Dissertation Abstract
Making Youtube And Facebook Videos: Gender Differences In Online Video Creation Among First-Year Undergraduate Students Attending A Highly Selective Research University

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Online video creation for YouTube and FaceBook is a newly popular activity for college students. The ease of creating online videos has been revolutionized by development of small inexpensive cameras, video compression, high-speed Internet access and online file storage. Women have explored social networking technologies at about the same level as men, but have expressed less interest in computer programming and multimedia design. Online video creation includes aspects of both social networking and programming / multimedia design; it provides an interesting hybrid forum for examining gender-related differences.

This mixed methods study uses questionnaire data from 31% of the population of first-year students attending a highly selective research university. The study explores how online video creation varies by gender after incorporating theoretical concepts of confidence, self-efficacy, attitudes towards computers, perceived ease of use, perceived usefulness, social influence and demographic variables such as socioeconomic status, ethnicity and high school size. The theories of self-efficacy (Bandura), stereotype threat (Steele) and learned helplessness (Abramson) and the Technology Acceptance Model (TAM) inform the study’s conceptual framework. The study also examines whether gender affects the relationship between computer confidence and online video creation outcomes through a statistical interaction. The study uses descriptive (e.g., analysis of variance) and multivariate (e.g., regression) analyses as well as qualitative inquiry using focus groups and interviews to address the research questions.

The study finds significant gender differences in creation of online videos and roles played in the process, especially in terms of complex video editing and commitment of time. Men report more participation in creating videos for required school projects, a finding that raises concerns for policymakers and practitioners. Attitudes toward computers and TAM explain observed gender differences. Use of the Mac computer platform is also associated with greater likelihood of video creation. Qualitative inquiry provides additional insights, suggesting that humorous videos are primarily created by men and women are less willing to spend available leisure time on video creation activities. The study’s results inform the need for gender-specific academic support interventions to promote acquisition of media literacy skills by all students and to support the decisions of female students to major in fields that build on video creation skills.

For more information, please contact Anu Vedantham at vedantha@upenn.edu
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Dissertation Defense
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Three Research Questions

1. For first-year traditional-age college students attending a highly selective research university, what gender differences exist in online video creation?

2. How do the theoretical perspectives of self-efficacy, technology acceptance, stereotype threat and learned helplessness inform understanding of such gender differences after controlling for demographic characteristics such as ethnicity, socioeconomic status, immigrant status and high school size?

3. Does the relationship between confidence using computers and online video creation vary between women and men?

Data Collection

- Questionnaire with published and customized parts
- Online and paper surveys collected at point of arrival to college
- 752 surveys received
  - 333 needed for sample size
- Qualitative inquiry with focus groups and interviews of 19 students

Answers to Three Research Questions

1. Online video creation varies by gender in significant and complex ways

2. Selected theories do explain gender differences with demographic controls added
   - They remove significance of gender
   - Computer confidence, positive attitudes and perception of ease of use are significant

3. No, the relationship between confidence and online video creation does not vary by gender
Roles played in Online Video Creation

<table>
<thead>
<tr>
<th>Role</th>
<th>Percent of Men</th>
<th>Percent of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>Sideline</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Calm/Laidback</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Headheld/Can</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Assumption</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Videowięążnik/Whale/Fish/Other</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>City Riding</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Film Production</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

Significant gender differences found for solid bars, not for faded bars.

Ethnicity and Immigrant Status

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percent of Men</th>
<th>Percent of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>80</td>
<td>70</td>
</tr>
</tbody>
</table>
| Ame
| 60             | 50               |
| Hisp           | 40             | 30               |
| White          | 40             | 30               |
| Other          | 20             | 10               |
| International  | 10             | 5                |

Significant gender differences found for solid bars, not for faded bars.

Model Concepts

- Attitudes toward computers
  - computer confidence
  - tool use
  - positive attitudes
  - negative attitudes

- Technology acceptance
  - ease of video creation
  - value of video creation
  - self-perception of ability
  - comfort with social risk

- Mac (Apple) computer platform

* No gender differences observed

Implications for Policy and Practice

Educators should:

- Target multimedia literacy for all students
  - Guide women to make their first video for a school project
  - Increase computer confidence for all students
    - Training and guided exposure help increase confidence
  - Address perceptions of ease of use
    - Small projects can help entrance to more advanced editing
    - Easy-to-use technologies increase video creation
  - Acknowledge the negative effects of self-efficacy, stereotype threat and learned helplessness
    - More oversight of mixed-gender group projects may help

Questions? Contact Anu Vedantham at vedantha@upenn.edu