

Objectives

1. To identify items used in peer reviewed mobile app rating scales.
2. To identify factors important to patients, clinicians, and app developers in evaluating the quality of mental health apps.

Methods

1. Six Focus groups were conducted. Important factors in evaluating quality of mental health apps for older adults were identified by 4 groups of stakeholders (Figure 1).
2. A systematic review of quality assessment scales for mobile apps was conducted. (Figure 2).
3. Identified constructs and items (Table 1).

Results

Figure 1. Average ranking of usability factors by stakeholders in focus groups from most important (11) to least important (1)

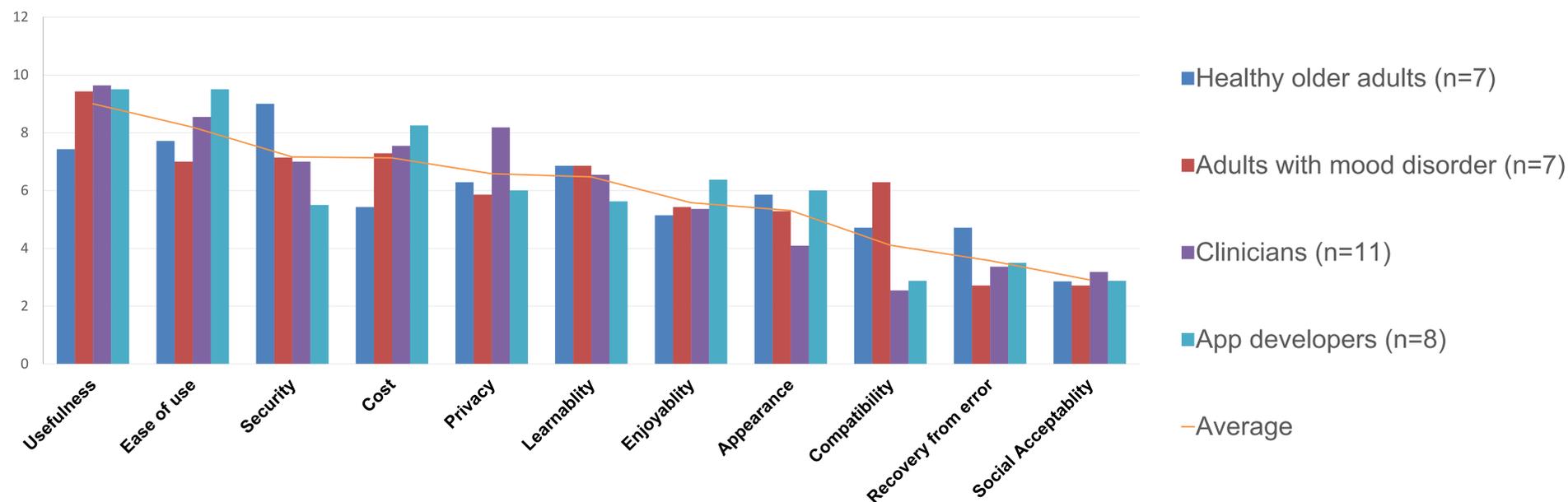
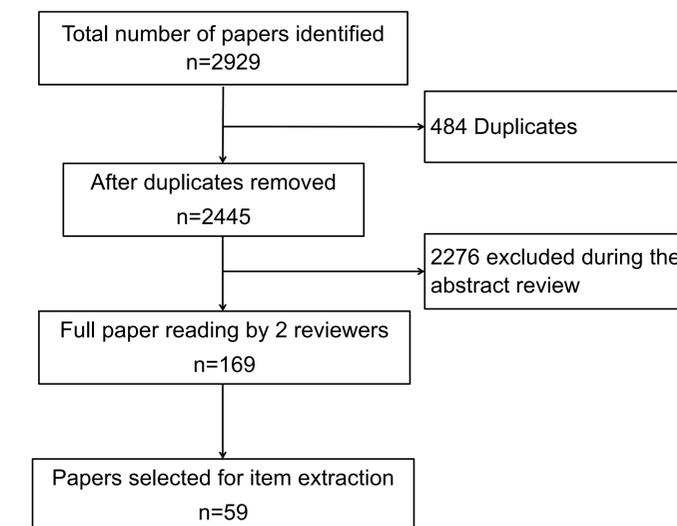


Table 1. Frequency and Percentage of items extracted from literature under each quality category

Quality and Usability Categories and Constructs	Items n (%)	Selected Sample Items for Each Category
Usefulness (including effectiveness)	147 (25)	[Does app] Encourage and support self-monitoring?
Validity/reliability of content/information	106 (18)	Are claims made by the app justified and backed up with scientific evidence?
Ease of Use	101 (17)	Gestural design: Are interactions (taps/swipes/pinches/scrolls) consistent and intuitive across all components/screens?
Appearance	71 (12)	Is the visual design of the program attractive and appealing to its target audience? Does the program have a harmonious look and feel (including colors and fonts)?
Privacy and security	55 (9)	Are the data encrypted?
Learnability	38 (7)	How easy is it to learn how to use the app; how clear are the menu labels/icons and instructions?
Customizability	17 (3)	Can options be modified?
Error prevention/ correction	16 (3)	Are there confirming messages showing warning information related to actions that the user needs to consider?
Enjoyability	12 (2)	It was fun to work with the app
Compatibility (with other devices)	8 (1)	Can application connect to other devices?
Availability of technical support	7 (1)	Does the app have a help page?
Costs/expenses	3 (0.5)	[Does the app] have in app purchases?
Total	581 (100)	

Figure 2. Paper Selection Process for the literature review



Conclusions

1. The most important factors in evaluating the quality of health mobile apps are usefulness, validity of the content, and ease of use.
2. For older adults, security and privacy, cost, and ease of use are more important than appearance and enjoyability.
3. Social acceptability is not an important factor in evaluation of quality of mobile apps.