROFESSOR BRINKMAN

Yes. So the literature around, I suppose, language attainment and the size of the child's vocabulary is very strongly socioeconomically related. So children from poor socioeconomic backgrounds or living in poor socioeconomic regions tend to have smaller vocabularies, not as many words. Um, their speech can be quite different to those that are raised in higher socioeconomic areas.

The understanding behind that is this is, is what we call part of the intergenerational effect of socioeconomics. So if you have parents with not a wide vocabulary, then you as a child are not as exposed to a wider vocabulary. And so you don't tend to pick up as many words as a young child. And so that pattern continues over time and things like preschool, aet cetera, try to alleviate some of those concerns, but of course, you know, children are in the home environment for a very long time. And so this home environment, language exposure is very, is very predictive of these later outcomes because of this intergenerational inequality.

COUNSEL ASSISTING

Expand on that in a moment, but are there some key milestones when it comes to language development, particularly within the first two years?

PROFESSOR BRINKMAN

Sure. So development is I suppose, characterised as spurts and lulls in a way, right? And some of that variation is perfectly normal. So a child could walk anywhere between nine and 15 months. If a child starts walking at nine months, it doesn't mean that they're going to become a marathon runner. There's no, there's no predictive quality in that range of nine to 15 months, post 15 months, then that becomes a concern. And then you might want to see a referral to an occupational therapist or something, and being able to support that physical development.

So most of the research recent research is showing that there is actually quite a large range in terms of what we call language emergence. So when a child starts to talk, it's quite a wide range and that range doesn't seem to be partly predictive of outcomes. Once that child starts

to talk, then the most predictive is how rich the language environment is in being able to pick that language up for that child and then to continue to see them grow. Um, so yeah, prior to two, there is, I mean, this is not my research. Um, but some research that was done at Telethon Kids Institute with Professor Cate Taylor, for example did a very interesting study called looking at language.

And they were actually trying to pick up these children prior to the age of two and then intervene in some groups and not in other groups and then follow their language skills over time. And they found that it was actually very difficult to pick up any sort of language outcome prior to two that would predict those outcomes. So it wasn't until sort of three, four years of age that you are really starting to be able to assess development in a way that you can, I suppose, identify kids that aren't going to do very well in the future vs. those that aren't.

If we look at the AEDC data, so Australian early development census data that's taken when the children are on average about five and a half one and a half years of age, that is highly predictive of outcomes. So, you know, by the time the kids are starting to get three and above those language measures of predicting, there is debate around prior to that, is it just because our measures aren't sensitive enough to be able to pick it up? Or is it just that this is this natural variation in development? And that seems to be a large debate in the literature still.

COUNSEL ASSISTING

Are there any key figures from the Australian early development census that can tell us how children are faring in South Australia with respect to language development?

PROFESSOR BRINKMAN

Yeah, so unfortunately South Australia's not doing so well on the language and cognitive development domain when you compare to the other states. So the other states have actually seen improvements on language and cognitive over time. Um, South Australia, that hasn't been the case. And particularly interestingly, particularly for the language and cognitive development outcome.

COUNSEL ASSISTING

And I believe is it a figure around about 7.9% of five year old children were vulnerable in communication skills in the 2021 census?

PROFESSOR BRINKMAN

So there's two, two domains on the Australian Early Development Census. One is language and cognitive development. And the other one is communication skills in general knowledge. Language and cognitive development is the domain that has more of what we would call, I suppose, formal academic type of items. So proficiency and language you know, early, early reading skills, early sort of understanding of language. Whereas the communication skills in general knowledge is more about being able to communicate one's needs more around verbal language than it is around starting to know your letters and that sort of stuff.

COUNSEL ASSISTING

How strong is the international or national evidence with respect to the quality of early language development and, and later development? Are there any seminal studies that are often referred to?

PROFESSOR BRINKMAN

So, well, I mean the Hart and Risley study, but we've tried to replicate is probably the most iconic study that everybody tends to quote with a, what we call the 30 million word gap but when you look deeply at that study there's yeah, there's, there's a few, like any study, there's always some things that you could do better, including many of my own.

COUNSEL ASSISTING

Stick with Hart and Risley can you describe to us a little bit about, for example, where that was based and what some of those limitations were in your view?

PROFESSOR BRINKMAN

So Hart and Risely study was well, it was published in 1995. It was conducted in the early nineties in out of the University of Kansas. Um so it was conducted by two people, Betty Hart and Todd Risley. And they had been, I suppose, language researchers for a long time and particularly in, in preschool setting. And they were concerned that despite what they were trying to do in the preschools to improve language, they weren't really seeing cumulative effects on the, on the children's development. And so decided to start, you know, looking into the home environment.

Um, so on sample as 42 and mainly what we call convenience sample. So it started with friends and family and then they, and they broadened out to using some of the birth notifications to recruit. Um, they had three different groups, so they had six children that were in what they called the welfare group. Um, I think 13 in the middle group and another 13 in the upper group, no, , 23 and 13. So out of those three groups, they tracked them over time from about just under 12 months of age through to about three years of age, they had research assistants videotape with a, like camera went into the home for an hour every month of the child's life. Um, the hour was recorded sort of early evening. And then they came back, you know, the research assistants essentially came back and then did a stellar job in coding all of that data, cause that was a massive amount of things to do.

But what they did in terms of their coding was tried to determine what they call adult language exposure. So the number of words that were in the home environment, so research assistants essentially just counted the number of words that they were seeing on this hour and then they extrapolated those figures out to the 30 million word count. So in terms of I suppose, concerns about the study as such in terms of, you know, how replicable, that is how generalisable that is to Australia. So one, you know, it's just outside University of Kansas, it's a convenient sample. It's a very small sample. Um, two, you've got, I don't know about you, but I wouldn't normally

behave the same as I would if normally, if I had a research assistant with a video camera in my home

COMMISSIONER

You'd probably tidy up a bit beforehand.

PROFESSOR BRINKMAN

Yep. Um, it's like you know, there, there are a few issues associated. But this, this study is just iconic, right, just like everybody is very excited about it. And so anyway, we decided to see whether we could replicate it in Australia with a larger sample size and using this new equipment, which actually Betty Hart, who's one of the, the original authors of the Hart and Risley, actually helped to develop this software.

It's a little recording device that you put in a little t-shirt that you put on the kids and it records for 16 hours and then you take the recorder back and plug it into computer. And it uses sound recognition technology to be able to count the adult words, be able to count the child's vocalisations or their own child's own words once the child starts talking and then what they call conversational terms. So I talk, you talk within a space of five seconds and then that's a conversational term. And so it, it counts all these things, literally spits it out of the software and you can have an indication of what's going on in the home environment. So you know, it's not requiring video cameras or anything like that. And so you, the hope is that that's picking up what would be considered more normal behaviour in the home environment and for a significantly longer period of time. Cause it records for 16 hours. So yeah. So that's what we're trying to do.

COMMISSIONER

So, so it, it's measuring words spoken in front of the child conversations back and forth that's with the child and anything the child might vocalise or say.

PROFESSOR BRINKMAN

Yeah, that's right. Yeah.

COUNSEL ASSISTING

And it's important to clarify that what it's not measuring as I understand it and correct me if I'm wrong is what is said in terms of whether they're discussing a nursery rhyme or the radio's on, in the background.

And I might ask you in a moment about background noise, but importantly, for present purposes, it's measuring numbers of words in the interactions and the to and fro of language as last witness used rather than making any transcript or analysis of what was said, is that correct?

PROFESSOR BRINKMAN

That's right. So it's not, it's not able to say whether, you know, we're having a screaming match, which to each other with, you know, a very negative conversation vs. something like, you know, like a lovely scaffolded conversation, that's helping to the child to, I know, learn something. It's not able to differentiate between the two, the data is recorded. And so you can actually go back and listen. Our consent procedure was that we wouldn't do that.

Um, however, in terms of the background noise there, it does also record this thing that they call electronic noise. And so that's a combination of screen use TV, radio microwave going off in the background, anything like that, it counts as electronic noise. Um, and so we, we have actually done a follow up study, look further funding to be able to actually understand that more because people were increasingly concerned about screen time for children. And so we got additional funds and we went back to our families to consent, to listen to the sections of the recording where electronic noise occurred to be able to try and determine whether that was screens or microwaves or car running in the background or whatever else that Lena was picking up.

Um, so that's a, that's a subsequent study that is going on at the moment where we are actually now have research assistants coding, a bit like Hart and Risley were originally.

COUNSEL ASSISTING

In the context of the Hart and Risley study, you mentioned this concept of a 30 million word gap. What, what did that study find and what does that phrase that we hear bandied about actually mean?

PROFESSOR BRINKMAN

Yeah, so once their researchers did the coding, then essentially they analysed the data, broke it down into these three groupings. So what they called welfare middle professional number professional and essentially drew straight lines between the data that they were getting for every month as the, as the child aged. And then they extrapolated those figures out. So when you look at the data that they present they have these modelled straight lines from actually from birth right through to four years of age, even though the study only went from about 10 months of age to three to three years of age, they extrapolate that out and then they determined their calculation was on the basis of 40, you know, their hour that they counted and they decided, okay, well times that by 14 on an average day. And times that by the number of days and, and extrapolated to the 30 million words.

What we're finding in our study is that it's not these straight linear lines. Um, and our patterns are actually quite different to, we're still starting to see a gap, but the patterns are quite different and the magnitudes quite different to what Risely found.

COUNSEL ASSISTING

Just to be clear by the 30 million word gap. Do you mean an estimate or a forward extrapolation I think you described it as whereby they were able to work out that by three children from disadvantaged families heard 30 million less words by four.

PROFESSOR BRINKMAN

By four years of age, their estimate is that a child in a welfare background, so the six children from the welfare background were hearing 30 million words less than those in the higher professional group over that those four years of their life.

COUNSEL ASSISTING

Am I correct that the Hart and Risley study didn't monitor children up until three,

PROFESSOR BRINKMAN

They completed their analysis at three, and then they extrapolated three to four with their data.
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COUNSEL ASSISTING

Thank you. You've raised some of the limitations around that study in terms of participant numbers uh, and the filming and the practicalities of it and also, I think it's fair to say that extrapolation nature of stopping at three and then trying to forward estimate to four. How was LILO structured to try and produce the strongest or most robust evidence that you could?

PROFESSOR BRINKMAN

So, I mean, we took a slightly different approach in that first up we wanted to have a larger sample. So we did, you know, power analysis as to what we would need to be able to determine, you know, a sensible effect size, et cetera.

And so our study aimed to recruit 120 families in and we use, because in Australia we know that maternal education is the strongest predictor of language. So we use maternal education as our category for the groups. So we, we aim to recruit 120 families with the mother's education level being high school only, so no certificate or anything along those lines, only high school educated vs. degree plus. So at least one degree.

So they were the two extremes essentially of the sort of maternal education spectrum. And then using the Lena device rather than going, I mean, we went into the home to be able to do surveys and all of those sorts of things, but in terms of our understanding of language that used the, the Lena device to do the recording, and we went in once every six months. So we started at six months of age prior to when the children were going to be talking so that we could just see sort of what sort of interaction the parents were having with the children prior to child language emerging and then every six months thereafter. Um, and so the data that we've presented so far today are sort of results coming behind the survey, the study, of course. So

we've presented data up to 18 months. So we've got six, 12 and 18 months is what we've published so far. That will be, we're taking it up to five years of age.

COUNSEL ASSISTING

What are the key findings to date?

PROFESSOR BRINKMAN

So what we found initially was at six months and 12 months, we were actually seeing no gap at all between the two maternal education groupings. And indeed there was extremely large variation in the amount of words that were spoken in both groups. So if you took the two groups together, the extremes were anything from 3000 words in a day up to 40,000 words in a day and massive variation not between, but within the two groups. So large variation, no significant difference prior to the child talking between 12 and 18 months is generally when the children will start, their language will start to emerge.

And so we start seeing the child vocalisations increase and they're both increasing in both education groupings, but for the high education grouping, the child's vocalisations increase more dramatically. So we're seeing a, a steeper gradient for the conversational turns, we also see an increase between the 12 months and the 18 months. And again, with a steeper increase for the high degree plus mums vs. the, the high school only, what is very interesting though, is the adult word count is, is nothing really like the lines that we see from the Hart and Risley study.

So essentially for the high education group being, there's very little variation over time, it's relatively straight line. Um, for the low education grouping, the amount of adult words actually declines after 12 months. So it seems that when the child actually starts to talk there is less interaction. Um, you see it in the conversational turns, but the amount of adult words is actually less for and lowering for the high school only education grouping, whereas Hart and Risley, you see both increase, but starting to deviate, we see straight and starting to drop, starting to drop. Um, so yeah.

So what does that mean is the big question, I suppose, at the moment we haven't been able to link the data to the child development outcomes, collecting child development outcomes, but of course so that's something that we're planning to do to see whether these counts actually do relate to child development and how much so but I think the key thing that we're finding is that at the time that you would expect to see greater interaction and greater, you know, I'm sure somebody has already mentioned today, serve and return. Um, so you know, this idea that you're responding to the child and continuing to support the child you would expect to see that increase. I would've predicted when the child talking but we're not seeing that as dramatically as we would've thought. Um, but that, that gap is actually increasing. So, yeah.

COMMISSIONER

And have you got any theories as to why that might be happening or you don't want to chance your arm until you've done some more research?

PROFESSOR BRINKMAN

No, not really. Um, I mean, I have to say, I think that, you know, all of the chief investigators were a little surprised. Um, we weren't necessarily expecting that. We had actually, I mean, if, if you asked us all before we started the study, I think we all would've thought that we would've seen a, a gap in language interaction prior to the child talking and wouldn't necessarily have predicted that the gaps start emerging when the child does start talking. And then I don't think we would've predicted that we would've seen less words being spoken to the child. So they're, they're all interesting to, yeah, very, very interesting. And then I think one thing to think about also is there's this sort of assumption, I think within the literature that just more is better. And I think the study is now starting to make us reflect a little bit more. And again, it goes to this quality argument, you know, is the quality of the conversation, not necessarily just the amount of words. Um, so, you know, that's something that is difficult to collect with a Lena device, quality. If anything, your proxy, your strongest proxy would be what they call a conversational turn. Um, but it's a, it's a very, I think, loose measure of quality, really. Um, so it will be, you know, it will be interesting over time to, to, to see there is some other research that's being presented by, by others in America that show that again, it's, it's less seems to be less about the amount and more about this vocabulary size and the quality of the vocabulary that seems to predict the child's own language skills.

COUNSEL ASSISTING

Is it also important to recognise, I imagine that there will be general differences in introverts vs. extroverts in terms of children and parents, but also possibly cultural issues that might come into play the nature of these interactions.

PROFESSOR BRINKMAN

Yeah, absolutely. I mean if I, I have to say I'm an introvert. So if I was in a family with 40,000 words in a day, I don’t know how well I'd cope to be honest.

COMMISSIONER

Does seem a lot of words.

PROFESSOR BRINKMAN

It does seem like a lot of words, doesn't it? Um, so exactly. I, you know, always with research, right, it's always more complicated than you really want it to be. Um, so yes, I expect that child's own personality characteristics as well as the parents. Um, and we know that culture makes a difference too. Some cultures are a lot more should we say chatty or talkative than others, but you know, interestingly, no matter what language a child is raised in language emergence always seems to happen at a very similar age. So, you know, there's this natural variation in that variation is picked up around the world in independent of what language it is, that's, that's spoken to the child. So it, it seems a very complicated space.

I suppose we went into the study in the first place, well I did anyway, you know, I'm no language expert, but my work is really around inequality and, and, and had this sort of this interest around this intergenerational, what we can do from an interventional point of view to try and sort of stop this intergenerational transmission, you know, where is it that we would engage? I think one thing that we can say from the study already is it seems that the time to really be supporting parents and encouraging parents to engage more with their children is that time when the child's actually starting to talk themselves. So between that 12 and 18 months. So I think we've sort of, we're starting to understand that already from this study. And of course it's in service provision land that we are the weakest in terms of our touch points. Um, there's not a, you know, like community, child health generally has phased out by that time. Preschool's not until, you know, potentially three but four at the moment. Um, and so, you know, what is there in that, that space, it's quite a large gap and it's a really important gap for development.

And most of the developmental milestones are all occurring within that timeframe. Um, and particularly around language, you know, trying to emphasise that language rich environment and those interactions when the child starts talking, seems to be something that we can, we can already start to predict from this day,

COUNSEL ASSISTING

In terms of that first thousand days and the services that that are and aren't available, what how would you best see parents being supported to foster good language development in that that period after CAFHS might stop and before preschool might start?

PROFESSOR BRINKMAN

So, I mean, we have some hints on that using the Australian Early Development Census status. So even just looking and again, it's associational, it's not, it's not, you know, unfortunately we haven't, we don't have a history of conducting randomised control trials in Australia in the early childhood space. But if you look at the association of data, children that have been ticked by the teacher as having attended a playgroup and all attended a preschool, you see far better results in terms of language and development. Um, so we know we seem to, that seems to indicate that playgroups are having a positive impact on, on language development.

And it would seem to indicate that preschools having a positive impact on, on language development, children that attend both playgroups and preschools seem to improve even more. Now the difficulty is because it's associational and not a trial we don't know whether it's just the parents that seem to you know, potentially more proactive in trying to support their child's development are the ones that then are attending playgroups and preschools, you know, to support their, their children.

And that's, that's a bit, that's a little bit difficult to unpack in Australia, but you know, some of the international trials that we've done you know, some of the ones that I've done myself in low income countries, you know, these early childhood education initiatives that are sort of these

community playgroup type models we are seeing higher rates of attendance and improved outcomes, not just in language for other aspects of development as well,

COUNSEL ASSISTING

Are those playgroups then a potential rich source in which good language development might be fostered?

PROFESSOR BRINKMAN

Potentially. I think that the thing about playgroups that is different from preschool, I mean, it's low dose, but in some of these international trials, that've done there higher, higher dosage, you know, longer hours and multiple days. But the one thing that is different is that you have parents there, you know, like we're at least one parent or guardian of some sort who then, you know, there's the role modelling. They can see other you know, parents are given different ideas around activities that they can do with their children. And then they can take that home and do it with their children. You're providing more confidence to the parents in their parenting ability to support development.

So I think that's quite different from a preschool type model where, you know, you are dropping your kid off and then you're picking them up afterwards and you're not necessarily getting that parenting component in addition to it. Um, I would also say there's sort of, I mean, there is soft touch in a way, like there is soft entry point, so they're not, they're not, you know, highly professionalised as such, so maybe they're seen as more of an open, safer environment for, for families to, to engage in. Um, but yeah, it's all, we don't actually have very strong evidence, unfortunately, in Australia around these different models.

COUNSEL ASSISTING

Presumably therein lies the strength in the ongoing work though. And I understand it's ongoing in terms of LILO in terms of trying to continue to analyse and work out what you can draw from the study.

PROFESSOR BRINKMAN

Yeah. So we, we just recently just the, of last year completed the data collection. Um, so now we're, you know, heavily doing all of the coding and getting the data ready to be able to analyse. Unfortunately we're a little bit further behind then I'd hopefully be at this point in time, you know, small things like COVID all a few other things got in the way, but yeah, hopefully we can start really getting into the data now and start getting some outcome soon.

COUNSEL ASSISTING

I'm interested in the branching out in terms of looking at the background noise and, and starting to, to interact or recognise some of this electronic contribution. Yeah. Uh, perhaps just asking you for your personal views, is there a place for a positive role in terms of using

electronic resources or internet based platforms to help with development of language in addition to, to parent child to and from.

PROFESSOR BRINKMAN

Yeah, that's a, that's not such a simple question. So screens everywhere, you could sort of go down the harm minimisation type of approach. I think, you know, you're never going to get rid of them. Um, and they, you know, they are highly functional, so they're very, very attractive for use. So what we're trying to do with what we're calling, you know, we're calling screen time study, or the ENILO, which is electronic noise in little ones. Um, so what we're doing is we're basically for the LILO participants that agreed for us to be able to listen to the recording, we're separating out that electronic noise going in and then trying to code. Now, the coding that we're doing is not just trying to identify what the electronic noise is. So whether it's a screen of some sort, whether it's TV, radio, whatever but then also trying to identify whether that's educational or not.

So it it's quite amazing. The research assistants are getting very good at being able to identify all of the different TV shows children are, are listening to and become experts in their own rights. So, you know, you can compare Bluey vs. a, you know, YouTube video or whatever. Um, so they're being able to code what that noise is, whether it has any educational component to it or not. And we're sort of doing a categorical response on that as in no education vs. high educational content. Um, and then we're also trying to determine whether the interaction with the screen is with a caregiver of some sort. So is it done in conjunction and is there some sort of support with the family member looking at the screen? So, you know, you can imagine a whole lot of different sort of scenarios.

So we are trying to code that at the moment and then link that to, to child development. So the idea is trying to unpack again, is it just quantity of screen use, you know, the, when you look at the literature at the moment, most of it says, you know, large amount of screen time is for children's development. Um, but a lot of that was based on, you know, TV and not necessarily the modern era of iPads and tablets, you know, phones and everything else. Um, so you, you know, it'll be interesting to sort of monitor this over time. Um, we have, you know, some of the, we haven't published this yet, but we're close to writing the paper. It's sort of hoping that it will get published soon, but you know, the, sort of the indication at the moment, the, the Australian guidelines, World Health Organisation guidelines. So the children shouldn't be listening to screens at all, or exposed to screens at all prior to the age of two, I think we can confidently say that that is not happening.

So then the question is if it makes a difference, if it makes a difference to child development in both positive and negative ways, so presumably positive for educational, negative, maybe if it's, there's no educational component whatsoever? Does that differ by socioeconomic grouping? So you could have a hypothesis that for those children that are not getting a very strong sort of, you know, language environment in their home, but they're listening to screens all the time. Maybe they're getting a wider vocabulary from the screens that they're listening to.

You could come up with so many different types of hypotheses, both positive and negative at the moment. I think the literature is really unclear of that, that we do see most of it seems to

indicate negative outcomes for child development. And that goes from inability to regulate behaviour through, to eyesight even you know, sort of depth perception. There's a whole lot out there. Some people have even been trying to link it to autism. So there's a lot of burgeoning research of mixed quality and so hopefully this study will help to be able to inform that over the next few next year or two.

COUNSEL ASSISTING

Will those participants continue to be monitored, to look at trends as they get older.

PROFESSOR BRINKMAN

So consented for data linkage. So the aim is to link the, the data of the study participants into BE BOLD, which you would've heard about earlier today, so that we can look at you know, the, I don't know, NAPLAN outcomes over time, a whole lot of things. So yeah, that is the aim, but that would be through linkage. It won't be going back into the home environment.

COUNSEL ASSISTING

At this stage where the study's at the moment, is there reason to be cautiously optimistic in terms of it confirming what some of the literature suggests that children raised in responsive and stimulating home environments would be more likely to thrive?

PROFESSOR BRINKMAN

I think it's probably a bit too early to say that, to be honest out of this, this study in particular, there are other studies that are probably better able to say that than this one at this point in time, as soon as we start linking the you know, the language input to actual child development outcomes, then yes. But we're not quite there yet.

COMMISSIONER

I have many questions. This has been very, very interesting. Thank you. I just want to take you back to something you said right at the start, which is that the first age range at which you can get an insight from language into likely future pathway is age three.

And before that either we lack the tools or it's not it's not statistically correlated. Um, I just want to build on that and therefore ask you moving to a three year old preschool model what opportunity does that give us in relation to language development that we don't have now and how would that opportunity be best used?

PROFESSOR BRINKMAN

Yeah. So I, I think you might have already discussed in South Australia at the moment, we, we're not doing terribly well in comparison to other states and around our child development checks, you know, not doing that as regularly or as widely as, as one might like to say. Clearly

trying to do these sorts of checks is a lot easier if you have a universal service that everybody's attending, just cause you have catchment.

You know, for example, the reason why we do the Australian Early Development Census in what South Australia's called the reception year is because we have the large catchment. I mean, ideally you would do the AEDC at the slightly younger age range for generally, you would, you would expect to do, but we don't have everybody coming. So it's very difficult to do a large scale census.

So I suppose for the, should have coming into a preschool, then there's an opportunity to catch you know, signs of developmental delay or you know, children not doing so well earlier than what we currently do. And then hopefully if it's a high quality service, then that we would be able to support that child so that when, you know, they come into the school environment, they're more ready to accept the learning environment. That's sort of offered when they, when they come into the, into the school system.

We don't in Australia, we don't tend to use school readiness as terminology because we like to have the view that all schools are ready for the child independent of whether the child's ready for the school. But ultimately, you know, the aim of any early interventions is really to try and support those children to be able to thrive as best as they can independent of whatever the home environment is that within which they're raised.

So three year old preschool provides an opportunity for that. Um, I think there is, I think it's still a live debate around, you know, when you say, when we say three year old preschool, I think most people think four year old preschool opened up to three year olds and I think it would've been nice to take this opportunity to consider is that what we really mean? Or is there an opportunity to do something a little bit different and from, you know, from the literature that's out there that would have aspects like being potentially more community approached, having parents involved. So you've got that learning, you know, for parents there'd be, you know, a few other things that we would do a bit differently.

COMMISSIONER

Just focusing on, on language. If we did have, you know, well, well attended high quality three year old preschool. So I understand the force of what you just said about the model, but you know, if, if we just imagine we had that sort of with any model, is there, is there evidence to suggest that if three year old showed up, some of whom clearly had good, good language acquisition and three year old showed up with comparatively fewer words, like perhaps dramatically fewer words that an in an intervention could be done at that point, which would make a difference. Is there evidence around that?

PROFESSOR BRINKMAN

I think you'd want to see that because, as much as we'd like it not to be the case, inequality increases through the education system. It doesn't decrease. The idea that, you know, education closes the gap, when we actually look at data it doesn't seem to be the gap.

And it makes sense because learning is cumulative, right? You, if you already come in with skills you get skills, right? So if you, if you come in with some skills, then you're able to take advantage quicker of what the teacher might be able to teach you. And, you know, you are gaining, right.

Whereas children that, you know, come without that, into the school environment, you know, they really need to pick up really quickly. Otherwise you are going to see that starting to fall behind. And that's when we start seeing the longitudinal trajectories that we all don't like to say.

So I think in early education system, be it three year old or four year old would ideal in, in my mind. And I know this is probably contentious with many, but in my mind it would be trying to understand not just the child's own skills, but the home environment and working out how we can potentially support those kids really quickly upon entry into either three or four year old preschool to enhance their development and pick them up so that they can then start, you know, improving and not being, not starting behind, I suppose.

So what that would look like I think is, is another challenge. And again, the literature is there is quite a bit of literature out there, but it's contentious. For example, around early reading skills, you know, they call them the phonics wars, literally people arguing around, you know, whether phonics are good or bad and when should you start teaching the, the children. Um, and yeah, it's, it's a very, very, very contentious space.

The part of the debates that I think are interesting that are starting to come out of America with the randomised controlled trials of Head Start. Um, so, you know, these is a preschool based on some of the ordinary, you know, the Abecedarian preschool and all these things that we've, you know, been mentioned numerous times today, I expect the trials haven't always shown as positive as what they had hoped, right?

So the evidence isn't as strong and it's mixed. So some trials seem to show no impact some positive impact and, and the gap, the gain for those that have shown an impact, the gain is lost once the children hit school. So it seems that children that weren't exposed to the intervention as such really can catch up quite quickly.

So then there's the question mark, as to why are we naturally investing so much in this space or, and, or have we got the programs right? And so now they're starting to unpack more around the pedagogy of what's occurring within that in those preschool environments. And so that they're now starting to talk about, you know, should we actually bring in some you know, more, don't really want to use the word instruction, but more sort of specific skills targeting children that, that don't have those language strengths in the home and trying to really support that in those first, early years and trying to raise them up because at the moment it's very, it's been very play-based and of course play-based is exactly what you would want to see for young children, especially for three year olds, but there's play-based and play based and how you, how you play with children in a way that you still are enhancing development, exposing them to you know, letters and all these sorts of things.

And the trials seem to be showing internationally that those, that sort of going back a little bit to more of the instructional based seem to be supporting some kids, whether it's all children and in what way, and from what cultural groups that's, when you start getting very complex. Um, and it's, I would say the literature is you can't really put your hand on your heart and say, this is, this is the way we should be going. And definitely we can't do that in Australia with context of Australia being different to other countries. So, unfortunately it's not as, it's not as clear as what we'd like it today.

COMMISSIONER

Understood. Thank you very much.

COUNSEL ASSISTING

The witness can be released. Thank you.

COMMISSIONER

That was very interesting. So I believe that concludes our witness evidence for today. So thank you very much for all your hard efforts. Thank you to everybody and thank you for those who have been watching in person or online and we will resume on Friday and we'll hope to see people then. Thank you very much.

< THE HEARING ADJOURNED AT 4.35 PM UNTIL 10AM FRIDAY 27TH JANUARY