adapting and learning the application. On the following day, they used the application more often. One participant fasting on the second day which is Participant 4 (94 Kcal) that shows low intake on that day due to no food is taken during daytime. There were also participants that forgot to upload their meals on the first day. The participants that could not upload their meals because their meals did not exist in the database. We have visited them each day and assisted in the recording their meal intake, and that solved the problems. Even though there are limitations during the study, we still believe that the intervention with the use of mobile apps among the elderly provides insight for future research design and possibilities.

## IV. CONCLUSION

The results of this study conclude that our participants liked the Nutrihealth application because it helps them to monitor their health. This application also causes our participants to be careful in choosing meals instead of monitor our participant's diet. They also can use it everywhere as long as they bring their smartphone. This is also the reason they prefer to use Nutrihealth application. Some of our participants expressed possible future improvements on the application. Some suggested that this application should update its meals. The meals provided by the application is not enough and will affect the calories intake results. To continue the study on persuasive mobile application development on a healthy diet for elderly based on persuasive design, a more diverse demography of population will be included such as adult citizens in Malaysia. These recommendations will be considered for improvement of our Nutrihealth application.

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