

Luchetti M, Cutti AG, Verni G, Sacchetti R, Rossi N. Impact of Michelangelo prosthetic hand: Findings from a crossover longitudinal study. *J Rehabil Res Dev*. 2015;52(5):605–18.

Appendix 5. Analysis of clinical interviews of psychological assessment. Extracts of the interview transcripts were translated from Italian.

Time Point	Recurrent Themes and Subthemes and Specific Issues	Extracts
Baseline	1. Amputation as change of life.	<p><i>Stefano:</i> I felt changed, like I was done, I don't know what was in my mind.</p> <p><i>Guido:</i> You see yourself changed. . . . It (the amputation) changes your life. Before I had a job, everything was normal, like everybody else. . . . Now there is a prosthesis. . . . There is a loss, there is a trauma—there was also a psychological trauma. It is not easy to move from a life to another life. But then, you get used to the new condition.</p> <p><i>Paolo:</i> . . . It was all new for me. All a new world, suddenly.</p>
	2. Factors facilitating adjustment:	
	2a. Beginning to use prosthesis.	<p><i>Stefano:</i> And, then, I came here [INAIL Prosthetic Center], I don the body powered. Already with the prosthesis, as to say, having the hand, you know... someone did not realize that I was an amputee. . . . Then, I wore the myoelectric and I started to drive, I got my driving license. . . . I got my life back, essentially I got my life back, again.</p> <p><i>Guido:</i> As I wore the body powered, life was again. . . . Because I couldn't do anything without the prosthesis. . . . When I had the first body powered, I went out on Saturday to visit friends. "Ah!! Let's play cards!" they told me. "Eh, let see if I can," I said. And, I held 13 cards, here. . . . Oh! I was so happy. . . . I was like a child that starts to walk. I remember this experience clearly. . . . Then, I wore the myoelectric, and slowly. . . . You restart to live again . . . to do thing you were doing before and you were not doing anymore after the accident.</p> <p><i>Paolo:</i> I was lucky because, after I had the accident, I came here immediately, and I put on a body-powered prosthesis. . . . Then, I tried the myoelectric solution. . . . It saved me. It allowed me to drive. . . . At first I thought—I can't do this, I can't do that. . . . But the prosthesis has filled all gaps . . . especially the myoelectric.</p> <p><i>Alberto:</i> When I got the myoelectric prosthesis, it opened a world to me, I could do . . . not the 100 percent . . . but it helps me a lot.</p>
	2b. Support from others.	<p><i>Stefano:</i> I get over it because I had a kid. . . . I also had a</p>

	<p><i>Guido:</i> There have been some improvements in doing little things. . . . With time, you realize all new things you can do. . . . I use it to do thing I couldn't do before. . . . For example, the shoes. Another thing I discovered is that you can tie your shoe grasping laces between fingers. . . . It improves the level of life that we [people with amputation] do with prostheses.</p> <p><i>Francesco:</i> The movement of the wrist is really useful. . . . When I drive with [the Michelangelo prosthetic hand], it is a completely different thing.</p> <p><i>Paolo:</i> The lateral grip allows me to do 90 percent of my work. . . . I have to take note of something on my notebook [at work], I do it more easily with [the Michelangelo prosthetic hand]. . . . These are small things, but in the everyday life, these make the difference to me. . . . I am more realized. . . . It completes me!</p>
2. "Like a real hand"—Natural postures and gestures.	<p><i>Stefano:</i> It is more human, the shape, it is more human [compared to tridigital prosthetic hand]. . . . It is more human while I am walking. . . . I feel more comfortable. I don't care much about cosmetics but I feel more comfortable.</p> <p><i>Fabio:</i> When you shaking hands, it [the Michelangelo prosthetic hand] resemble to a real hand. It looks more human.</p> <p><i>Guido:</i> I do it [activity of daily living] in a more natural manner. . . . The movements are normal movements. . . . I do not block the wrist because I can do like this [leans prosthetic hand on leg]. Now, the shoulder is in a normal position.</p>
2a. Michelangelo prosthetic hand is less noticeable.	<p><i>Stefano:</i> With [the Michelangelo prosthetic hand], it is difficult to note [that I have a prosthesis].</p> <p><i>Fabio:</i> Even if I don't have such a problem. . . . People notice less that it is a prosthesis, speaking about cosmetics.</p> <p><i>Guido:</i> If I go to a party, there are people that I don't know, and they look at me. . . . They see me as a normal person. . . . This is a good thing for me. . . . Even in the photos. I took a picture and looking at it I thought "My God! It seems like a real hand!"</p>
2b. Michelangelo prosthetic hand helps in social interactions.	<p><i>Paolo:</i> The wrist . . . it allows me to assume even more natural manners, which are less noticeable. . . . I prefer it [the Michelangelo prosthetic hand] compared to others . . . also as it appears to other people. . . . People asked me "Did you have a transplant?"</p> <p><i>Guido:</i> I was at a buffet . . . and, a glass of wine . . . I hold a stem glass [with the Michelangelo prosthetic hand]! . . . Before, I had to take a plate from the buffet and find a table to eat, not now! Now, I can also walk . . . I mean . . . the fact that I have to sit at a table, it was something that isolated me from others. . . . Instead, now it is normal . . . wonderful!</p> <p><i>Paolo:</i> Before, I did not play beach volley with my kids and friends. Now, I do even this . . . I was playing with my daughter, and I could grasp the little dresses and shoes of her</p>

Reliability	<p>dolls.</p> <p><i>Fabio:</i> The old prosthesis [the tridigital prosthetic hand] is more reliable. . . . Certainly, it [the Michelangelo prosthetic hand] has more functions but there are a lot of problems that need to be addressed from a technical point of view.</p>
Dimension	<p><i>Francesco:</i> There was a problem, I didn't feel confident.</p> <p><i>Francesco:</i> At first, the hand looked slightly bigger. But, I am a person that doesn't think of it too much. I am interested in its use. . . . The fingers are a little long. . . . You look at the mirror and you see the difference with your arm, and also with the other prosthesis.</p> <p><i>Alberto:</i> Considering cosmetics, it [the Michelangelo prosthetic hand] seems more awkward . . . bigger, compared to the other one [the tridigital prosthetic hand]. The other one is proportioned to my hand.</p>
Noise	<p><i>Fabio:</i> This prosthesis is noisier than the other one. If I walk around . . . I don't say that people's heads turn, but they may say "What's wrong with him?"</p> <p><i>Francesco:</i> Another thing I note is the noise. This is like the noise of an old myoelectric prosthesis.</p>
Weight	<p><i>Guido:</i> The only thing is the noise, but . . . the important thing is that it's working.</p> <p><i>Stefano:</i> It is heavier [compared to the tridigital prosthetic hand] but you do better.</p> <p><i>Fabio:</i> I had problems with the stump because of the weight.</p> <p><i>Alberto:</i> It is heavy. . . . The stump gets tired.</p>
