

# Online or Print: Which do Students Prefer

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# Introduction

- **Context of issue: print or electronic?**
  - Easy assumptions about “Millennials” & technology
  - What do undergraduates really want?
- **Research question**
  - “What are undergraduates’ format preferences when engaging with their academic readings?”
- **Academic Readings:**
  - Readings of any origin – monograph, textbook, course reader, journal articles, etc., required or needed to fulfill coursework.

# Selected Literature Review

- **Previous studies of academic format preferences and usage**
  - UC Libraries (2011)
  - U of Maryland (2014)
  - Mizrachi (2010)
- **Cognitive Studies on reading**
  - Eshet-Alkalai & Geri (2007)
  - Magnen, et.al. (2013)
  - Popular press reports (2014)

# **Institutional Context**

## **University of California, Los Angeles (UCLA)**

- **Approximately 28,000 undergraduates**
- **Most freshman applications in US**
- **Highly selective**

# Methodology

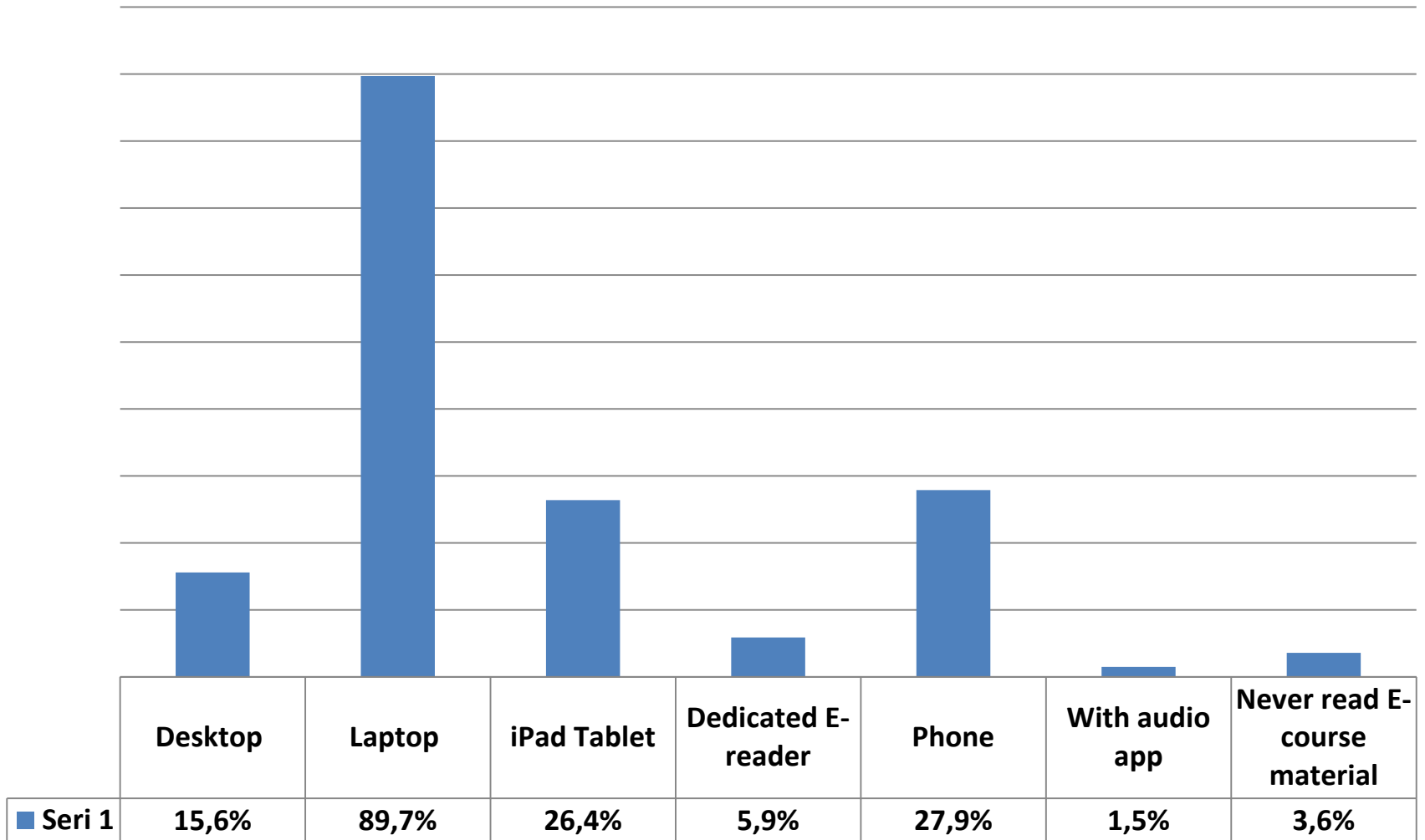
- **Academic Reading Questionnaire (ARQ)**
  - Online using Survey Monkey
  - 22 questions
  - 14 regarding format (Likert style)
- **Distribution**
  - Internal Review Board (IRB)
  - Email to 5,000 undergrads through Office of Registrar
  - April & May 2014
  - 390 complete responses

# Results - Population

- **Age:** range 18-60 years; average 20.55
- **Year of Study**
  - 1<sup>st</sup>-30%; 2<sup>nd</sup>-22%; 3<sup>rd</sup>-28%; 4<sup>th</sup>-19%
- **GPA:** 80%  $\geq$  3.0 ('B' grade)
- **Strongest Language:** English 90%
- **Majors**
  - 53% sciences; 46% arts, humanities, social sciences
- **Visual/other limitations:** ~10%

# Results - Devices

Devices Used for Electronic-Course Readings



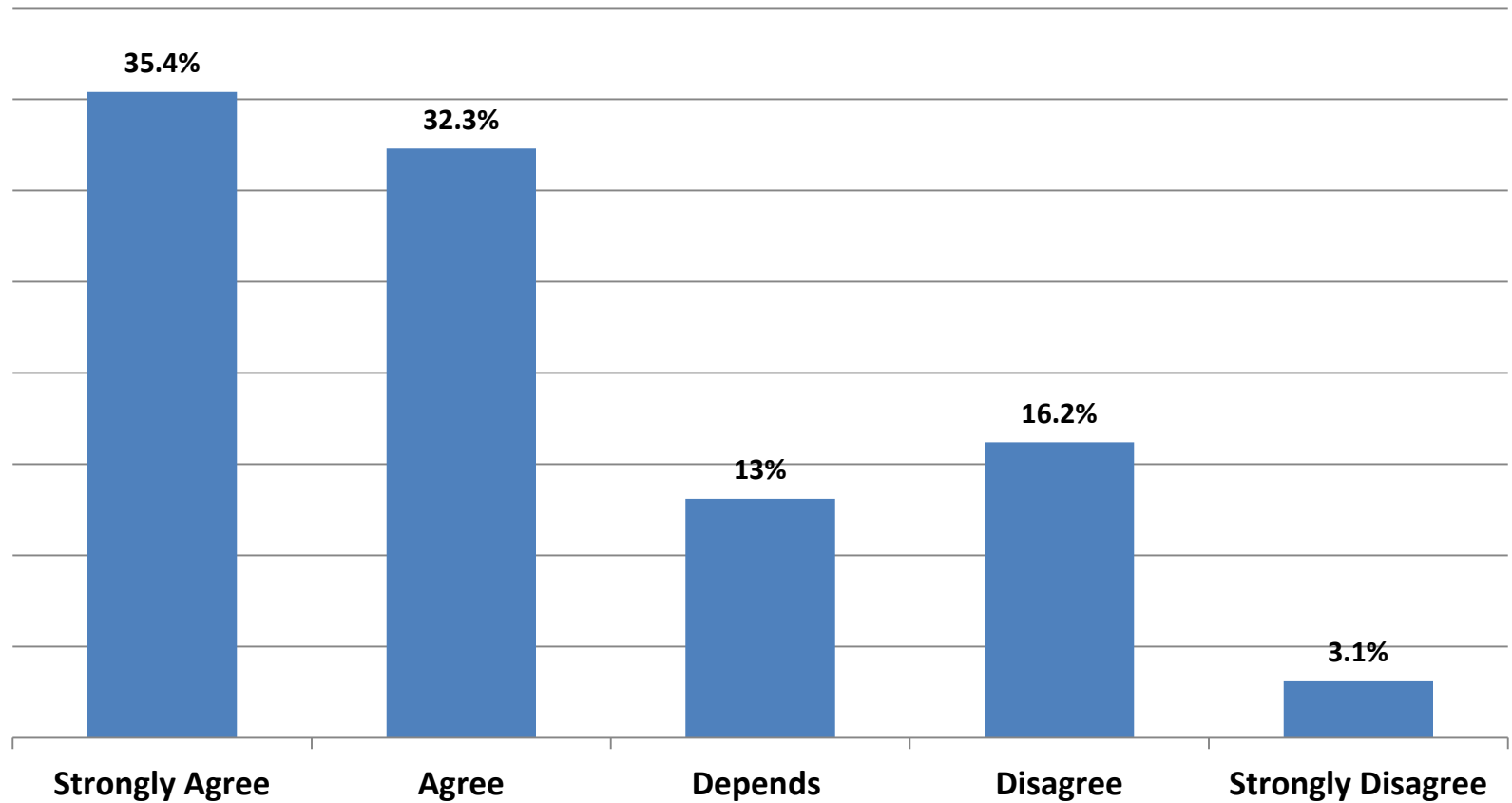
# Analyzing Results

- **14 Questions**
  - **9 – students' format preferences/behaviors that reflect those preferences**
  - **5 – learning factors/behaviors that reflect learning engagement**



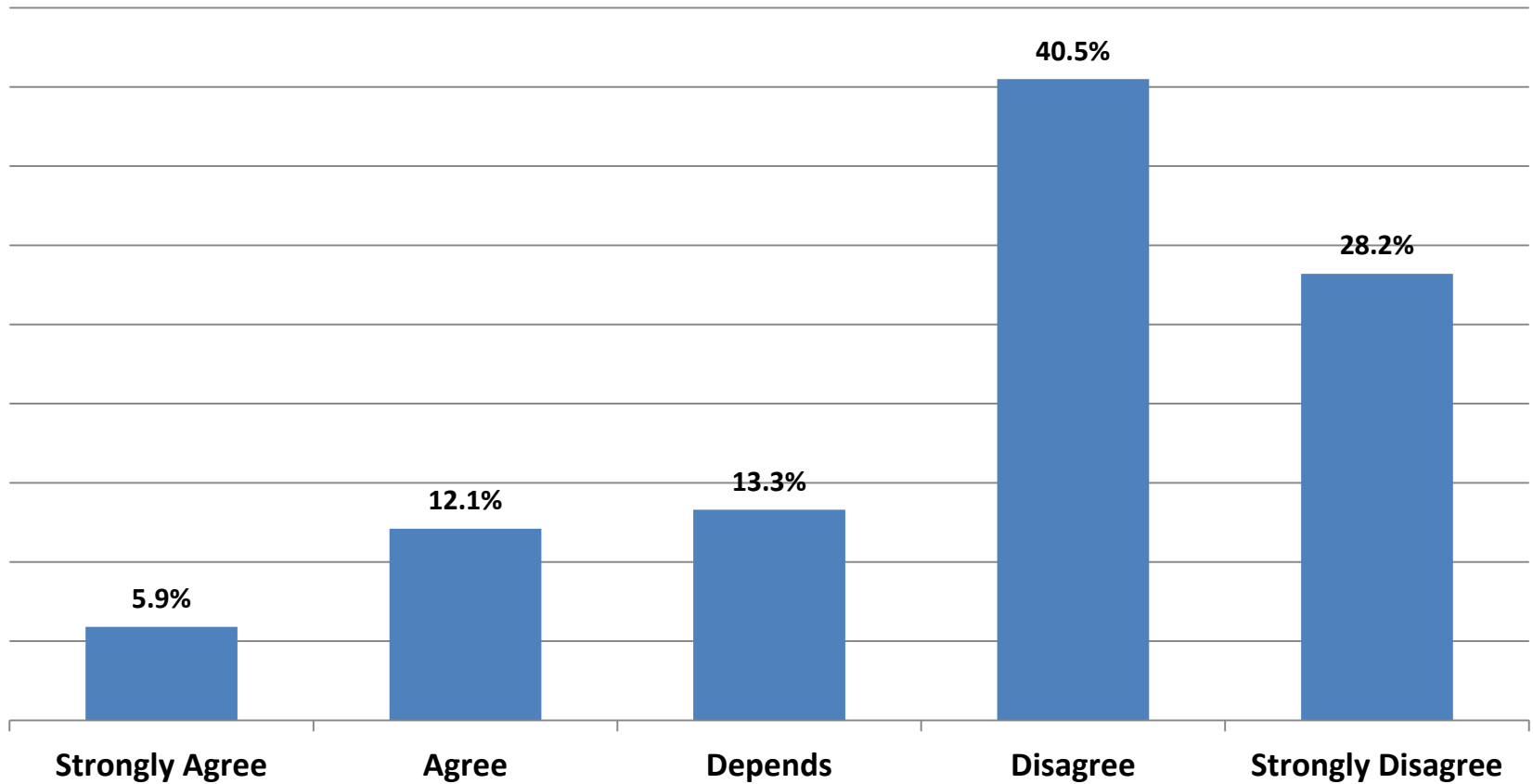
# General Reading Preferences (1)

I prefer to have all my course materials in print format.



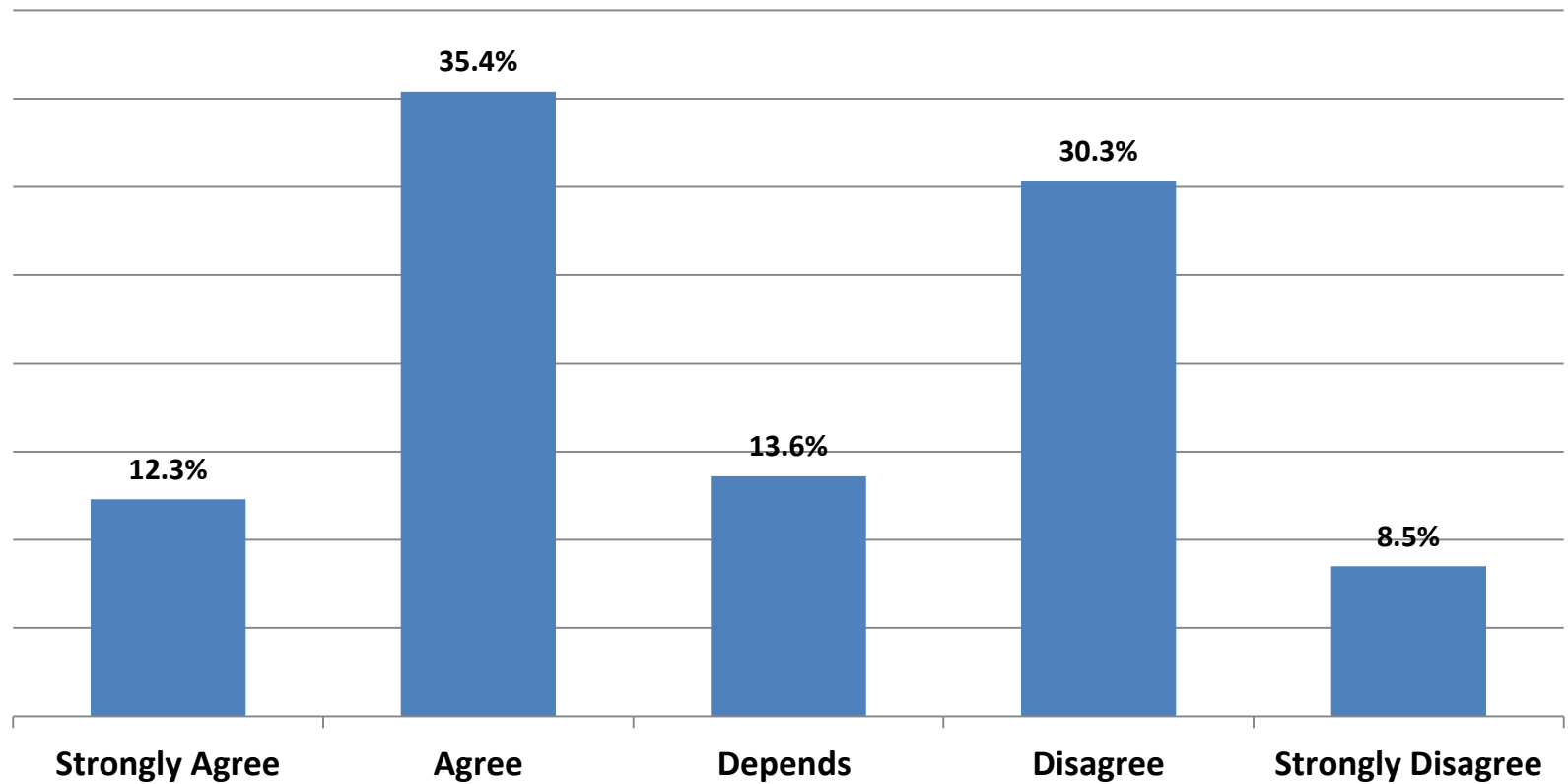
# General Reading Preferences (2)

I prefer to read my course readings electronically.



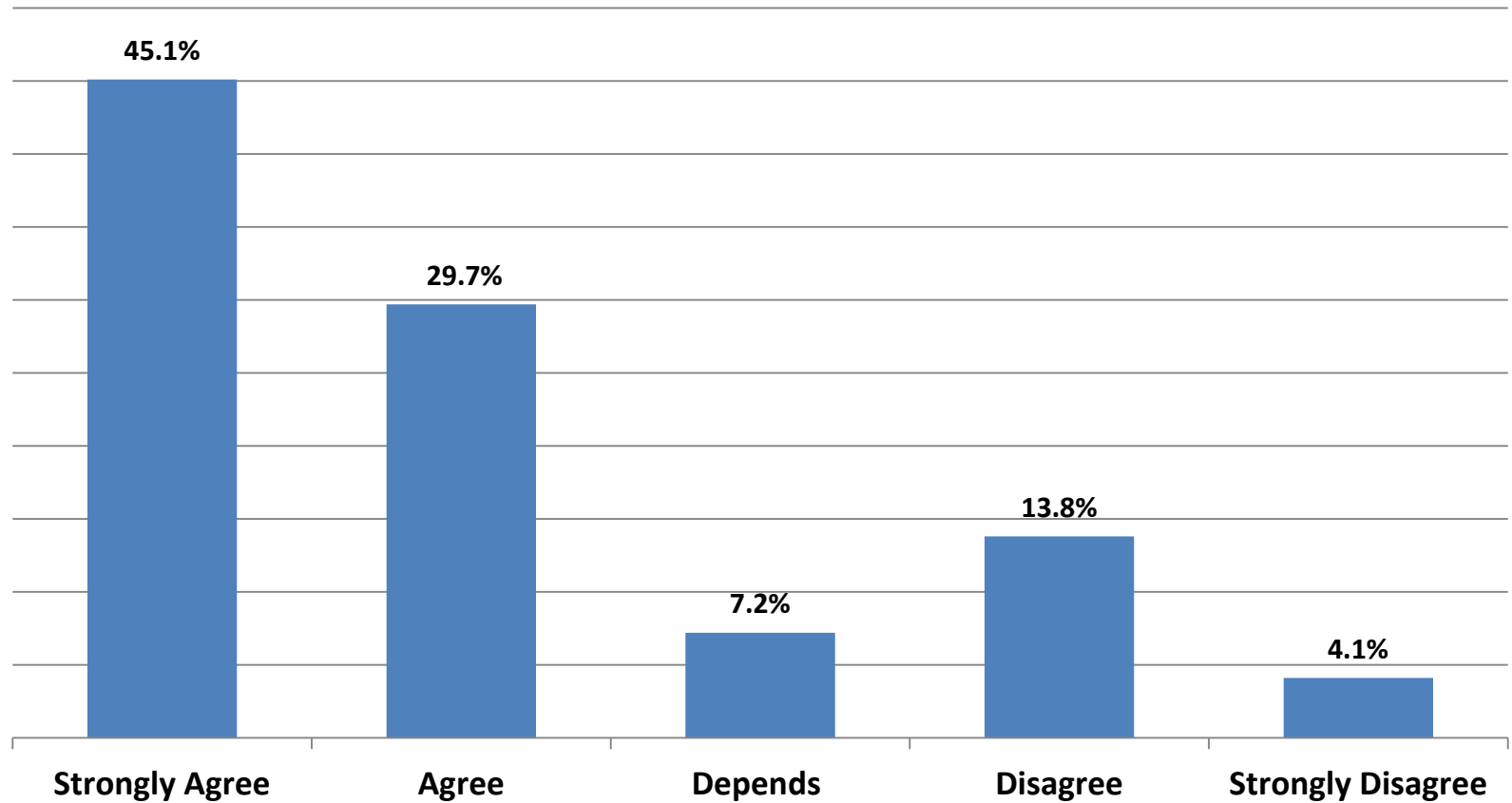
# Impact of Length (1)

If an assigned reading is less than 5 pages long, I prefer to read it electronically.



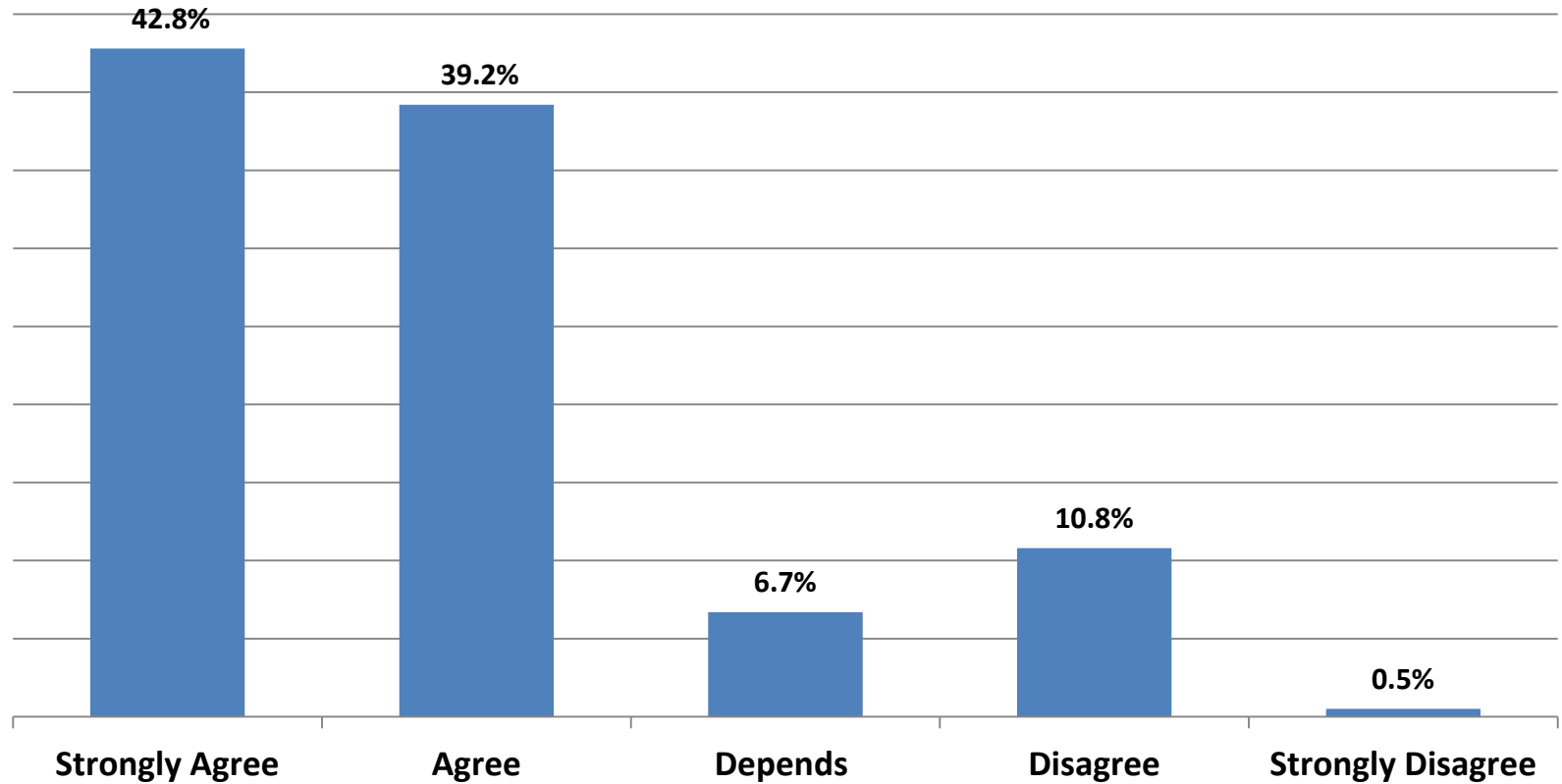
# Impact of Length (2)

If an assigned reading is longer than 10 pages, I prefer to read it in print.



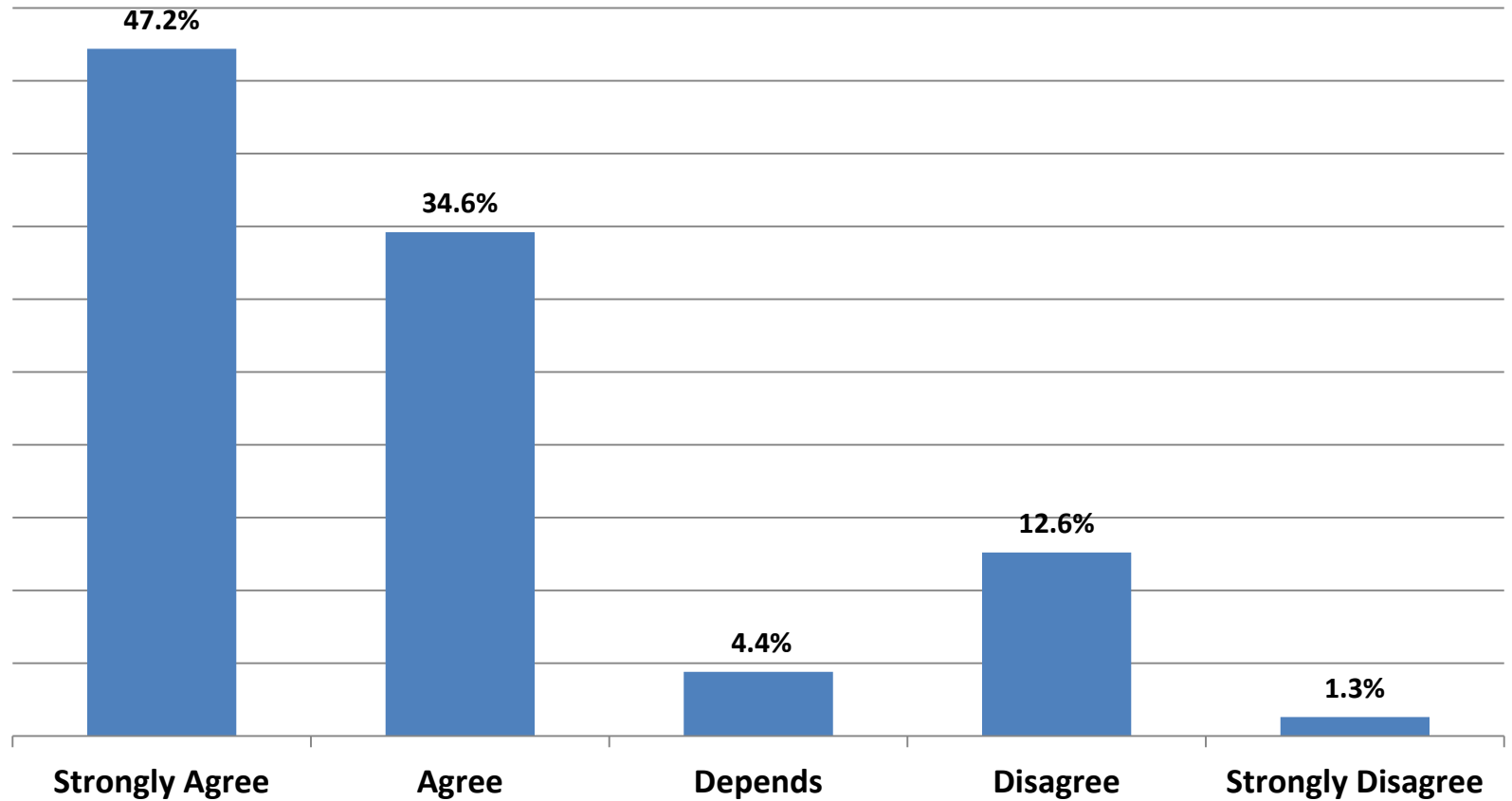
# Remembering Best

I remember information from course readings best when I read them in print.



# Focusing Best

I can focus on the material better when I read it in print.



# From the Comments (1)

## Format preference often 'Depends'

- Importance of reading to course
  - More important – greater print preference
- Complexity of reading
  - More complex – greater print preference
- Length of reading
  - Prefer longer readings in print
  - Shorter readings okay electronically

# From the Comments (2)

## Benefits of Electronic Format

- Cost, weight, accessibility, no difference in learning efficiency (for some), environmental considerations, 'Find' feature, archival efficiency

## Benefits of Print

- Learn better – especially complex readings
- More efficient engagement –tactile & kinetic learning benefits, less distractions
- Less eyestrain



# Take-Aways

- **Most prefer print for learning**
- **Like the cost and convenience of electronic**
- **Better learning experience vs. convenience**
- **Safe to assume no association with age, major, GPA or year of study**
- **Invite use of ARQ in multiple institutional, language and cultural communities**
- **Use every 4-5 years for longitudinal research**

# Questions?

**Thank you!**