

Participatory Design of a Physical Activity Intervention for Latino Adolescents Using Facebook

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Abstract and Objective

Persuasive technologies are interactive computing systems designed to intentionally change attitudes and/or behaviors. Little is known about the efficacy of harnessing such technologies to promote health among at-risk adolescents. We conceptualized Facebook, an innovative social utility used by more than 200 million people, as a “palette” for the delivery of multi-faceted, theoretically-based, and culturally and linguistically appropriate health promotion strategies. We are designing a Facebook application that will embrace the functional triad (tool, social actor, and medium) of roles for computing technology toward the goal of promoting activity. Persuasive strategies will target motivation for physical activity, perceived competence for exercising regularly, and perceived enjoyment of physical activity. During a summer education program, nine Latino adolescents participated in sessions to create preliminary designs and functional specifications for three components of the proposed application: physical activity mash-up, goal setting and activity monitoring, and reward/award structures.

Keywords:

Social utility, Participatory design, Adolescents, Physical activity, Latino

Introduction

Persuasive technologies are interactive computing systems designed to intentionally change attitudes and/or behaviors.[1] Little is known about the efficacy of harnessing such technologies to promote health among at-risk adolescents. Social utilities such as Facebook, MySpace, Short Message Service (SMS), and Twitter are integrated into the daily lives of adolescents providing opportunities for intentional persuasion in regards to health-promoting behaviors. We conceptualized Facebook, an innovative social utility used by more than 200 million people, as a “palette” for the delivery of multi-faceted, theoretically-based, and culturally and linguistically appropriate health promotion strategies. It is not Facebook itself, but the persuasive strategies related to promoting physical activity that we will build using the Facebook application programming interface and integrate as secure project-specific area in Facebook, that comprise our proposed Persuasive Facebook (p-Facebook) intervention. P-Facebook will embrace the functional triad (tool, social actor, and medium) of roles for com-

puting technology toward the goal of promoting activity.[1] Persuasive strategies in p-Facebook will target motivation for physical activity, perceived competence for exercising regularly, and perceived enjoyment of physical activity. To inform design and functional specifications, we engaged in a series of three participatory design sessions with Latino adolescents.

Methods

Nine adolescent Latinos from Gregorio Luperon High School, a mathematics and science high school for Latino immigrants attended a summer research education program at Columbia University. As part of the program the adolescents participated in three sessions to create preliminary designs and functional requirements for three components of the proposed Facebook application: physical activity mash-up, goal setting and activity monitoring, and reward/award structures. Prior to each design session, adolescents were provided background information on the specific component (e.g., what is a mash-up, how is a mash-up built?). Subsequently, they were divided into three groups of three: one group comprised females, the second, males, and the third, one male and two females. Each group was facilitated by an informatician. Adolescents documented their design ideas on large flip charts and presented their ideas to the entire group for feedback.

Results

Every group successfully generated designs and functional specifications, some of which reflected gender differences.

Conclusion

Sessions were useful in informing the design of p-Facebook.

Acknowledgement

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References

- [1] Fogg B. Persuasive Technology: Using Computers to Change What We Think and Do. San Francisco: Morgan Kaufmann Publishers 2003.