



# **Evaluating Personal Mobile Music**

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# Musicology: Personal Music in Shared Spces



# Design Overview

Formative Studies  
(Interviews, Surveys)

Technology Prototype  
(Phone-Based Personal Music Player)

Evaluation  
(Deployment... or?)

# Musicology: High-level Areas

The sharing trinity:

1. Identity management, not just privacy

2. Enabling the personal music ecosystem



3. The power efficiency of full-featured protocols

# Evaluation of Pervasive Mobile Systems

Three main difficulties with an evaluation of the Musicology system:

- *Time* – trying to deal with people's behavior over time
- *Scale* – involves many people to understand social effects
- *Functionality* – integrating with user's *existing* mobile device

The ideal evaluation of such a system would be very difficult! By necessity, focus on immediate reactions and perennial concerns – things that should transcend the intermediate usability issues.

So, even though we have a working prototype,  
don't even *try* to evaluate usability – *give it a miss!*

# Evaluation Method

To investigate some of the underlying concepts supporting the Musicology model, we focused on three main concepts:

- ***In-situ*** – conduct in a representative environment to capture relevant context
- ***Comparative*** – look at the behaviors among a collection of techniques, not aiming to specifically evaluate one
- ***Survey*** – don't focus on the devices, instead the underlying features

# Evaluation Overview

*Comprehensive survey given in-situ covering a number of interfaces...*

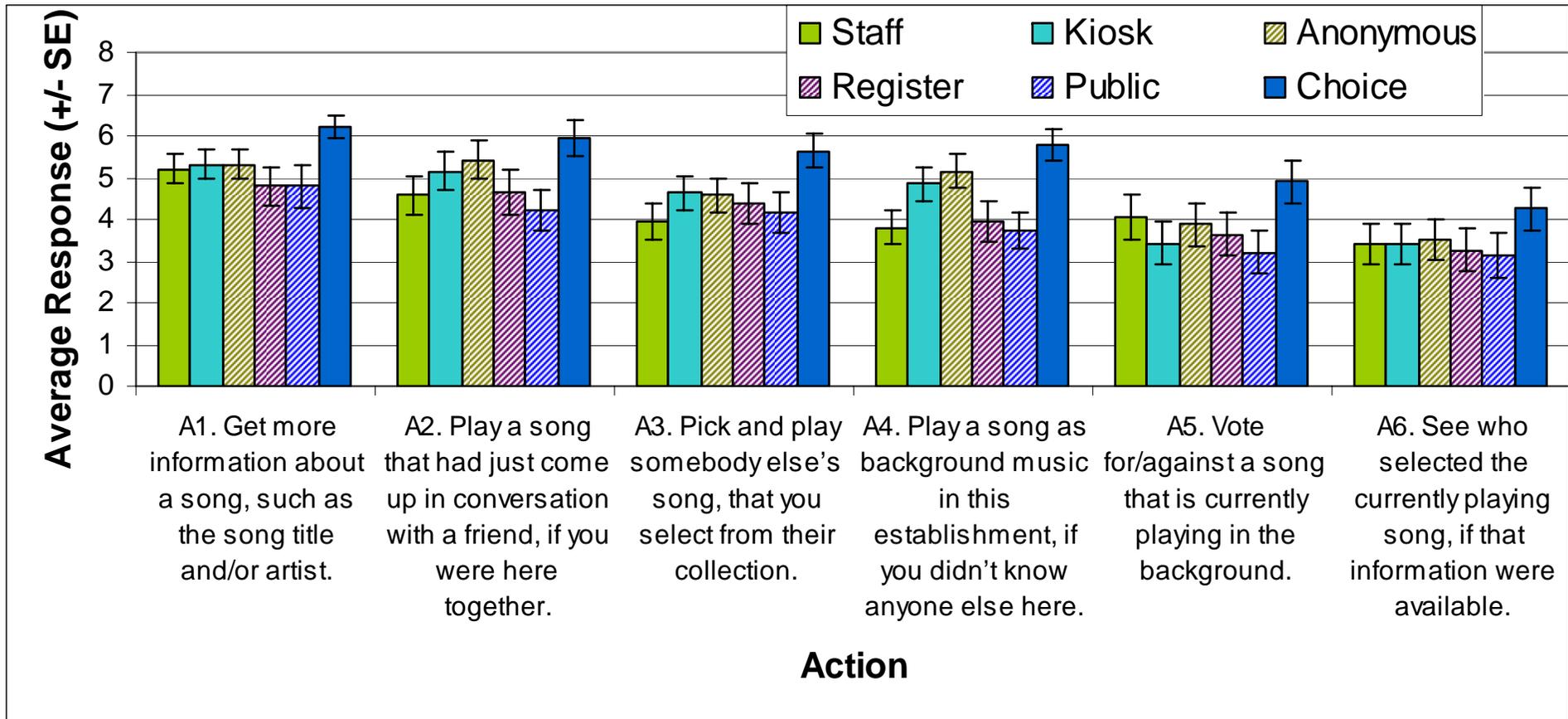
- (General questions – not specific to interaction)
- Staff – walk up and talk to the staff
- Kiosk – walk up to a public situated kiosk
- Anonymous – phone-based interaction w/o identity
- Register – interact through phone after registering
- Public – after registering, everybody can see it's you!

*...and a verity of actions...*

- Playing music
- Listening to music
- Interacting with much
- Sharing music
- “Watching” others

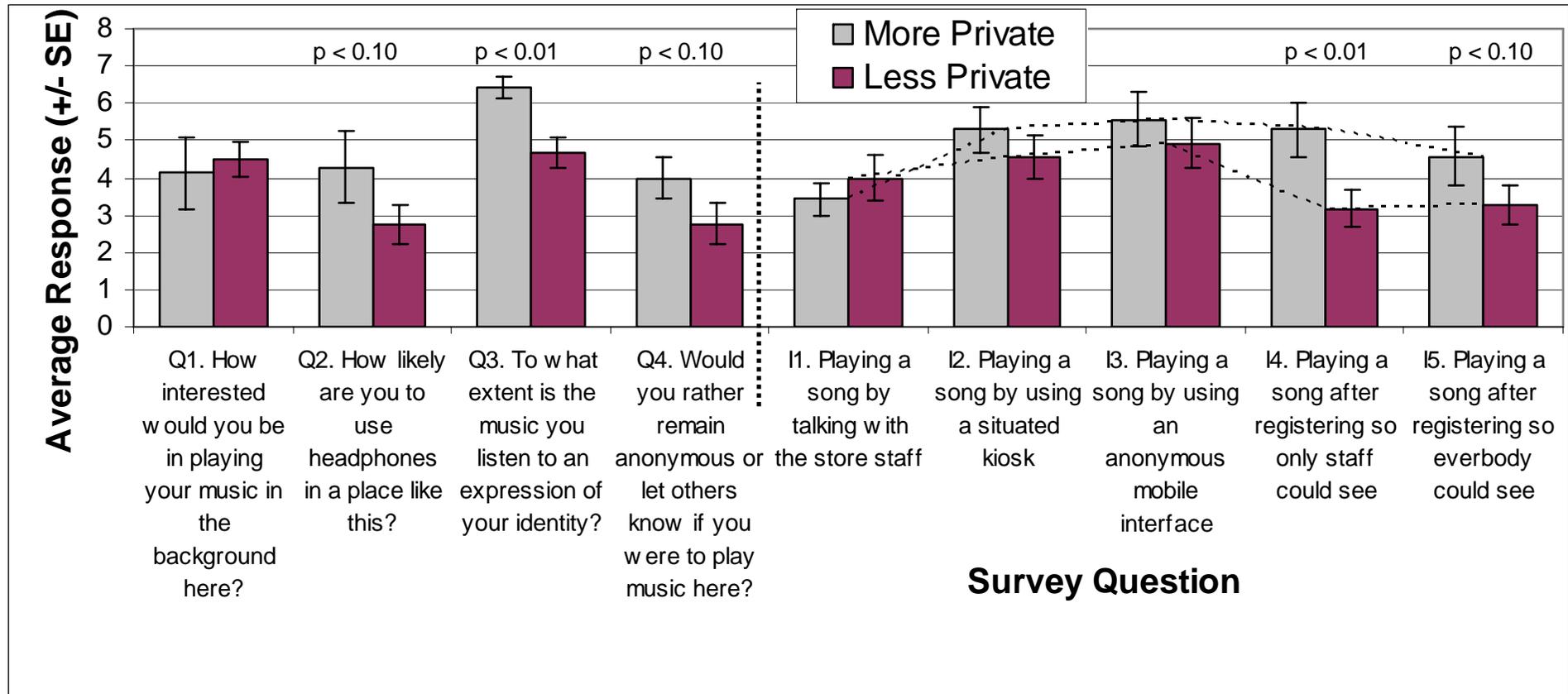
Administered to ~20 participants in a southern (US) collegiate setting.

# Interfaces and Actions



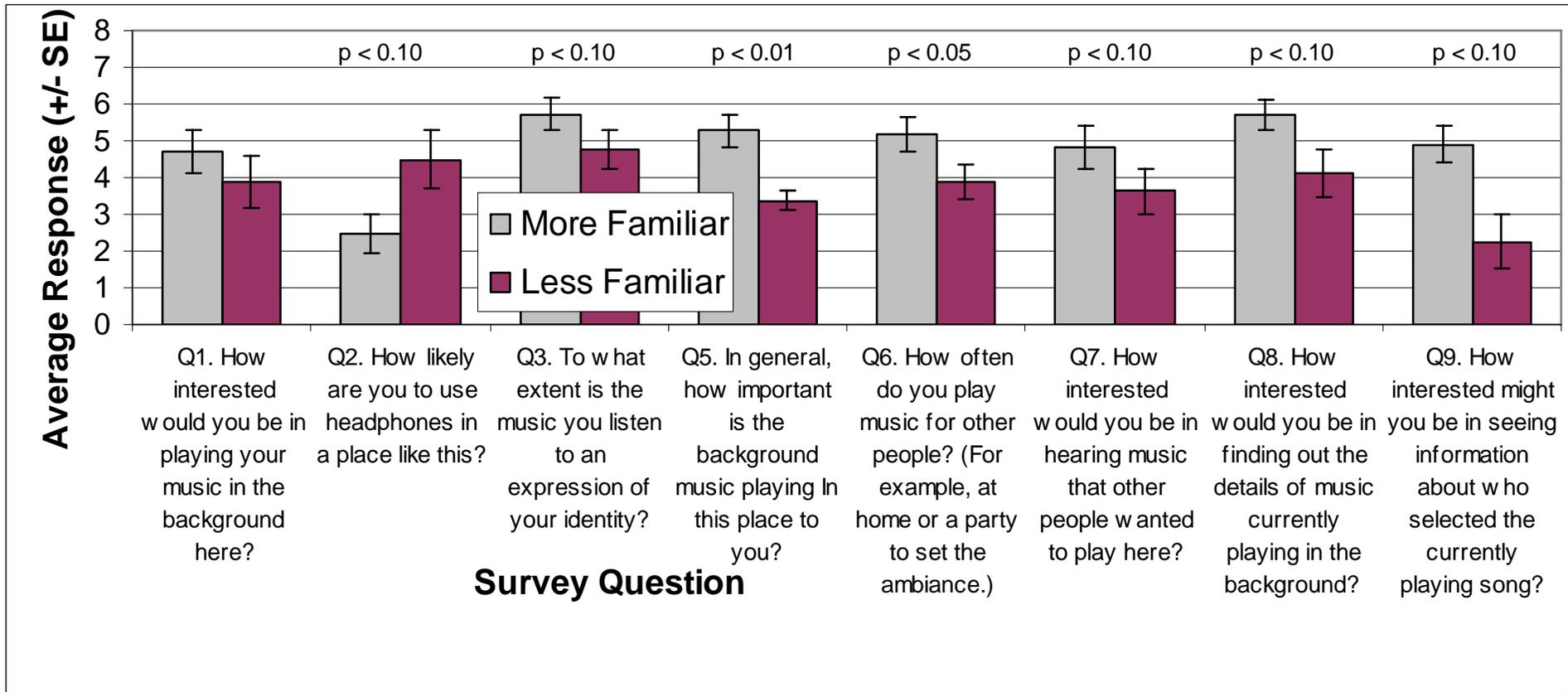
***Mobile devices have a marginal impact for most actions, but...***

# Privacy and Identity



***Privacy is not the key...  
it's really about managing identity!***

# Familiarity with the Establishment



***Repeat customers have a very different perspective of the capabilities...***

# Summary

Emerging pervasive mobile systems are very complex!

- User's behavior over time
- Involve social considerations
- Integrated technologies

Need to find ways for researchers to evaluate the correct aspects of the system without problematic deployments!

With personal music in public places, identity and familiarity are key elements of an interactive mobile system...