Supplementary Materials

Surveys

Table 3: Pre-Training survey administered to the therapists after watching the training video but prior to in-person training to use the robot.

Question	Input Format

Please rate your level of experience with the following:
    Computers
    Tablets
    Smartphones
    Robots
	5 element Likert: No experience (1), Very high experience (5)

Have you ever done a video call?	Yes/No
Have you ever done a video call? for healthcare?	Yes/No
How do you feel about robots?	5 element Likert: Very negative (1), Very positive (5)

What have you done with video based telepresence? If you have not done an activity, which do you believe could be done with video based telepresence?
    Motor Assessments
    Stretching
    Strength Building
    ADL Practice
    Cognitive Assessments
    Cognitive Exercises
    Environmental Adaptation
    Orthotics Assessment/Prescription
    Discussion about Radiology Results
    Medical Prescriptions
	Radio buttons: Have Done, Could Do, Could Not Be Done

How do you feel about using video calls for healthcare?	5 element Likert: Very negative (1), Very positive (5)
What type of therapist are you?	Radio buttons: therapy discipline
What is your level of education?	Radio buttons: level of education
Prior to this study have you had any exposure to the Lil'Flo robotic system?	Check boxes: prior experiences
How would you describe yourself	Check boxes: ethnicity
How would you describe yourself	Radio buttons: gender
What is your age?	Text entry
How many years have you been practicing?	Text entry
Excitement: How excited are you to use the system?	Slider: Very Low – Very High
Do you have any other thoughts, observations, anxieties, points of excitement, etc. after the training video?	Text entry

Table 4: Post-Training survey administered to the therapist after training to use the robot.

Question	Input Format
Please answer the following questions based on the training which you just completed with the system:	
Excitement: How excited are you to use the system?	Slider: Very Low – Very High
Mental Demand: How mentally demanding was operating the system?	Slider: Very Low – Very High
Physical Demand: How physically demanding was operating the system?	Slider: Very Low – Very High
Performance: How well did you perform the tasks you were asked to do?	Slider: Failure – Perfect
Effort: How hard did you have to work to perform the tasks asked of you?	Slider: Very Low – Very High
Frustration: How insecure, discouraged, irritated, stressed, and annoyed were you?	Slider: Not at all – Very much
Enjoyment: How much did you enjoy operating the system?	Slider: Not at all – Very much
Please rate how you believe that using the Lil'Flo system (with video telepresence + the humanoid robot) will compare to using video telepresence alone:	5 Element Likert: Much better with humanoid (1), No difference (2), Much better without humanoid (5)
Communication between me and my patients	
My patients' motivation to do rehab activities	
My patients' compliance with instructions during interactions	
My patients' adherence to treatment plans after interactions	
My ability to assess my patients' function	
My patients' level of enjoyment	
My patients' level of understanding instructions	
Please rate how you believe that using the Lil'Flo system (with video telepresence + the humanoid robot) will compare to in-person interactions:	5 Element Likert: Much better with humanoid + telepresence (1), No difference (2), Much better in person (5)
Communication between me and my patients	
My patients' motivation to do rehab activities	
My patients' compliance with instructions during interactions	
My patients' adherence to treatment plans after interactions	
My ability to assess my patients' function	
My patients' level of enjoyment	
My patients' level of understanding instructions	
Do you have any other thoughts, observations, anxieties, points of excitement, etc. related to your use of the system today?	Text entry

Table 5: Post-interaction survey administered to the patients after each interaction

Question	Input Format
Please answer the following questions based on the interaction you just had using the sliders:	Slider:
How well did you understand what you were supposed to do?	Not at all – Perfectly
Would you want to have this interaction again?	Not at all – Very much
How safe did you feel during the interaction?	Not at all safe – Very safe
Mental Demand: How mentally demanding was the interaction?	Very Low – Very High
Physical Demand: How physically demanding was the interaction?	Very Low – Very High
Performance: How well did you perform the tasks you were asked to do?	Failure – Perfect
Effort: How hard did you have to work to perform the activities asked of you?	Very low – Very high
Frustration: How insecure, discouraged, irritated, stressed, and annoyed were you?	Not at all – Very much
Enjoyment: How much did you enjoy the interaction?	Not at all – Very much
For each of the following statements, please indicate how true it is for you, based on the interaction you just had and activities you just completed, using the following scale:	5 Element Likert: not at all true (1), somewhat true (3), very true (5)
The activities were fun to do	
I believe the activities could be of some value to me	
I would describe the activities as very interesting	
I was very relaxed in doing the activities	
I think that doing these activities is useful for rehab	
I thought the activities were quite enjoyable	
I think doing these activities could help me to improve my arm function	
This was an activity that I couldn't do very well	
The activities did not hold my attention at all	
I am satisfied with my performance at these tasks	
This was an effective method of doing rehab	
Please rate your impression of Lil'Flo on these scales:	5 Element Likert Scales from 1 – 5
Dislike – Like	
Unfriendly – Friendly	
Unkind – Kind	
Unpleasant – Pleasant	
Awful – Nice	
Do you have any other comments or thoughts about this interaction?	Text entry

Table 6: Post-interaction survey administered to the clinicians after each day in which they particpated

Question	Input Format
Please answer the following questions based on all of the interactions which you had TODAY with the system.	Slider:
Mental Demand: How mentally demanding was operating the system?	Very Low – Very High
Physical Demand: How physically demanding was operating the system?	Not at all – Very much
Performance: How well did you perform at operating the system?	Not at all safe – Very safe
Effort: How hard did you have to work to operate the system?	Very Low – Very High
Frustration: How insecure, discouraged, irritated, stressed, and annoyed were you?	Very Low – Very High
Enjoyment: How much did you enjoy operating the system?	Failure – Perfect
Please rate the quality of the following during the interactions today:	5 Element Likert: Very Poor (1), Fair (3), Very Good (5), and Not Applicable
Communication between me and my patients	
My patients' motivation to do rehab activities	
My patients' compliance with instructions during interactions	
My ability to assess my patients' function	
My patients' level of enjoyment	
My patients' level of understanding instructions	
Do you have any other thoughts, observations, anxieties, points of excitement, etc. related to your use of the system today?	Text entry

Table 7: Final survey administered to the clinicians after they completed all of their trials

Question	Input Format

How effective do you believe that Lil'Flo would be for the following activities?
  Motor Assessments
  Stretching
  Strength Building
  ADL Practice
  Cognitive Assessments
  Cognitive Exercises
  Environmental Adaptation
  Orthotics Assessment/Prescription
  Discussions About Surgery
  Discussions about Radiology Results
  Medical Prescriptions
	5 Element Likert: Very Effective (1), Fair (3), Very Ineffective (5)

Are there other activities that you think Lil'Flo would be well adapted to?	Text entry
Are there other activities which you regularly need to do that you think Lil'Flo would be poorly adapted to?	Text entry

Please rate how using the Lil'Flo system (with video telepresence + the humanoid robot) compared to using video telepresence alone:
  Communication between me and my patients
  My patients' motivation to do rehab activities
  My patients' compliance with instructions during interactions
  My patients' adherence to treatment plans after interactions
  My ability to assess my patients' function
  My patients' level of enjoyment
  My patients' level of understanding instructions
	5 Element Likert: Much better with humanoid (1), No difference (3), Much better without humanoid (5)

Are there other ways in which telepresence with the humanoid was better than traditional telepresence?	Text entry
Are there other ways in which traditional telepresence is better than telepresence with the humanoid?	Text entry

Please rate how using the Lil'Flo system (with video telepresence + the humanoid robot) compared to in-person interactions:
  Communication between me and my patients
  My patients' motivation to do rehab activities
  My patients' compliance with instructions during interactions
  My patients' adherence to treatment plans after interactions
  My ability to assess my patients' function
  My patients' level of enjoyment
  My patients' level of understanding instructions
	5 Element Likert: Much better with humanoid + telepresence (1), No difference (3), Much better in person (5)

Are there other ways in which telepresence with the humanoid was better than in-person interactions?	Text entry
Are there other ways in which traditional telepresence is better than in-person interactions?	Text entry

How useful do you believe Lil'Flo would be in the following locations?
  Rural outpatient clinics
  Rural inpatient clinics
  Elder care facilities
  Schools
  Patient homes
  Community centers
  Urban inpatient clinics
  Urban outpatient clinics
  Centers for special needs
  Acute care settings
  Pediatric acute care settings
	5 Element Likert: Extremely Useless (1), Somewhat Useless (2), Neutral (3), Somewhat Useful (4), Extremely Useful (5)

Are there other locations in which you believe Lil'Flo would be particularly useful?	Text entry
Are there other locations in which you believe Lil'Flo would be particularly useless?	Text entry
Do you have any other thoughts, observations, anxieties, points of excitement, etc. related to all of your usage of the system?	Text entry

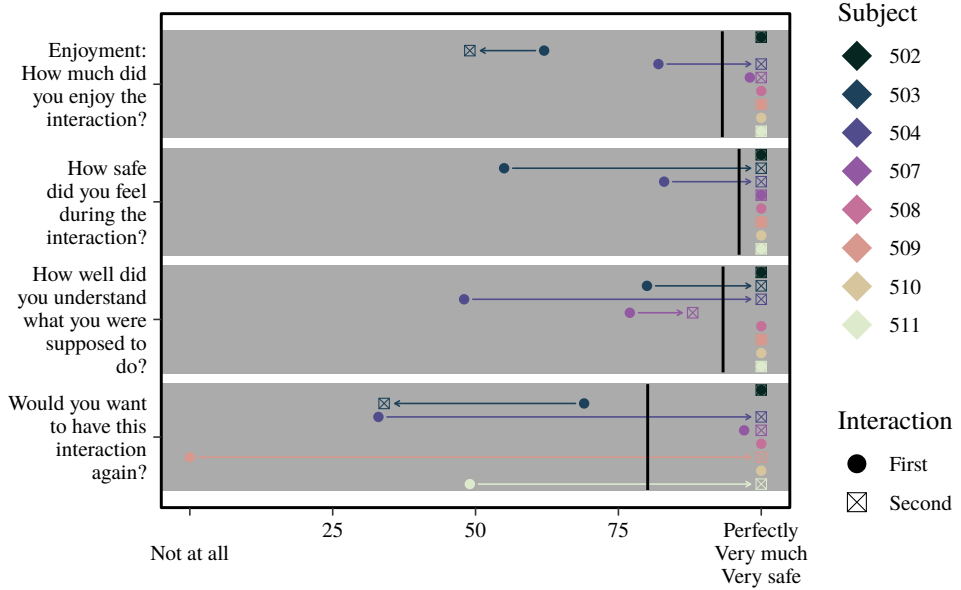## Extra Figures - Change in Rating Between Interactions

Figure 18: Patient responses to a series of four custom questions asked after the interactions. The subject weighted means (each subject's responses are averaged over their one to two interactions and the subjects' averages are taken as equally weighted in a mean) are shown as a vertical black line. Some subjects only interacted with the robot once, and so only have a single circle. Some subjects provided the same response value for the first and second interaction, shown as a filled in square.
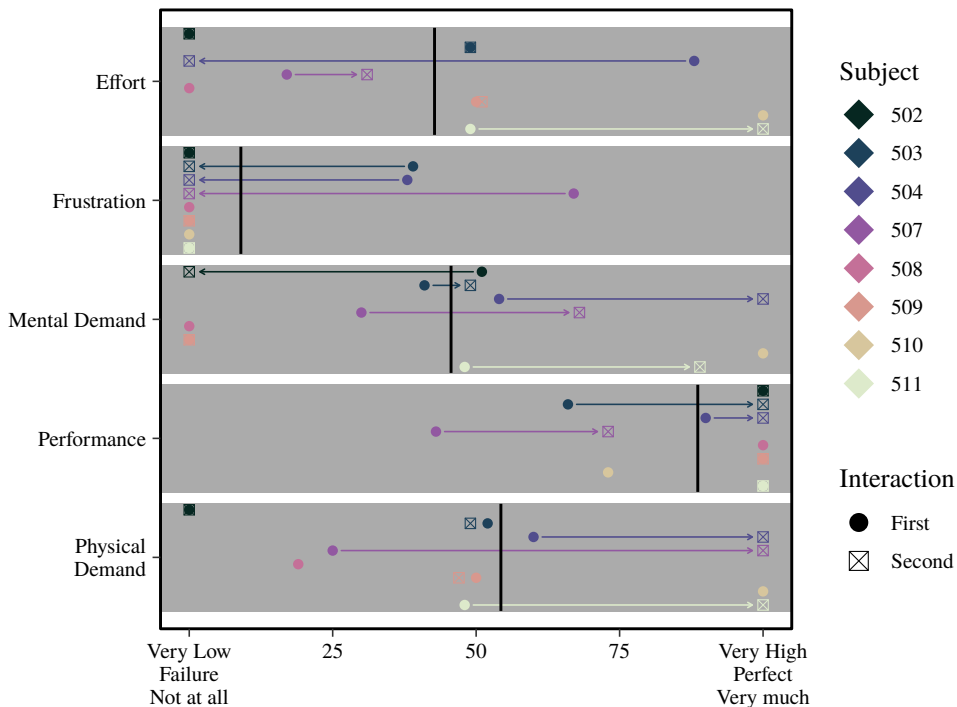
Figure 19: Patient responses to the NASA TLX asked after the interactions. The subject weighted means (each subject's responses are averaged over their one to two interactions and the subjects' averages are taken as equally weighted in a mean) are shown as a vertical black line. Some subjects only interacted with the robot once, and so only have a single circle. Some subjects provided the same response value for the first and second interaction, shown as a filled in square.
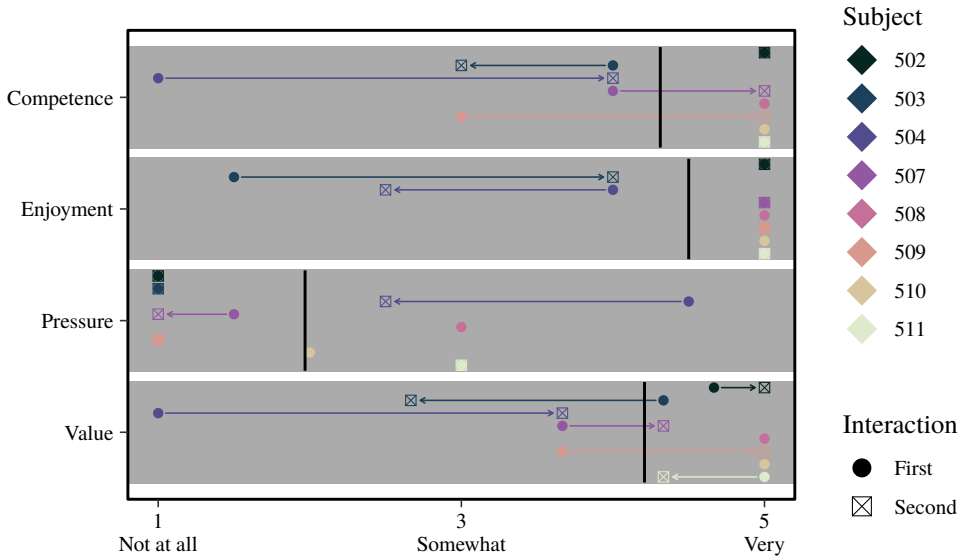
Figure 20: Patient responses to the IMI asked after the interactions. The subject weighted means (each subject's responses are averaged over their one to two interactions and the subjects' averages are taken as equally weighted in a mean) are shown as a vertical black line. Some subjects only interacted with the robot once, and so only have a single circle. Some subjects provided the same response value for the first and second interaction, shown as a filled in square.
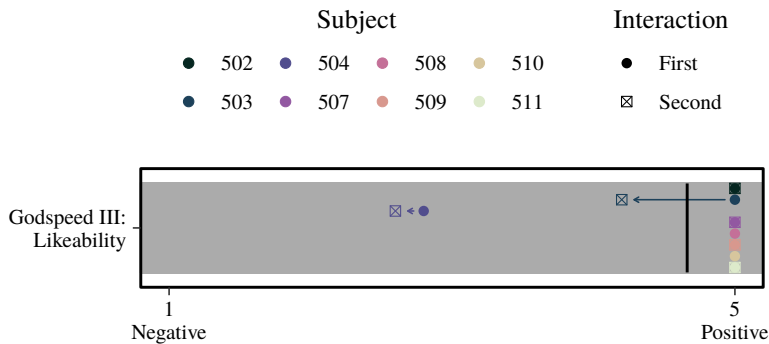

Figure 21: Patient responses to the Godspeed questionaire, part 3, asked after the interactions. The subject weighted means (each subject's responses are averaged over their one to two interactions and the subjects' averages are taken as equally weighted in a mean) are shown as a vertical black line. Some subjects only interacted with the robot once, and so only have a single circle. Some subjects provided the same response value for the first and second interaction, shown as a filled in square.