

Use of Electronic Tablets in Physiotherapy: A Client Experience Survey in a Therapeutic Context

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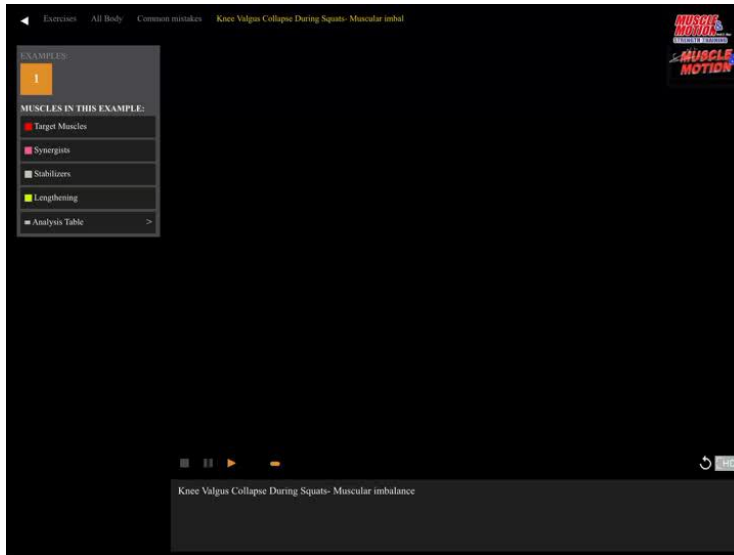
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Video 1: Interactive Anatomy Demonstration



Video 2: Patient Feedback (Single Leg Squat)

Declaration

The authors declare having no conflict of interest and did not receive any support from the applications development companies.

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Background

To this date, few studies have assessed the use of interactive technology with clients in a musculoskeletal rehabilitation setting. The use of such technologies could greatly facilitate patient education and therefore contribute to their return to functional activities.

Purpose

Collect client satisfaction levels following the use of an electronic tablet in a physiotherapy context.

Relevance

The project represents an important step with regards to the pertinence of interactive technologies within current rehabilitation practices.

Methods

The participants that were recruited for this qualitative study (n=46; 40 M/ 6 W; age: min=16, max=60) received treatment in physiotherapy for a variety of musculoskeletal conditions, such as: lumbar, cervical, shoulder, knee, and ankle. Educational activities were completed with the electronic tablet (ex: education on mechanism of injury, how to complete exercises). At the end of the physiotherapy session, the participants were requested to complete a standardized satisfaction questionnaire consisting of 10 questions (2 open ended questions and 8 with the Likert scale 1-5).

Results

Overall, the median Likert scores varied between 4 and 5 (range: min=1, max=5), demonstrating a high level of client satisfaction. The only negative comments were in regards to the delays required to charge the tablet or to launch certain applications during the session.

Conclusion

The study clearly demonstrated a definite interest from clients with regards to the use of interactive technologies during their functional rehabilitation. The next step will be to assess the clinical and financial effectiveness with randomised clinical trials, comparing the use of interactive technologies to traditional educational methods.

Acknowledgements

- Captain Kristie-Anne Villeneuve, PTO: support and translation services
- Dr Élise Duchesne: liaison with UQAC teachers

Table 1: Survey Results

Likert Score (max=5)	Explanations given by your physiotherapist concerning your health problem (#1)	To what extent do you think that the addition of an electronic tablet has influenced your overall satisfaction level (#2)	How likely would you recommend the physiotherapy electronic tablet experience to a friend (#3)	How useful is an electronic tablet to explain injury to a patient or execution of exercises (#4a)	How useful is an electronic tablet to correct posture or execution of exercises (#4b)	How useful is an electronic tablet to ensure patient compliance with home exercise program (#4c)	To what extent would you recommend other CAF Physiotherapy departments purchase electronic tablets (#5)	If your physiotherapist were to email you complementary information about your injury, how likely would you be to consult this information (#7)
	Very unsatisfied to Very satisfied	Very unsatisfied to Very satisfied	Very unlikely to Very likely	Very unuseful to Very useful	Very unuseful to Very useful	Very unuseful to Very useful	not useful to essential	Very unlikely to Very likely
1	0	0	1	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	1	2	2	1	0	5	2	2
4	6	13	11	7	12	15	29	10
5	39	27	32	38	32	21	14	32
n=	46	42	46	46	44	41	45	44

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If you are receiving this survey, it is because your physiotherapist has used an electronic tablet (iPad) with you at the clinic today. For the purpose of improving services, we would like to get your opinion with regard to this experience. A total of 10 questions with short answer options will be asked.

*Take note that participation to this survey is completely anonymous.

**Data collected will be exclusively used for analysis and service improvement purposes.

1. What is your level of satisfaction with regards to the explanations given by your physiotherapist concerning your health problem:

Very unsatisfied	Unsatisfied	Neither satisfied or unsatisfied	Satisfied	Very satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Have you ever had a physiotherapy consultation before? If yes, to what extent do you think that the addition of an iPad has influenced your overall satisfaction level?

Very unsatisfied	Unsatisfied	Neither satisfied or unsatisfied	Satisfied	Very satisfied	N/A (never had a physiotherapy consultation before)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How likely would you recommend the physiotherapy iPad experience to a friend?

Very unlikely	Unlikely	Neutral	Likely	Very likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. To the best of your knowledge, how useful is an iPad (in comparison to traditional methods: i.e. textbooks) to:

	Very unuseful	Unuseful	Neutral (same as traditional techniques)	Useful	Very useful	N/A (I have no idea)
Explain injury to a patient?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correct posture or execution of exercises?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure patient compliance with home exercise program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. To what extent would you recommend other CAF Physiotherapy departments purchase electronic tablets/iPad?

not useful	somewhat useful	useful	very useful	essential
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Prior to your first physiotherapy appointment, did you consult the internet in order to get more information about your symptoms?

- ☐ Yes
☐ No

7. If your physiotherapist were to email you complementary information about your injury (explanations, exercises program, tutorials), how likely would you be to consult this information?

Very unlikely	Unlikely	Neutral	Likely	Very likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Could we have done any better to improve the iPad experience? If yes, how?

9. What are, in your opinion, the anticipated problems with regard to iPad utilisation within the physiotherapy clinic?

10. Please indicate your age group:

- ☐ 16-29 years old
☐ 30-40 years old
☐ 41-50 years old
☐ 51-60 years old