# SUPPORTING SOCIAL INTERACTIONS WITH AN EXPRESSIVE HEART RATE SHARING APPLICATION

FANNIE LIU, LAURA DABBISH, and GEOFF KAUFMAN, Carnegie Mellon University

https://doi.org/10.1145/3130943

# WHAT IS THE PURPOSE OF THE APP?

**“Expressive Heart Rate Sharing for Enhanced Social Interactions”**

## HEART RATE SHARING

Allows users to share their real-time heart rate data with others, providing a physiological dimension to social interactions.

## EMOTIONAL EXPRESSION

Through heart rate data, the application aims to provide insights into the emotional or psychological states of individuals, enriching communication.

## ENHANCEMENT OF SOCIAL DYNAMICS

By sharing expressive biosignals, the application seeks to foster deeper connections and understanding among individuals, thereby supporting social interactions.

# HOW DOES THE APP WORK?

## WEARABLE HEART RATE SENSOR

Utilizes a wearable heart rate sensor to continuously monitor and collect users' heart rate data.

## ANDROID APPLICATION

A specially designed Android application serves as the platform for sharing and viewing heart rate data among users.

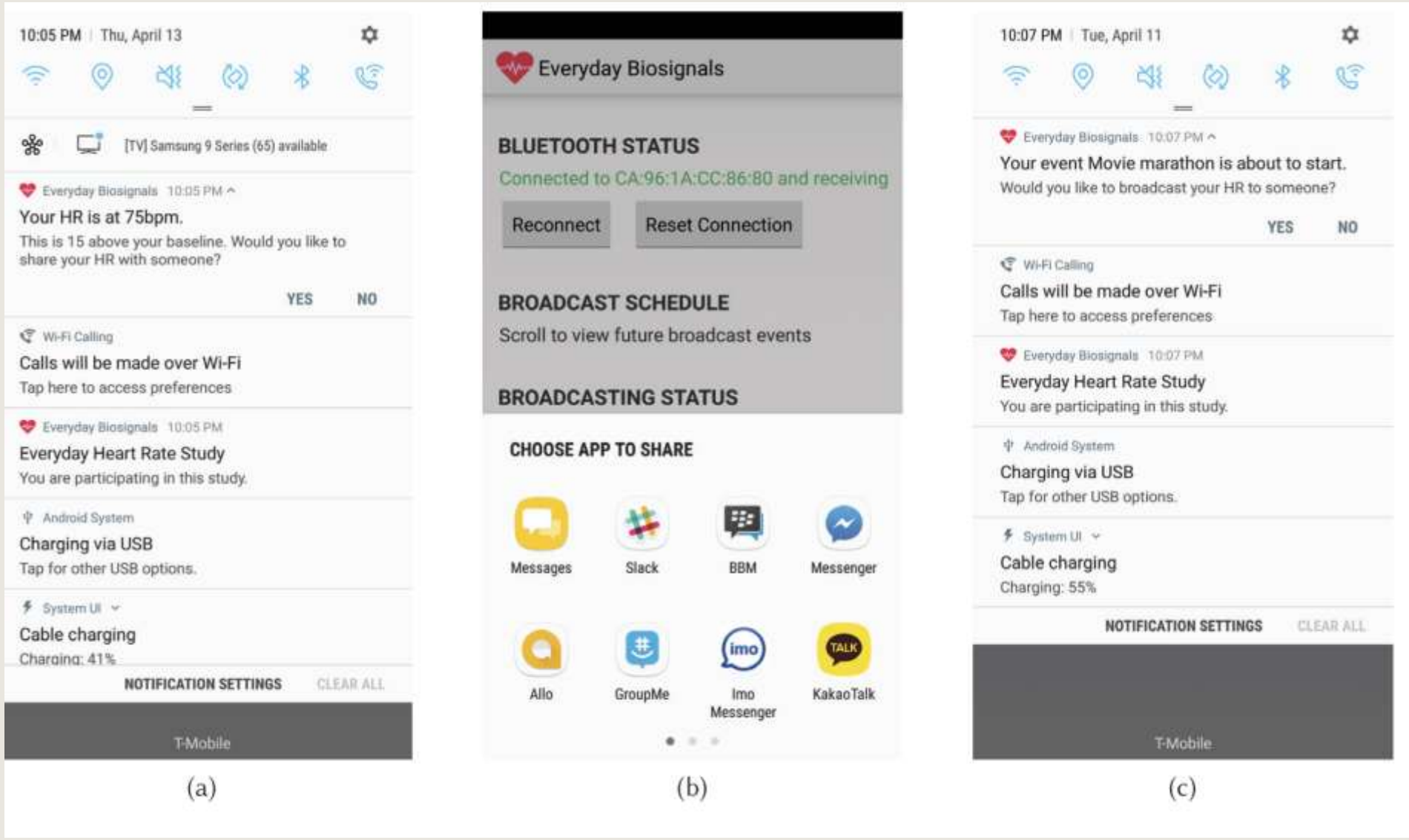
## REAL-TIME DATA SHARING

The application enables real-time sharing and viewing of heart rate data, allowing individuals to see and react to the physiological signals of others.

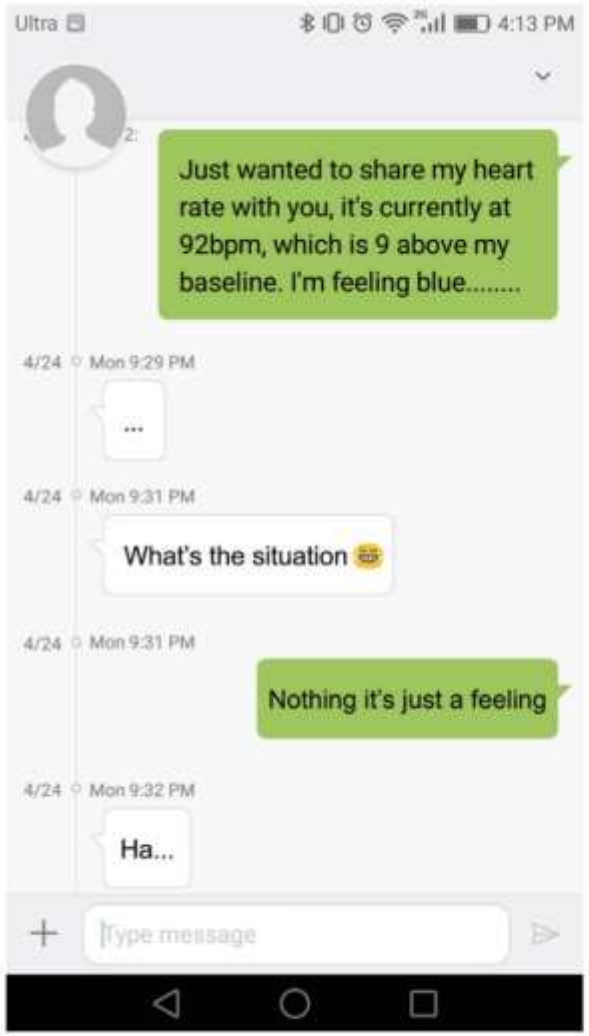
## PRIVACY CONTROLS

Assumes the inclusion of privacy controls to let users manage who can view their heart rate data, ensuring a level of privacy and control over personal data sharing.

# APPLICATION SCREENSHOTS



# APPLICATION SCREENSHOTS




(b) Emotional Expression, translated


(c) Daily Update.


(d) Playfulness, translated from Hindi.

# MY COMMENTS: APPLICATION BENEFITS

## ENHANCED EMOTIONAL CONNECTION

By sharing heart rate data, individuals may form a deeper emotional connection, understanding each other's reactions and emotions in real-time.

## SUPPORT FOR SOCIAL INTERACTIONS

The application could potentially support social interactions, especially in remote or virtual settings, by providing an additional layer of emotional expression.

## PROMOTION OF EMPATHY

The real-time sharing of physiological data may promote empathy and understanding among individuals, creating a more supportive social environment.

# MY COMMENTS: APPLICATION RISKS

## PRIVACY CONCERNS

Sharing personal physiological data could raise serious privacy concerns, especially if the data is mishandled or leaked.

## POTENTIAL MISINTERPRETATION

The interpretation of heart rate data can be complex and may lead to misunderstandings or incorrect assumptions about a person’s emotional state.

## DEPENDENCY ON TECHNOLOGY

There's a risk of users becoming overly reliant on technology for social interaction, which might decrease their natural human interaction and understanding.

# MY COMMENTS: EVALUATION OF THE APP

## INNOVATIVE APPROACH

The app introduces a new approach to leverage technology to enhance social interactions, offering a new avenue for expressive communication between its users.

## NEED FOR SAFEGUARDS

It is crucial to implement robust privacy safeguards and properly educate users to mitigate the risks associated with sharing personal physiological data.

## INTEGRATION WITH OTHER APPS

The app can be enhanced to be integrated with other popular social media applications (i.e., Facebook, TikTok, X) so users can communicate their emotional state to broader audiences.

# THANK YOU

AGGELOS SINAPIS

SDY 60 (Pervasive & Mobile Computing)

std153519@ac.eap.gr