

## Supplementary File: Participant likes and dislikes, and further example evidence

### Participants device preferences and reasons (Q1)

Device	N	Reason
Paro	26	“Reacted to my movements”
		“Pretty eyes, soft”
Pleo	12	“Needy”
		“Interactive and responsive”
Joy for All Dog	20	“Favourite animal”
		“Almost like a real dog”
Joy for All Cat	16	“Fluffiest”
		“Most familiar”

### Participant dislikes summary (Q2)

Reason	N	Example
Texture	10	“Fur could be softer”
		“Don’t feel real”
		“Too synthetic”
		“Unrealistic”
Internal feel	5	“Hard parts in bodies”
		“Feel plastic under fur”
		“The hard feeling through their fur”
Movements	5	“Bumpy robot feeling”
		“Too still”
		“Random movements, not in response to me”
		“Maybe movements are a little too robotic”

			“Too mechanical”
Size/shape	1		“Cat and dog awkward to hold”
Fear	3		“Creepy”
			“Cat scary”
Cost	1		“Price of seal”
Noises	3		“Dinosaurs noises are annoying”
			“Some noises irritating”
			“Sounds could be better, more sounds”
Ethical concern	1		“I don't really know if they can be used to alleviate loneliness, and whether robots can replace humans in the aspect of intimacy”
Appearance	1		“Dog is one colour, not realistic”
Practical/Maintenance	1		“They can get dirty”

**Further evidence of participant responses to open question on general feelings towards companion robots for older people (Q4) – Main text Table 2**

Response	%	Example Evidence
Positive	65.76	<p>“It could help them feel more responsible and useful”</p> <p>“I really like the idea, it can re-create the feeling of a pet, even if they couldn’t look after one”</p> <p>“I think anything that could help is a great idea”</p> <p>“It is good if it helps them an I know people with dementia can get stressed”</p> <p>“Great, why not”</p> <p>“Anything that reduces stress is important and beneficial”</p> <p>“They are a fun companion to have around and demand very little care”</p> <p>“I feel it would be great for them to have some comfort from”</p> <p>“I think it would be very therapeutic for them”</p> <p>“Great for people who can’t have animals”</p> <p>“I think it would be very successful providing comfort to my relative with dementia, particularly the dog, for nostalgic purposes”</p> <p>“My neighbour has dementia and misses her cat I would love to give her one for comfort”</p> <p>“Great idea for people who are alone every day”</p>

Mixed	14.93	<p>“In one way I think it's good as its great that it gives everyone an opportunity to touch but on the other hand I think its sad cause it means that there is no real human contact around them to touch them”</p> <p>“conflicted”</p> <p>“I struggle with the concept of replacing care with robotics but in neurodegenerative diseases such as AZ dementia it can be harder on family members sometimes and if it stimulates/soothes them then maybe”</p> <p>“I wouldn't want people to use it as an excuse not to visit their relatives or look after them but think it's a useful thing as someone can't be with them”</p> <p>“I think it is better to have humans nearby, but if the robots are sufficient to alleviate dementia, I think it is a good idea”</p> <p>“A good idea, the problem would be making the robot responsive enough without it being too expensive”</p> <p>“Maybe it can seem strange, but I think that’s a good thing to fight loneliness”</p> <p>“Its sweet and sad, anything that calms them had to be good”</p> <p>“Good concept but I don’t know how the old people would react to it”</p> <p>“Good idea, need to lower prices”</p>
Negative	7.46	<p>“Might be more efficient for kids”</p> <p>“I think a real animal would be better”</p> <p>“I would have the thought that it was a bit ridiculous”</p> <p>“I would be slightly worried of infantilising the person, the person may get upset or see it as a trick”</p>
No Response	11.94	

### Further evidence of unprompted ethical concerns raised (Q5) – Main text Table 3

Area of Concern	Frequency	Example Evidence
Batteries	2	“There may be emotional distress if the batteries ran out”
Malfunction	1	“What happens if they malfunction?”
Human Contact	7	<p>“I worry about the idea behind it [sic] social care [sic] is about compassion, if we turn that responsibility over to robotics what sort of society will emerge?”</p> <p>“Might encourage people to be distant from the elderly”</p> <p>“People would rely on them too much and not visit”</p> <p>“I may question [sic] the elderly [sic] deserve interactions with real people”</p> <p>“I hope they would never be used to fill an emotional need that a human would give”</p>
Robustness	1	“Toughness, can they withstand a fall?”

Deception	4	<p>“It may confuse them”</p> <p>“In cases of bad dementia, they could become confused as to whether the robot was real or not”</p> <p>“if the person with dementia thought it was real and found out it wasn’t they may be upset.”</p> <p>“Could become agitated during lucid moments if they feel they were lied to.”</p>
Privacy	1	“Should not be connected to net (privacy)”
Danger	2	<p>“Electrical fault if liquid spilt on them”</p> <p>“Tripping/falling”</p>
Dignity	2	<p>“They may try to feed or walk them, potential embarrassment”</p> <p>“I would hate if they felt patronised or like these were used as a substitute for family”</p>
Infantilisation	1	“May feel patronised belittled with a fluffy toy”

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