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.	Stefano: I felt changed, like I was done, I don't know what wasin my mind.Guido: 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 isa loss, there is a trauma—there was also a psychologicaltrauma. It is not easy to move from a life to another life. Butthen, you get used to the new condition.Paolo: It was all new for me. All a new world, suddenly.
	2. Factors facilitating	<i>Tuoto</i> It was an new for me. All a new world, suddenly.
	adjustment: 2a. Beginning to use prosthesis.	<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.
		<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.
		<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.
		<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.
	2b. Support from others.	Stefano: I get over it because I had a kid I also had a

		partner that, in my opinion, she has been clever She was not the type "I'll bring you that," "I'll do that for you." She let me adjust by myself.
		<i>Guido:</i> Some friends took me out They make me doing things going to the beach Because, at the beginning, I didn't want to go anywhere.
	3. Having an artificial limb: 3a. How does a prosthesis have to be?	<i>Paolo:</i> At first I did not want to go out. After a week, my friends invited me to dance They were all really nice to me and that helps me to get over it.
		<i>Fabio:</i> I care about the functionality—also the cosmetics— but above all the functionality. If it (the prosthesis) has both, it is better!
		<i>Guido:</i> I am not interested [in cosmetics] I am not interested in having a cosmetic solution, it is always a prosthesis. The important thing is that it works, because if it doesn't as I told you, I cannot do anything without prosthesis. I need its functionality I don't care if it has a color or another color It must work.
	3b. The prosthesis is "essential."	<i>Paolo:</i> I never care about cosmetics It must work and never let me down, because I work with it The important thing is that it works and that allows me to do to carry out everyday life, more than anything else.
		<i>Alberto:</i> More is functional and better you can do your things About cosmetics, the gloves are the problem. <i>Stefano:</i> I do everything with the myoelectric prosthesis I don't see myself without it.
		<i>Fabio:</i> I never refused the prosthesis, I mean I always wore it, used it.
		<i>Guido:</i> I cannot do anything without the prosthesis. When it breaks it's a problem Once got used to the prosthesis, I've never taken it off!
9 Follow-Up	1. Enhanced functionality in everyday life.	<i>Francesco:</i> I've never left home without the prosthesis The first thing I do when I wake-up is wearing the prosthesis. It is not because I feel the need. I also feel more useful with it It is essential.
		<i>Paolo:</i> By now, there is a habit toward the prosthesis. When I start up, I immediately put on the prosthesis because I cannot do anything without it I don't have the touch. Besides this, I can do everything [with the prosthesis].
		<i>Stefano:</i> There are some movements, some things that it [the Michelangelo prosthetic hand] can do better. You do not need to stress the shoulder For example, when you hold a shopping cart You grasp it, I mean, you feel more comfortable. It facilitates you in movements, in grips.
		<i>Fabio:</i> You do a lot more, without doubts. Even daily, at home, I live alone so in washing dishes, for example, this [the Michelangelo prosthetic hand] is better.

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	<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.
	<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.
	<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!
2. "Like a real hand"—Natural postures and gestures.	<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.
	<i>Fabio:</i> When you shaking hands, it [the Michelangelo prosthetic hand] resemble to a real hand. It looks more human.
2a. Michelangelo prosthetic hand is less noticeable.	<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. <i>Stefano:</i> With [the Michelangelo prosthetic hand], it is difficult to note [that I have a prosthesis].
	<i>Fabio:</i> Even if I don't have such a problem People notice less that it is a prosthesis, speaking about cosmetics.
	<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!"
2b. Michelangelo prosthetic hand helps in social interactions.	 Paolo: 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?" <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
interactions.	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!
	<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

	dolls.
Reliability	<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.
Dimension	<i>Francesco:</i> There was a problem, I didn't feel confident. <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.
Noise	Alberto: 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. <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?"
	<i>Francesco:</i> Another thing I note is the noise. This is like the noise of an old myoelectric prosthesis.
Weight	<i>Guido:</i> The only thing is the noise, but the important thing is that it's working. <i>Stefano:</i> It is heavier [compared to the tridigital prosthetic hand] but you do better.
	Fabio: I had problems with the stump because of the weight.
	Alberto: It is heavy The stump gets tired.