

Supplementary Table 2. Coding Tree for focus groups with participants who received the vaccine, exploring the behavioural determinants of COVID-19 vaccine uptake during pregnancy

COM-B conceptual themes	Subthemes	Sample codes (focus groups)	Sample quotes (focus groups)
Psychological Capability	(1.1) Consistency and reliability of COVID-19 vaccine information and research	- Lack of research/long-term research	<p>“But I was anxious up until the baby was born, I'm not going to tell you lies, and not because I disrespected the views of my doctors or I'm an anti-vaxxer, but for the reason of, there just hasn't been enough time passed, girls . The research has been done but for me, I was so scared that enough time hadn't been passed to see what the outcome of this could be.” (Focus group participant 5)</p>
	(1.2) Balancing authentic and accessible risk-benefit information and choice-framing	- Conflicting/changing advice	<p>“Yes. I got my first one, actually, whenever I was pregnant and didn't know. And then, the second one, I hmm'ed and haa-ed with it because the information was changing all the time about whether a pregnant woman should or shouldn't get it, so I just didn't really know what to do. No matter how many people you asked, they were like, 'Oh, it's up to you,' more or less. It was just that there was no-, at that time, it was like, 'I don't know whether you should get it or not.' And then, I think, after I got it, it was like, 'Yes, all pregnant women should get it.' So, it was just like they were making up their mind, whether pregnant people should get it or not, so it was a bit confusing.” (Focus group participant 1)</p>
		- No discussion of benefits vs risks of vaccine	<p>“No. Like not about what was in the vaccine, they literally just asked, 'Have you got it?' I think one gave me like the COVID-19 helpline thing for pregnant women, so that you could phone up, it was a midwife that was giving out the vaccinations, if you wanted more advice from that. But I never phoned it. But they didn't actually talk about the benefits and the</p>

		- Accessibility and availability of risk information/language	<p>risks and stuff like that, they just asked did you get it, and once you said, 'yes' they were like 'that's ok', move on." (Focus group participant 1)</p> <p>"if you asked the question, you were basically told, 'We're not told to given anybody information about it. You have to make up your own decision on that.' They didn't have any leaflets, they didn't have anything at the time. And I was really frustrated because I understood that they couldn't tell me, but even after they knew some things, they were reluctant to talk about it. It was almost as if they were worried that if anything did go wrong that you'd come back to them and say, 'Well you said this. ' But I did my own looking around on social media, and I started following a couple of really reputable people even on social media. But you have to be selective. There was an immunologist in London, who specialises in pregnancy and he was really really good, and I was able to signpost other pregnant people to the same person who was bringing out really up to date . She was looking at all the research and letting everyone know like what's being said, and how to actually look at it from a layman's point of view, so you didn't have to have any special medical knowledge to understand what she was saying." (Focus group participant 4)</p>
Social Opportunity	(2.1) Persuasion of personal relatedness	- Influenced by personal stories (friends, family)**	<p>"We had friends that were nurses at the time, and they were in the COVID wards. They were just telling us that there was say, 8 out of 10 people that was in that, and maybe 6 of them that were pregnant mums. So, I was like, 'I should probably get the vaccine then.'" (Focus group participant 1)</p>

			<p>So, after I got it, it was advised then that all pregnant women go and got it, and they kept banging on about it, so I'm glad I did. I probably would've been sick of listening to them.” (Focus group participant 1)</p> <p>“Yes, it did. But I thought because they didn't feel alone, I think I would've really found that really beneficial if that had happened for me or if an environment, like at your antenatal-, or even people who haven't taken it in their post-partum period being offered it before they leave hospital . Might be a really good time as well. I know that in England, they did some things like that, where the obstetricians were offering a vaccine clinic as you were leaving the hospital because you're still at risk, high risk, 6 weeks post-partum too.” (Focus group participant 4)</p> <p>“It might be an idea to have the vaccines, I know this probably not-, well, it would be easy to have the vaccines whenever your at your maternity appointments-, because you get most of your appointments, and you have to get it again for your vaccine, so it would be good-, I know what though that it's just probably being a bit greedy, but that would make things a whole lot easier. “(Focus group participant 5)</p>
<p>Reflective Motivation</p>	<p>(4.1) Unnerved by the unknown (vaccine risk and safety)</p>	<p>- Fear of unknown impact & unknown substance</p>	<p>“But, as I said, damned if I did and damned if I don't because if I didn't get it and something happened and if I did get it and something happened. But I did feel sick getting it, both times, I cried whenever I got to go to them. I just thought, 'If somebody tells me so many years down the line that my child has this because of the vaccine then it's my fault.' But then, if you had got COVID or something happened during the pregnancy, I said, 'You could avoid this if you got the vaccine then. ‘It’s just all unknown.” (Focus group participant 5).</p> <p>“And I knew that taking the vaccine wasn't risk free, because we didn't have the information, but I knew that COVID from my own, not from being a nurse, just from reading myself that COVID was causing women to</p>

		- Optimism in health choices is important**	<p>who we're reaching and who we're not reaching, is through research. But I don't know a lot about it, so." (Focus group participant 5).</p> <p>"No, if you got the vaccine, you were sort of hoping you would take milder symptoms, if you did get it, then you could end up in hospital." (Focus group participant 1).</p>
Automatic Motivation	<p>(5.1) Fear drives indecision</p> <p>(5.2) Feeling unheard and cornered</p>	<p>- Worry and fear (scary stories and unknown impact)</p> <p>- Unease and uncertainty (risks and unknown impact)</p> <p>- Feeling trapped, pressurised and/or judged</p>	<p>"I have, whenever I had the vaccine, I had got a massive headache after my second vaccine. And I was admitted into hospital, and they treated me for a clot straight away. So, I was terrified at that stage, I thought. And of course, you do Google it, I know you shouldn't, but you do Google it. And it was like, 'Well, there's a high risk of your child coming early.' So, I was like, 'How many weeks is he?' And all of that, it was a scary thing for me, thank God, I was okay I don't know what to put it down to, maybe a massive migraine. But I would say was a result of all the stress of the unknown from the vaccines." (Focus group participant 5).</p> <p>"I would say so, but I am not going to tell you-, I still think I will still always be anxious, a wee bit anxious about baby's development down the line if anything comes up. The first thing that'll probably pop up into my head will be, was that a result of the COVID vaccine? But I hope that never happens, but I suppose-, don't know." (Focus group participant 5).</p> <p>"I thought that something really pregnancy specific because you feel like when you go, that you're the only pregnant person-, well I did, I was the only pregnant person in the room and the other people were looking at you and, 'oh gosh, she's getting that and she's pregnant'. In Derry here, maybe P5 would remember as well that they had specific pregnancy days</p>

		<p>- Lack of/need for empathy and understanding</p>	<p>where they protected time for pregnant women. Unfortunately, there was a big protest outside, the anti-vaxxers gate-crashed it, but I thought that would be useful.” (Focus group participant 5).</p> <p>“I think health inequalities are real and there are specific groups who are missing out on vaccines and on general health because they are in a certain group or a certain socioeconomic class or whatever. In order to help best reach people in the way that they-, we need to reach people in the way that is meaningful to them as well, that they will understand and it will be appropriate for them, that they would be interested and listen to them. Not everyone's going to be a nerd like me and go on and look at immunologists and all that there, they wouldn't find that interesting. But in a way that's meaningful to them, it will be important because they are missing out and they don't-, it is unfair. You might think that they've made that choice, but it's not necessarily true, it's just because they fit in a certain class where they maybe don't know where to look for the information or their education-, they wouldn't know what is sound research and what's not sound research and things like that, in ways that best reach people. I think they should be allowed to look at that.” (Focus group participant 5).</p>
--	--	---	--

Note. **Denotes any differences in the codes identified for focus group participants