Using a PDA in Psychiatric Rehabilitation: Benefits and Obstacles

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Plan

1. Introduction
2. Study Aims
3. Method
4. Results
5. Discussion
6. Conclusion
7. Questions
Introduction

What is a personal digital assistant (PDA)?

• Mobile device
• Pocket size
• Combines several functions (e.g., schedule, alarm...)
• Can be a smartphone, electronic tablet, iPod Touch...
• Is easily accessible in public stores
• Can be personalized to everyone’s needs (apps)
Introduction

Recent technology developments...
• Modified our ways to communicate
• Facilitated everyday life
• Became necessary in the realisation of our daily occupations

Could technology facilitate the rehabilitation process of persons with disabilities associated with mental health disorders?
Introduction

The use of PDA in mental health can:

- Compensate cognitive difficulties
- Facilitate disease self-management
- Increase treatment compliance
- Increase community participation
- Facilitate mood and anxiety self-management
- Overcome daily difficulties associated with mental disorder

But the contribution of PDAs in psychiatric rehabilitation is poorly documented

(Depp et al., 2010, Granholm et al., 2012; Heron & Smyth, 2010, Kimhy & Corcoran, 2008; Pijnenborg et al., 2010; Sims et al., 2012)
Objective

To confirm the feasibility of using a PDA (iPod touch or iPad) in a psychiatric rehabilitation process in people with mental disorder

What are the benefits?

What are the obstacles?
Method: Participants

- Recruitment via posters at IUSMM, associated organisms and participation in information meetings

- Selection criteria for participants
  - 18+ years old
  - In a psychiatric rehabilitation process
  - Speaks French
  - Has an interest in technologies

- Selection from a theoretical sample

- Participants were paired with a rehabilitation practitioner
## Method: Participants

<table>
<thead>
<tr>
<th>Participant characteristics</th>
<th>n = 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>42</td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
</tr>
<tr>
<td>- Female</td>
<td>4</td>
</tr>
<tr>
<td>- Male</td>
<td>7</td>
</tr>
<tr>
<td><strong>Follow-up context:</strong></td>
<td></td>
</tr>
<tr>
<td>- Hospitalization</td>
<td>3</td>
</tr>
<tr>
<td>- Outpatient clinic</td>
<td>5</td>
</tr>
<tr>
<td>- Supportive housing</td>
<td>1</td>
</tr>
<tr>
<td>- Assertive community treatment</td>
<td>3</td>
</tr>
</tbody>
</table>
Method: Experimentation

Steps:
1. Signing ethic consent form and equipment lending
2. Short formation
3. Identification of needs/objectives and apps
4. Familiarisation with PDA (2 months)
5. Experimentation during everyday life (6 months)
   • Bimensual follow up meetings with research team
6. Final group interviews
   • Consumers and practitioners separately
   • Completion of socio-demographic and technology habits questionnaires
Method: Interview Content

Consolidated Framework for Implementation Research (Damschroder and al., 2009)
Method: Interview Content

Concepts considered for interview analysis:

- Technology’s Characteristics
- Participant’s Context
- Participant’s Characteristics
- Process
<table>
<thead>
<tr>
<th>PDA characteristics</th>
<th>• Did you find that using the PDA was a complex task?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context characteristics</td>
<td>• Did you receive support from your friends or family to use the PDA?</td>
</tr>
<tr>
<td>Participant characteristics</td>
<td>• Did you have apprehensions regarding the PDA?</td>
</tr>
<tr>
<td>Process</td>
<td>• Do you find the pairing with a healthcare practitioner useful?</td>
</tr>
</tbody>
</table>
Method: Analysis

• Considered only for final group interviews
• “Content analysis”
• Based on Consolidated Framework for Implementation Research (Damschroder, 2009)
• Themes emerged from participants discourse
• Interviews were integrally transcribed
• Used Qualitative data analysis software QDA-miner
Results: Benefits

PDA as a tool to reduce solitude and boredom

• Entertaining oneself and alleviating boredom
• To pass time
• Reduce isolation
• Becoming closer to one’s family, friends, etc.
«Ne serait-ce que pour briser l'isolement, quand la personne est confinée chez elle parce que bon, elle a fait une dépression pis elle n'a pas envie de toute façon de maintenir un contact avec l'entourage (...) quand la personne va mieux, des fois ça peut être dur de rétablir certains liens, tsé quand t'as des amis qu'ça fait six mois que tu leur parles pu (...) si elle peut continuer à garder contact d'une certaine manière.»

Participant 12
Results: Benefits

PDA: enhancing one’s ability to act

- Disease self-management:
  - Medication Reminder
  - Symptoms management
- Participation in daily occupations
- Support for productive activities
Results: Benefits

« Si j'ai beaucoup d'anxiété, ben là j'm'en vais vers le «Respiroguide», si j'avais envie d'faire d'l'exercice plus cognitif, ben là j'faisais le «Mot croisé» ou le «Scrabble». Dépendent comment j'filais durant mon temps de, de, de libre, ben là j'prenais mon iPod »

Participant X
## Results: Obstacles

- **PDA**
  - Complexity
  - Cost
  - Relative advantage

- **Context**
  - Availability of Wi-Fi connection
  - Support from family and friends

- **Participant Characteristics**
  - Motivation and affect
  - Capacity to realize tasks
  - Habits and self-efficacy regarding technology

- **Process**
  - Rehabilitation support
    - Client-centered and respecting rehabilitation stage
    - Give hope, motivation, pleasure, self-efficacy...
Results: Obstacles

«Au début j'aimais beaucoup ça, parce que...chez nous y'avait l'Internet à c't'époque-là, j'payais un...un ..., c'tait accessible là. Mais à un moment donné cette personne-là est partie...pis on n'a pas re-eu Internet en cours de route. J'dirais que les trois ou quatre derniers mois, je l'utilisais pratiquement pu (le iPod Touch). »

Participant X
Discussion

The Remotivation Process
(de las Heras, 2006)

1. Exploration
   • PDA as a tool to reduce solitude and boredom

2. Competency
   • PDA to enhance their control on the disease management or occupations

3. Achievement
   • PDA to facilitate participation and fulfilment in daily occupations (eg. work)
Discussion

Implications for occupational therapy practice:

• The use of PDA with the app’s diversity brings a lot of rehabilitation tools opportunities

• Support from rehabilitation practitioners is essential to a successful experience
  • Importance to be centered on client’s goals
  • Importance to respect client’s rehabilitation phase
  • Importance to give an experience which give hope, self-confidence, motivation, pleasure...
Discussion

What is the therapist’s role in the success of a technology-based intervention?

Can we consider that using a PDA for entertainment contributes to the rehabilitation process?
Discussion: Limits

- Data has not been analysed (follow-up meetings reports and researcher journals)
- Focus group bias
- Small sample
  - Hard to generalize
- Attendance to interview and follow-up meetings
Conclusion

- PDA could be useful in a rehabilitation process
- Further research about the factors affecting the use of PDAs in psychiatric rehabilitation need to be conducted

Données à venir avec la deuxième cohorte d’expérimentation (2013-2014)
References


References


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Questions