

Supplemental Table S1. Overall opinion of patients and suggestions for improvement regarding the teletreatment

Theme mentioned by patients (N/%)	Example statements
Perceived benefits (13/57) <ul style="list-style-type: none"> Reduction pain and/or medication Cognitive functions and/or sense of control, self-efficacy Body image/perception of the phantom Availability/Mobility Independence regarding time and place Integration daily routine 	<ul style="list-style-type: none"> <i>In case of acute pain attacks, it acts like a strong drug and immediately reduces my pain by 90% (Male, 37 yrs)</i> <i>In the past I was very anxious because of the pain, now I am a lot more confident because I can control my pain (Female, 78 yrs)</i> <i>It helped me to focus on the missing limb and to increase my awareness (Male, 58 yrs)</i> <i>During the exercises, the telescoping sensation changed towards the perception of a normal leg (Male, 33 yrs)</i> <i>I used the tablet on business trips to China in the airplane or in the hotel (Male, 44 yrs)</i> <i>I can decide myself where and whenever I want to do my exercises, which is a big advantage (Female, 70 yrs)</i> <i>I prefer doing my exercises on the balcony in the sun (Male, 66 yrs)</i> <i>The tablet lay on my bedside table, and I used it at night when the pain appeared...otherwise I had to go down in the room and set up the mirror...I probably wouldn't have used it (Male, 58 yrs)</i>
Ease of use and conformance with user requirements (9/39)	<ul style="list-style-type: none"> <i>It was really easy to use, I can't imagine that other patients have problems when using it (Male, 62 yrs)</i> <i>The occupational therapist at the clinic is instructing it as well, but not that idiot-proof (Male, 62 yrs)</i> <i>There is everything in that you need (Male, 44 yrs)</i> <i>Sufficient depth and diversity within a loose atmosphere (Male, 66 yrs)</i>
Providing guidance (10/44)	<ul style="list-style-type: none"> <i>At home, you don't know exactly how and what to do...it provided a good structure so I exactly knew what to do (Female, 47 yrs)</i> <i>During the training a lot of questions appear; I could get in contact with my therapist to answer these questions (Male, 37 yrs)</i> <i>I am using it every day at the same time, this gives me structure (Female, 78 yrs)</i>
Aspects related to digital exercise programs (11/48)	
<ul style="list-style-type: none"> Vividness/realism 	<ul style="list-style-type: none"> <i>The simple exercises had most effect, the complex ones distracted me too much from the mirror image and I focussed more on the intact leg (Male, 66 yrs)</i> <i>The simpler the exercises, the more vivid and real the visual image (Male, 44 yrs)</i>
<ul style="list-style-type: none"> Tailoring 	<ul style="list-style-type: none"> <i>In the beginning, I had to find the most effective exercises because only some of them had effect, so I think every patient has to make an individual selection (Male, 66 yrs)</i>
<ul style="list-style-type: none"> Traditional mirror therapy vs. teletreatment 	<ul style="list-style-type: none"> <i>I was astonished how real the image on the tablet was; it was equivalent to the mirror image and at the same time more flexible and comfortable (Male, 44 yrs)</i> <i>I perceived the mirror image more as my own leg and I better connected with my phantom compared to seeing my leg on the display (Male, 79 yrs)</i> <i>I got in contact with my phantom more easily by using the tablet, I suppose because I did my exercises while lying relaxed on the couch (Male, 33 yrs)</i>

Technical problems and difficulties handling the tablet (12/52)

- Data transfer
 - *It often took a long time until data were transferred (Male, 82 yrs)*
 - *The program should also be available offline, because mobile internet isn't always that good (Male, 44 yrs)*
 - *When I chose a lot of exercises, the program sometimes stopped in between and I had to start again (Female, 78 yrs)*
- Bugs regarding e.g. exercise program
 - *It took me some time until I knew how to hold the tablet to get a proper image of my amputated leg (Female, 47 yrs)*
 - *The position of the tablet's camera is not in the middle so I see my intact leg on the screen and at the same time the image of the other limb which doesn't fit (Male, 33 yrs)*
 - *When I used the mobile mirror therapy I still saw the gap between the amputated limb and the tablet (gap), perhaps virtual reality could solve this (Male, 37 yrs)*
- Problems handling the tablet

Instruction, personal contact and feedback (5/22)

- Introduction to teletreatment
 - *The therapist came a long for 5 minutes and gave me the tablet without further explanation and I wasn't technologically skilled so I didn't use it at home (Male, 77 yrs)*
 - *The tablet arrived too late, so we weren't able to discuss the mobile mirror therapy program, that's why I did not perform these exercises at home (Male, 82 yrs)*
- Technical support
 - *I never used such a thing before, it was useful that my daughter supported me until I knew how to use it (Female, 70 yrs)*
- Personal therapist
 - *The personal contact with the therapist was important to me, otherwise it wouldn't have worked (Male, 82 yrs)*
 - *I was uncertain whether the therapist received my messages because I didn't get feedback (Female, 47 yrs)*
- Other patients
 - *I used the chat several times but there was only limited response, I wished other patients would have used it more to exchange experiences (Male, 38 yrs)*

Suggestions for improvement (7/30)

- More variation in exercises
 - *When I have chosen my favourite exercises, the program should offer me a random selection from these exercises to make the training more diverse and challenging (Male, 48 yrs)*
 - Personalize instructions
 - *The standard exercise instructions of 10 repetitions don't fit my personal preferences. For more complex exercises 3-4 repetitions were sufficient, whereas for simple exercises more repetitions were useful. The goal is to achieve an preferably intense sensation, that's how the program should instruct it (Male, 37 yrs)*
 - Messaging
 - *It would be useful that a can correct my messages when I sent them by mistake (Female, 78 yrs)*
 - *These automated reminders aren't necessary, if you have a clear goal you don't need that (Male, 66 yrs)*
 - Operating system
 - *I have an Android tablet myself, so it's a pity that there is only an iOS version available (Male, 66 yrs)*
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