Performing Pregnancy: Young Moms-to-Be and the Public Performance of Self-Esteem and Support

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Abstract  
This paper describes the current development of an interactive community health education piece that targets young, pregnant women using an interactive wall. Foregrounding the pregnant form of the women, and working within the constraints of conventional media, we attempt to reverse the stigma associated with pregnancy in the lower end of the age range through positive and playful messages that give voice to the child-to-be and enlist the help and support of others.

Keywords  
Public performance, interactivity, limited interactivity, simulated interactivity, immersive media, wall projections, human factors

ACM Classification Keywords  
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms  
Social support networks, vulnerable populations, self-esteem, self-acceptance
Overview
In our discussion group, she sat to the far left. Like the other four girls in the group, she was a high school sophomore, around 15 years old. For the first 20 minutes of the discussion, she participated just as her peers did, chatting and sharing inside jokes. Then she started crying and told us that she was pregnant. Instantly, the mood in the room changed. Her friends ran to her side to comfort her, and their stories began to pour out, stories of girls who were shunned by their families, despairing over their futures, and, as their pregnancies became more apparent, dropped by their friends, one by one. And in the entire hour-long session, not once did anyone mention a father or any other male figure.

We had been asked by the Indiana State Department of Health to design a public health piece using their technology to educate young mothers-to-be about good maternal health. The importance of good health practices and their impact on subsequent generations had been proven repeatedly and the ISDH, through its Social Immersive Media Project for Life-course Education (SIMPLE) wanted to educate young mothers-to-be and families using unconventional means that they thought would be particularly engaging to its target population.

The ISDH had chosen to use a wall-sized projection technology that allows users to select content using a large cursor, which could be moved with the user’s shadow. The cursor, or selector, was the only interactive element of the given technology. Installation of the piece is planned for shopping malls, fairs, conferences, and community health clinics.

It was clear from our meeting with the girls and from ISDH data that young mothers-to-be face enormous social pressures and often their very existence is perceived as a threat by friends and family. Yet social support and its effect on lowering stress levels and maintaining good health habits throughout pregnancy is important for having a healthy pregnancy. How might we address the importance of receiving such support and of making smart and pro-active choices about the people you spend time with? How can we foster good maternal health for young women and girls by making pregnancy less about the social stigma and more about the health of the mother, the health of the baby, and the strength of the social fabric that supports them both? How can we foster positive self-esteem?

This piece aims to elevate the status of young-moms-to-be, increase their visibility, and strengthen their social networks.

Contemporary art practice can refer to work involving participants as works of ‘relational aesthetics’ that trace their origins to Situationism and Fluxus of the 1960s and 70s. [1] An interest in the quotidian or everyday informs such work and we may find a connection to this in the championing of an every day person in the form of the mom-to-be. But rather than stating that ‘Art is a state of encounter’ as these movements may, the SIMPLE project posits that encounter is a primary stage of acceptance and support.
figure 1. Snibbe Interactive Info Tiles in use. Tiles are selected by moving the cursor (orange square) with your shadow, thus launching a new screen. The new screen can show static or moving images and sound, does not allow for interactivity (Image copyright Snibbe Interactive)

Technology
The technology the ISDH chose to work with was developed by Snibbe Interactive, based in San Francisco. Their InfoTiles product is a large, 10 x 12 foot (3m x 3.6m) projection, divided into 20 squares. The interactivity of the InfoTiles lies in its movable cursor, or 'selector,' an open square that can be manipulated by the user’s shadow. The shadow of the user’s hands, ‘grasping’ the selector, can move it around the screen and place it on a Tile, activating it (the Tile appears to ‘flip’ to a back side) and launching a new screen. The new screen does not allow for any interactivity and rather houses conventional media—still imagery, video, and animation—and can do so to the full size of the InfoTiles. (Fig. 1)

After a tile has been selected and the video has run, participants can enter their email address to a kiosk and have a 20-30 second clip of their experience—as recorded by the screen, with their shadow—sent to them for posting onto social media sites such as Facebook and YouTube.

In all, the interactivity of the Snibbe device is limited to the selection of conventional media. However, interactivity when not supported in a medium can be simulated in ways that implicate viewers as participants in interactivity (Fig 2).

figure 2. Still from a public service announcement for television for the Indiana Coalition to Improve Adolescent Health. The p.s.a. was one of a series that used conventions of social media to position viewers as troubled participants in
dialog with peers. Audio was limited to the sounds of typing on a keyboard.

**The Performance**

In InfoTile technology, once the user moves the cursor to select the next screen, the conventional interactivity is over. At this point, the trope of interactivity is picked up by motion graphics and animation, and the performance of pregnancy begins. A step-by-step account of a an encounter follows:

1. A user decides to engage with SIMPLE and casts her shadow on it
2. Using her shadow to ‘grasp’ the selector and move it around on the screen, she selects a Tile
3. The selected Tile is activated, launching an animation that first instructs her to stand in profile to the screen so that her belly is viewable in the frame
4. Cartoon-style ‘thought bubbles’ emanate from the shadow of the mom-to-be’s belly and follow the voice over of a baby, giving its mom encouragement and reminding her to take good care of the “two of us”. All Tile animations present an element of self-care (“Remember to do the things that make you happy, like hanging out with people who make you feel good.”) and a reminder of how important she is to her growing baby (“Only six months go to! I can’t wait to see you Mom! You’re awesome!”) In addition to the nine Tiles for each month of pregnancy, another three are directed to grandparents-to-be, fathers-to-be, and friends. (FIG 3)
5. After the speech bubble messages, the animations conclude with full-size figures—also in shadow, as is the participant’s image on the screen—walking across the screen to ‘join’ the user (the mom-to-be for 9 of the Tiles) and stand along side of her to show their support. (Fig 4)

**figure 3.** Performing pregnancy. A young mother-to-be stands in front of the screen in profile while an animation gives voice to her growing baby through thought bubbles emanating from her belly and voice over. The young mother can watch the screen directly or via a separate monitor that includes all activity on the screen, including her shadow. Installed in shopping malls and health fairs, SIMPLE becomes a public performance of pregnancy by both the mom and her baby.
figure 4. The shadow of the mom-to-be, being joined in support by the animations of other shadows representing friends and family.

Conclusion
Erving Goffman [2] refers to performance in public as performance of social status and acknowledged roles. In this project we hope to gain insight into the mechanisms of such performance.

- How does self-perception enter into public space through performance?
- If the performance is reflective of status and roles, can alternative performances reverse this causality and shape them?
- How can these alternative performances change self-perception (of the performers), and how might they shift the perceptions of others (the ‘audience’)?
- Might a public performance present a new model for the relationship between performer and audience, and in doing so, change the already shifting relationships between the moms-to-be and others?
- How can public performance facilitated by immersive technology give strength to vulnerable populations?
- How can public performance change attitudes and behavior toward performers who themselves are vulnerable?
- How can public performance be used to educate, celebrate, and overcome stigma?
- How can public performance affect self-esteem and thus improve the self-care of a young mother-to-be and have a positive impact on her health and the health of her baby?
- How can visualization of social support (the group of shadows) change one’s perception of real social support? What are the characteristics of social support, what are its haptics in mediated spaces?

The first installation of SIMPLEx is scheduled for early April, 2011. We hope to gain insight into these questions after this and subsequent installations.

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Citations