ANALYSIS OF USABILITY BARRIERS AND PERCEIVED UTILITY OF WEARABLE ACTIVITY TRACKERS THROUGH 3 VARIOUS TRACKERS IN ELDERLY DEMOGRAPHICS (55+)

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ABSTRACT

This study reports a mixed methodology using surveys, usability testing and interviews, elaborating several findings on chosen topics. The study explains the reasons and causes of efficiency, effectiveness and perceived utility among three devices (GVR predominator, Fitbit inspire HR and MI Band 4). The findings of this study might be used to guide future smartwatch software design and to develop a better digital ecological momentary assessment.

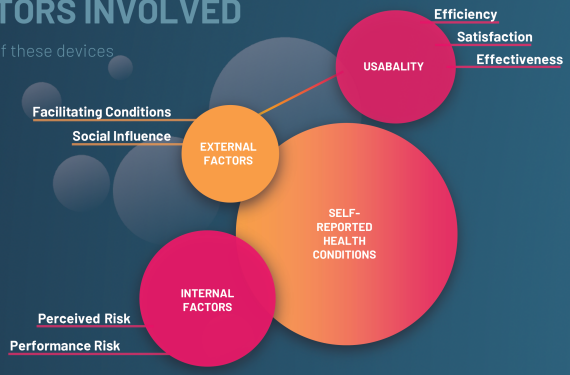
INTRODUCTION

Activity health tracker has been playing a vital role in today's medical calamities, enhancing the ability of self-monitoring more than ever before. Theset for the user to alter their health behaviour by providing personalised and tailored physical activity data in less intrusive and inexpensive ways to increase their health status awareness. Older adults who may benefit from such technologies are a fast-growing segment of the population. However, despite these potential benefits, elderly adults still show slow technology adoption rates. Hence increases the concern to understand how they perceive these products and to analyse what usability barriers are caused during the user's experience of these trackers in the elderly dwelling population.

Many factors are affiliated with user experience, but the number of evidence shows that usability directly influences the user. This study will focus on the factors that affect usability based on the user experience principles to understand the aged populations' perceived utility and preferences. about an activity trackers.

FACTORS INVOLVED

In utility of these devices

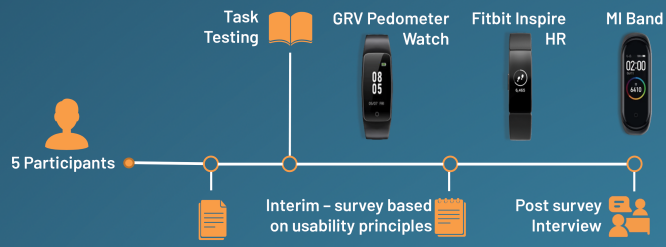


RESEARCH EXECUTION

SURVEY FORM

Based on internal and external factors through secondary research to understand the perceived value.

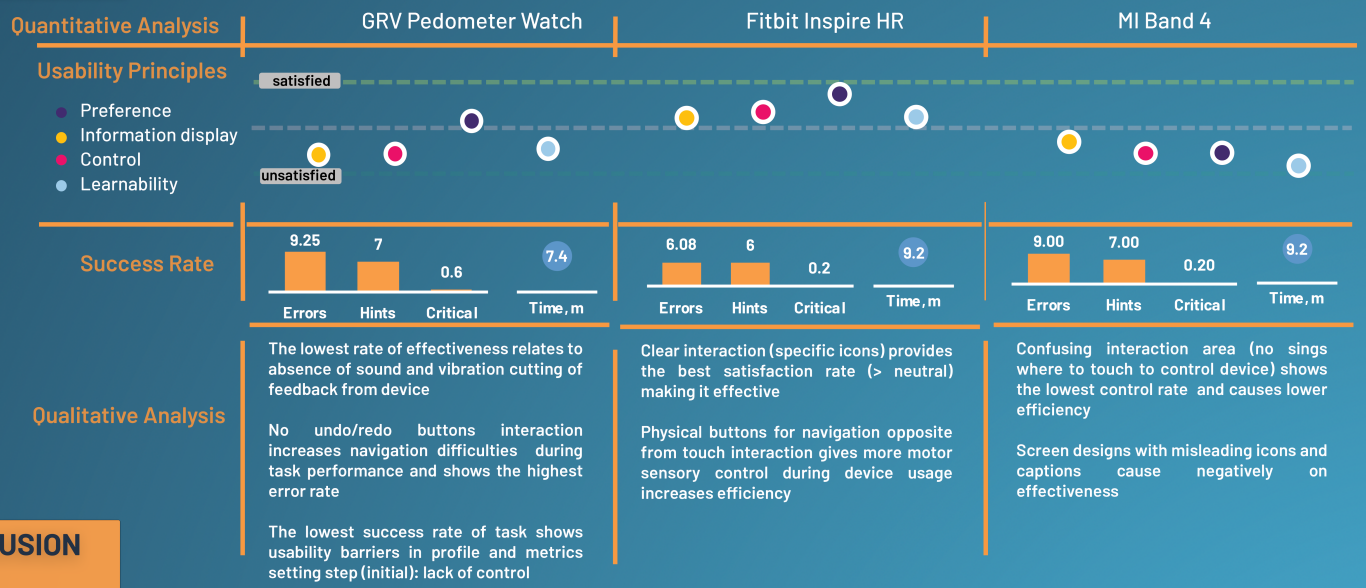
USABILITY TEST



POST-TEST INTERVIEW

To understand the user perspective to analyze the relation between usability and utility

DATA ANALYSIS



CONCLUSION AND FUTURE SCOPE

Findings after in-depth analysis on preferences and behavioral changes in relation to the usability barrier of activity health trackers among elderly dwelling population:

- Onboarding and lack of system navigation creates performance risk for users, which play a vital role in understanding the system to acceptance it. Hence interactive onboarding navigation should be confedered.
- Physical elements enhance the cognitive motor skills giving a clear dimensions of operating the device.
- Interactive interface with clear infographics, sound and vibration outputs should be used for intuitive assessment scale for better engagement and reduce perceived risk.

Future Scope: Dairy studies could be conducted on the findings of the study to calculate the adoption rate effect in real life environment.