

Supplemental Table 2. Intervention acceptability based on the focus group interviews

Category	Code	Quotations
Advantages of the intervention	Visual status indicators	<p>“Wearing the Fitbit made me walk more, even if I was busy. There is a notification that comes when I exercise a lot, and I became very conscious of that. If you walk a little faster than you normally do, the numbers will clearly tell you. I’ve come to realize how much walking can get you this far.” (ID 1)</p> <p>“Even though the numbers are small, there is a difference. The numbers motivated, supported, and encouraged me. The Fitbit would notify me to do a little more to reach the goal.” (ID 2)</p>
	Sense of accomplishment and confidence	<p>“The Fitbit vibrates when I hit 10,000 steps. ... I always knew it was good to walk 10,000 steps a day, but I never knew how much I was walking. But now I could feel it. I thought that I needed to walk more if I hadn’t yet walked 10,000 steps, so I would go outside and walk more. I was able to do it because it was fun. I think it was good. When you say, ‘You have to exercise,’ it seems a little difficult. But now I’ve come to think, ‘Ah! I was able to do more than 10,000 steps today! I should also do it tomorrow!’ It was such a pleasurable experience for me.” (ID 6)</p> <p>“First of all, I think I have gained confidence that I can do it myself. I thought, ‘Oh, I can do it if I make up my mind.’ I always thought that I didn’t have the time, but now I think I can make time to exercise.” (ID 4)</p>
	Emotional engagement and sense of presence	<p>“I liked the snow mountain and the ski resort scenes. Because I lived in the countryside when I was young, so it was pretty similar. The underwater videos also reminded me of the old days, so I felt nostalgic and wanted to watch more of those scenes.” (ID 7)</p> <p>“To be honest, the device itself [head-mounted display] was burdensome at first. It has a bit of weight. It felt as if I was trapped in a small space. At first, I felt too much pressure to the point that I had to say I didn’t want to do it. But once I watched the VR video, it felt like I was in nature. ... Usually you can’t see underwater unless you’re scuba diving. Should I say, watching VR videos gives you a sense of stability? Feeling a little free? It was nice to be able to experience it even for a short time in a busy life.” (ID 6)</p>

		<p>“It was nice to be able to wear the device, listen to the sounds of nature at home, and operate it myself. Really, I felt like I was there. Watching it [with the head-mounted display] is different from watching it on TV.” (ID 1)</p>
	Joy from exercise	<p>“It felt great going outside and walking. It’s boring to be at home alone. Especially, once you lock yourself at home, it’s hard to get out. I would just end up being on my phone all day. But ever since I started participating in this program, somewhere in my heart, I felt, ‘Oh, I need to go out. I must go.’ Once I started exercising, it felt very good. So, it would have been nice if this program was a bit longer.” (ID 8)</p> <p>“It was difficult until it became a habit. However, while walking, my body became lighter. I could feel the nature, and watching different people come and go, I became thankful and thought, ‘Ah, there are people like this.’ I felt like I wanted to continue [to exercise].” (ID 3)</p>
	External motivation through supervision	<p>“Since I received texts regularly, it felt like I was taken care of. I would always get the reports. It felt like someone was always watching me, so I knew I had to do it right.” (ID 12)</p>
	Easy to control VR device	<p>“Watching VR videos was fine. There was no [difficulty in using VR] at all ... I watched it 5 minutes minimum and 30 minutes max.” (ID 8)</p> <p>“At first [when learning how to use the device], I was worried because I thought it would be difficult, but it turned not to be hard at all, using it at home.” (ID 11)</p>
	Extra benefits	<p>“[Because I’m busy] I usually went for a walk in the evening, so I took my son or daughter out. It was nice to have time to talk with my children. For me, talking while walking was better than the walking itself.” (ID 12)</p> <p>“I usually exercised after 11 o’clock. There weren’t that many people out at that time, so I felt a little freer, and it also gave me time to talk while exercising with my daughter. In the past, I would wake up a lot in the middle of the night, but exercising really helped me sleep well.” (ID 4)</p>
Areas needing improvement	Discomfort caused by equipment	<p>“Since the Fitbit wristband was made of rubber, it made my skin itch when I sweat.” (ID 4, 6, 7)</p>
	Video content diversity	<p>“I think the goggles [Oculus Go] were a little heavy to wear on the head.” (ID 6, 10)</p> <p>“There were several videos, so I watched them one by one. It was okay watching it twice, but from the third time on, I wanted to watch something else. The overall mood of the</p>

Additional intervention elements	<p>videos don't have much variety, it's pretty much the same. ... At first, VR videos were interesting and fun. Later, it became more of a duty." (ID 2)</p> <p>"I have a phobia of water, but most of the videos were taken underwater, so there wasn't much for me to watch. There were only two videos I could watch. I saw one of the recommended videos that came out right after the first one ended. I really liked the video of London scenes." (ID 5)</p> <p>"At first, I was worried whether I would successfully finish the full 4 weeks. But after trying it, I think 8 weeks will be better, with the fourth week as an interim check. Twelve weeks seems too long." (ID 4)</p> <p>"I wished there were phone call sessions where I could talk comfortably, even once every three days. I think talking is good for treating depression. If possible, meeting somewhere like a coffee shop and spending time talking would help a lot [I think it will]. Not just digitally, but in real life. ... If we were to walk together at least once a month, we would be able to exercise consistently. But I would prefer it if it is with people similar to me. There would be no problem if I did it with Japanese people, and since we are from overseas, we would be able to really get along." (ID 1)</p> <p>"When you come home and wash your face or take a shower, you take off the Fitbit. There were so many times when the day would just pass by without me having it on, so I think the score hardly went up. Even when I go out in the evening or go to the market, I would have to wear it. But there were so many times that I would forget." (ID 7)</p>
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Abbreviation: VR, virtual reality.