Digitalization in health care and health promotion

Usability of Mobile Applications: A Concept Analysis to be Used in Health Promotion

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Theme: Development of health-oriented health care management systems

Organizers: Competence Centre for Health Promotion in Hospitals and Health Care,

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- **Position**

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- **Education**

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- **Background**

Long-Term Care / Mental Health Nursing / Counseling Care

- **Interest**

Health Promotion /

Prevention in Emerging Infectious Diseases

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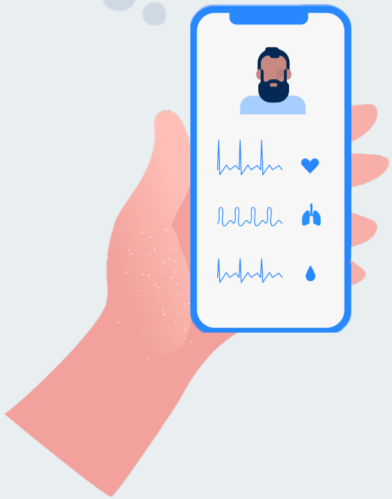
Introduction

Health Promotion

Academia

Industry

Not achieved their goals.



Mobile Application

Methods

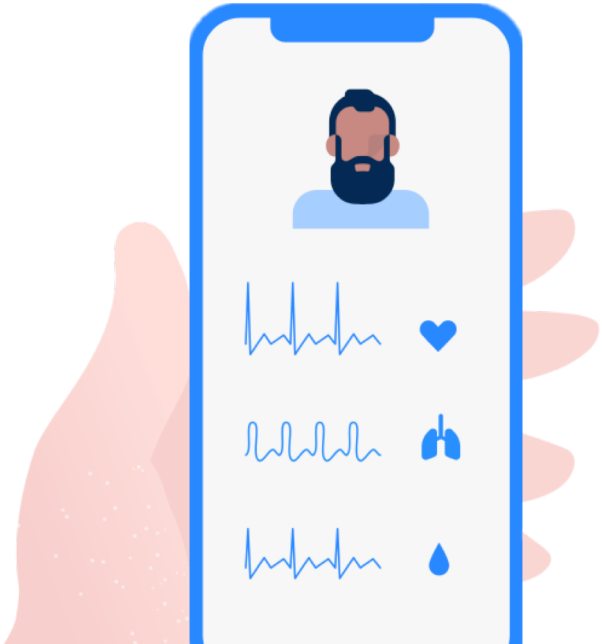
Nursing Field: Concept Analysis
(Walker and Avant, 2019)

Results

Defining Attributes

User Satisfaction

Efficiency



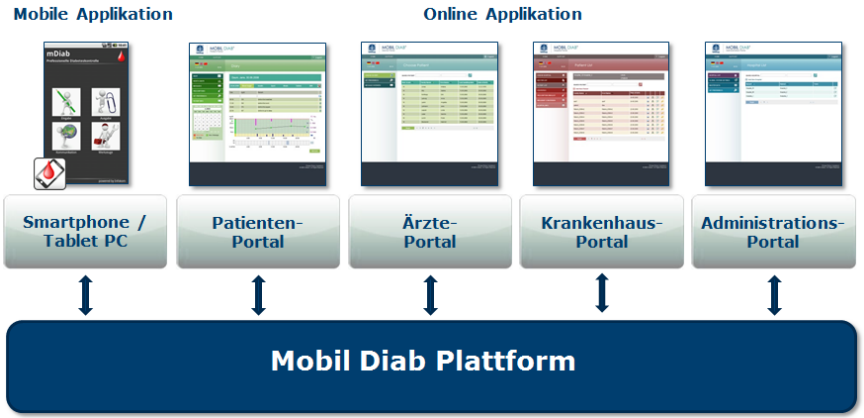
Learnability

Usability of
Mobile Applications

Model Case

Mobil Diab Application

1.78% Reduction in Glycohemoglobin



Overall benefits

- Efficiency in self-health management
- Learnability
- User satisfaction

Simple interface.
Intuitive screens
for data entry.

Participants were also asked to fill out a questionnaire evaluating the Mobil Diab system.
The results obtained indicate that users were satisfied with their experience.

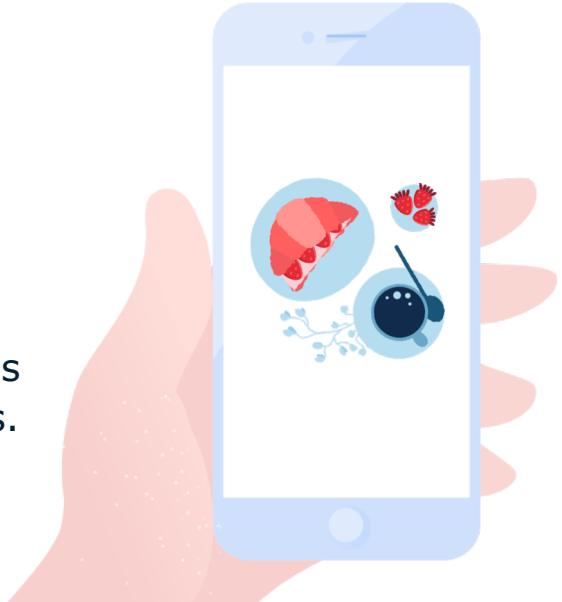
Contrary Case

Food Journaling Apps

Reduce the physical or psychological burdens of the paper-and-pencil recording process.

Improvement

- Lack of ingredient measurement skills.
- Inability to accurately estimate portion size.
- Difficult to analyze dishes with multiple ingredients.



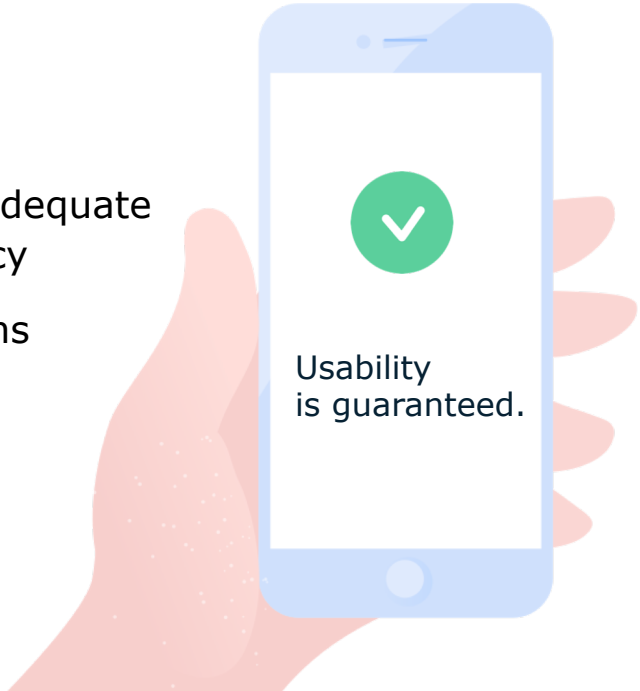
Overall

- Low learnability
- Low intention to continuously use the app
- Unable to efficiently achieve the goal
- User satisfaction would be low

Antecedents and Consequences

Antecedents

- Mobile phones
- Human users with adequate mobile phone literacy
- Technical applications
- Goals

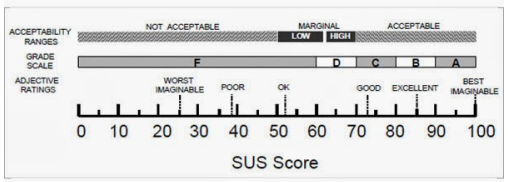


Consequences

- Continue to use the app
- Achieve their goals
- Intend to recommend it

Empirical Referents

Questionnaires



System Usability Scale (John Brooke, 1986)

- Efficiency
- User satisfaction
- Learnability

Observations

A process-based approach to test usability of multi-platform mobile applications. (Ingrid and Arilo, 2016)

- User satisfaction
- Learnability

Interviews

"An innovative mobile electronic tourist guide application" (Kenteris et al., 2009)

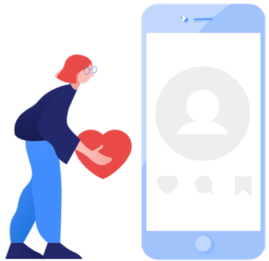
- Efficiency
- User satisfaction
- Learnability

Conclusions

“A mobile app with satisfactory usability achieves the goals set for its design and reaches its maximal efficacy.”

Developer

User



Healthcare Professionals

Relevance to HPH

Well-designed health promotion mobile applications can in turn be integrated into a health management system in order to provide continuous long-term follow-up care outside the hospital.

Thank you !

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