**Materials and Methods**

The ethics committee of the Queensland University of Technology approved the study (approval No. 1400000807). Detailed methods of this RCT were reported previously [[15](#_ENREF_15)].

Participants were recruited via television news and social media calls, as well as University e-mail networks. Once eligibility was established, participants were randomized to either mobile teledermoscopy-enhanced skin self-examination (SSE) (intervention group) or naked-eye SSE (control group). Overall, 234 participants were randomised and 199 participants completed the trial (101/118 control group participants and 98/116 intervention group participants). This paper reports the acceptance and satisfaction data from the 98 participants in the intervention group who conducted mobile teledermoscopy-enhanced SSE at home. To do so, intervention group participants received a dermoscopic attachment for their iPhone (FotoFinder handyscope; FotoFinder Systems GmbH, Bad Birnbach, Germany) as well as the FotoFinder app that guided them through taking photos of skin lesions of concern and submitting them for assessment to the study team. These participants were asked to complete three whole-body mobile teledermoscopy-enhanced SSEs in their home at baseline and 1 month and 2 months later. At each SSE, they were asked to photograph potential suspicious lesions via a study app and e-mail the image to the research team for diagnosis by a teledermatologist. Participants were provided with the AC (asymmetry/colour) rule for detecting melanoma [[17](#_ENREF_17)] in addition to macro and dermoscopic images of melanomas and keratinocyte cancers with a description of their typical features. After completion of the three home SSEs, all participants visited the study doctor at the university for an in-person clinical skin examination (CSE). The clinical outcomes are under review. This paper reports on intervention participants’ self-reported data collected via online questionnaires at (i) baseline prior to mobile teledermoscopy use and (ii) follow-up after mobile teledermoscopy use.

*Demographic Details*

Participants reported key demographic details (gender, age, work, previous mole or spot removal, education, marital status) and phenotypic information (eye colour, skin type, number of moles).

*Mobile Teledermoscopy Acceptance Survey*

We used a 25-item questionnaire which we had previously adapted for consumer use from the technology acceptance model (TAM) [[18](#_ENREF_18)], and assessed for internal consistency [[6](#_ENREF_6)]. Further items were added to the current version’s trust domain to elucidate this topic in greater detail. Cronbach’s α for this newly revised scale was above 0.7 which is considered acceptable for all domains except “facilitators” which was just below α = 0.67. Response options for each of the 25 items ranged from 1 to 5 (Likert scale: 1 = strongly disagree, 2 = disagree, 3 = unsure, 4 = agree, 5 = strongly agree), in seven TAM domains [[16](#_ENREF_16)]:

1. *Perceived usefulness* is the degree to which a consumer believes that the use of a system will increase their performance (3 items), α = 0.79.
2. *Perceived ease of use* refers to the degree to which a consumer believes that no effort will be required to use the system, and how easy it is to learn to use the system (4 items), α =0.81.
3. *Compatibility* refers to the degree of correspondence between an innovation and existing values and needs of potential adopters (4 items), α = 0.79.
4. *Attitude and intention* refers to an individual’s evaluative judgement of the target behaviour (e.g., good/bad, harmful/beneficial, pleasant/unpleasant) and their future intention to use the technology (4 items), α = 0.80.
5. *Subjective norm* refers to the extent to which individuals believe that people who are important to them will approve of their adopting a particular behaviour (2 items), α = 0.86.
6. *Facilitator* refers to the degree to which an individual believes that an organisational and technical infrastructure exists to support the use of the system (2 items), α = 0.67.
7. *Trust* refers to the doctor expertise, organisation credibility, and use and security of personal data (6 items), α = 0.81.

*Thoughts about Melanoma Scale*

The “thoughts about melanoma” scale was derived from existing scales that measure cancer worry [[19](#_ENREF_19), [20](#_ENREF_20)]. The revised 9-item scale reflects on frequency and extent of worry, effect of worry on mood and daily activities, and symptom-based worry on a 5-point Likert scale (5 = always, 4 = often, 3 = sometimes, 2 = rarely, 1 = never). Cronbach’s α for the scale was α = 0.88.

*Mobile Teledermoscopy Satisfaction Questions*

Participants were asked on a scale from 5 (strongly agree) to 1 (strongly disagree) if the dermatoscope was easy to use, motivated them to conduct SSE, and if SSE was easy to conduct. Participants were asked a binary question (yes/no) if they: (i) wish to conduct mobile teledermoscopy in the future, (ii) had a partner assist during mobile teledermoscopy, (iii) experienced anxiety, and (iv) found the AC rule helpful to detect a suspicious skin lesion. Participants were asked if they experienced any difficulties with the dermatoscope and, if so, to select these from a list/or add their own response. In an open-ended question at the end of the survey participants were asked for general feedback on the dermatoscope and how the mobile teledermoscopy process could be improved.

*Statistical Analysis*

Descriptive statistics were used to summarise frequency and percentage of participants’ demographic variables and satisfaction with mobile teledermoscopy. Mean score at the baseline and follow-up time points, as well as change scores, were calculated for each of the seven TAM domains, the TAM scale overall, as well as for the “thoughts about melanoma” scale. Paired *t* tests were used to assess whether the mean scores changed significantly from baseline. Univariate and multivariate linear regression analyses were used to calculate associations between demographic and phenotypic variables and the overall TAM change score (mean follow-up score minus mean baseline score). Data analysis was conducted using SPSS statistical software v25. Key themes of importance to participants were extracted from the open-ended question by a single researcher (C.H.).