Participation Reference Guide
For Pilot

About the Study

Introduction

The goal of this study is to develop for SIA a novel fatigue modelling and prediction model with consideration of individual heterogeneity and complex interactions that exist among fatigue factors to provide more accurate fatigue predictions and to **enhance pilot and cabin crew safety and well-being** while upholding levels of performance.

About the Study

Reimbursement

Reimbursement includes redemption of **(a) Fitbit Sense 2 (worth S$428)** and **(b) KrisPay Miles (Worth up to S$100 worth of KrisPay Miles)**.

(a) To keep your **Fitbit Sense 2**:

- Complete **at least 70% of the minimum questionnaire-based tasks** (per rostered flight)
- Wear tracker for **at least 70% of the time**

(b) To earn the **KrisPay Miles**:

- Complete **additional Fatigue Questionnaire and Psychomotor Vigilance Task (PVT)** during rostered flights

Minimum Tasks Requirements

Tasks to Complete	Short Haul Flights (Duration less than 3 hours)
(i) Pre-Flight (Within 4 hours before departure time)	
Fatigue Questionnaire iPad x 01	✔
PVT Task iPad x 01	✔
(ii) At Top of Climb (TOC) (Within an hour after TOC)	
Fatigue Questionnaire iPad x 01	
PVT Task iPad x 01	
(iii) At Top of Descent (TOD) (Within an hour prior to TOD)	
Fatigue Questionnaire iPad x 01	✔
PVT Task iPad x 01	✔
(iv) Post-Flight (Within 3 hours after landing)	
Fatigue Questionnaire iPad x 01	
PVT Task iPad x 01	
NASA Task Load Index iPad x 01	✔
(v) Once a Week (Between Monday - Sunday)	
Positive Affect & Wellbeing Questionnaire iPad x 01	

*Turnaround flights are considered as two separate flights.

<u>Minimum</u> Tasks Requirements

Tasks to Complete	Long Haul Flights (Duration 3 hours and longer)
(i) Pre-Flight (Within 4 hours before departure time)	
Fatigue Questionnaire iPad x 01	✓
PVT Task iPad x 01	✓
(ii) At Top of Climb (TOC) (Within an hour after TOC)	
Fatigue Questionnaire iPad x 01	✓
PVT Task iPad x 01	✓
(iii) At Top of Descent (TOD) (Within an hour prior to TOD)	
Fatigue Questionnaire iPad x 01	✓
PVT Task iPad x 01	✓
(iv) Post-Flight (Within 3 hours after landing)	
Fatigue Questionnaire iPad x 01	✓
PVT Task iPad x 01	✓
NASA Task Load Index iPad x 01	✓
(v) Once a Week (Between Monday – Sunday)	
Positive Affect & Wellbeing Questionnaire iPad x 01	

*Turnaround flights are considered as two separate flights.

Frequently Asked Questions

What is the duration of this study?

6 months

Can I exceed the minimum tasks during flight?

Yes. This includes the **Positive Affect & Wellbeing Questionnaire** and additional questionnaire attempts (up to a cap per task and flight); you will receive additional KrisPay Miles. Refer to your **Participant Information Sheet — Summary Sheet** for details.

Frequency of wearing tracker

24/7, including sleep time

Frequency of synchronizing tracker

Once a day at minimum, as often as possible

Frequently Asked Questions

How long is each Psychomotor Vigilance Task (PVT) test?

3 minutes per attempt [1]

How much KrisPay Miles do I earn per task?

Fatigue Questionnaire	2 KrisPay Miles
Psychomotor Vigilance Task (PVT)	10 KrisPay Miles
NASA Task Load Index	4 KrisPay Miles
Positive Affect & Wellbeing Questionnaire	10 KrisPay Miles
Wearing Tracker Daily	10 KrisPay Miles
Wearing Tracker to Sleep Daily	10 KrisPay Miles

Where can I check my task submission records & accumulated rewards?

Wellness Buddy mobile app → "Rewards"

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[1] 3 minutes is the minimum scientifically proven duration for the accurate capture of attention span

Frequently Asked Questions

Can I attempt the tasks while my device is offline during flight?

Yes. Your device will store local records of completed tasks. When you reconnect back online:

- iPad: Stored data will be automatically pushed to the Wellness Buddy mobile app

Personal Notes

Personal Notes

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Thank You for
Your Participation!