

Choose your own adventure: Online dating

Matthew J. Salganik

Social Network (Soc 204)
Spring 2017
Princeton University

May 3, 2017



Logistics:

- ▶ Op-ed assignment

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- ▶ Precept this week

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- ▶ Precept this week
- ▶ Questions about final exam?



Ethics of Computer Science Research

A CITP CONFERENCE

Frist Campus Center
Multipurpose Room B
Friday, May 5, 2017
9:00 a.m. – 1:30 p.m.

Register at citr.princeton.edu/event/ethics-conf

Computer scientists face thorny ethical questions in the course of everyday research: Could my new face detector be misused for racial profiling? Is my web crawler accidentally scooping up sensitive information about people? Inadequate attention to ethics risks undermining public trust; conversely, uncertainty about ethical norms and rules has a chilling effect on science.

This conference will bring together computer scientists and ethics scholars to tackle these questions, acknowledging that traditional research ethics may not easily translate to the new setting. Individual panels will consider ethics in subdisciplines such as data science and computer security, with major themes cutting across panels including how to teach ethics, how to engage with the public and other stakeholders about ethics in research, and what the research community can do to ensure that researchers act ethically.

 PRINCETON UNIVERSITY

CITP.PRINCETON.EDU

<https://citr.princeton.edu/event/ethics-conf/>

\Vote:

1. Ansari, A. and Kleinenberg, E. (2015). How to Make Online Dating Work. New York Times.
2. Kercher, S. (2017). First Comes Tinder. Then Comes Marriage? New York Times.
3. Tinder's: Modern dating myths.
4. Andreson et al. (2014) Political Ideology and Racial Preferences in Online Dating. Sociological Science with comment and rejoinder.

New digital systems:

- ▶ Effect of system on society
- ▶ Using system to study social behavior

How have sociologists studied dating and marriage in the past?

INTERMARRIAGE AND HOMOGAMY: Causes, Patterns, Trends

Matthijs Kalmijn

Department of Sociology, Utrecht University, Utrecht, The Netherlands;
e-mail: m.kalmijn@fsw.ruu.nl

“People have a tendency to marry within their social group or to marry of person who is close to them in status.”

- ▶ Can we measure these patterns and see how it varies over time and across space?

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“People have a tendency to marry within their social group or to marry of person who is close to them in status.”

- ▶ Can we measure these patterns and see how it varies over time and across space?
- ▶ Why does these pattern exist? (Very hard with only outcome data)

<http://dx.doi.org/10.1146/annurev.soc.24.1.395>

Trends and Variation in Assortative Mating: Causes and Consequences

Christine R. Schwartz

Department of Sociology, University of Wisconsin, Madison, Wisconsin 53706;
email: cschwart@ssc.wisc.edu

consequences of assortative mating for:

- ▶ inequality within generations
- ▶ inequality between generations
- ▶ long-run population change
- ▶ relationship quality and dissolution

<http://dx.doi.org/10.1146/annurev-soc-071312-145544>

Now move to more process data, online and offline

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GENDER DIFFERENCES IN MATE SELECTION:
EVIDENCE FROM A SPEED DATING EXPERIMENT*

RAYMOND FISMAN
SHEENA S. IYENGAR
EMIR KAMENICA
ITAMAR SIMONSON

Observe all decisions, not just final matches

k Speed Dating Experiment | k x

https://www.kaggle.com/annavictoria/speed-dating-experiment

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Speed Dating Experiment

What attributes influence the selection of a romantic partner?

by Anna Montoya · last updated a year ago

Overview Kernels Discussion Activity Download (384 KB) New Notebook New Script

Kernels >

- [The Ugly Truth of People De...](#) 67 votes
run 2 months ago
- [What matters most](#) 15 votes
run 4 months ago
- [Do we know what we want?](#) 10 votes
run 9 months ago

Discussion >

- [The Ugly Truth of People De...](#) 25 replies
a month ago
- [newbie question](#) 3 replies
2 months ago
- [My analysis on this dataset i...](#) 0 replies
3 months ago

Top Contributors >

Rank	User	Contribution
1st	JPHwang	
2nd	Ricky	
3rd	Samshipengs	

https:
//www.kaggle.com/annavictoria/speed-dating-experiment

1940 heterosexual couples, US, way of meeting (some categories overlapped):

- ▶ family, 24 percent
- ▶ friends, 21 percent
- ▶ school, 21 percent
- ▶ neighbors, 13 percent
- ▶ church, 13 percent through church,
- ▶ bar or restaurant, 12 percent a
- ▶ co-workers, 10 percent

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By 2009,

- ▶ half of all straight couples still met through friends or at a bar or restaurant, but 22 percent met online, and all other sources had shrunk.
- ▶ more than one-third of couples who married in the United States from 2005 to 2012 met online.

<https://www.nytimes.com/2015/06/14/opinion/sunday/how-to-make-online-dating-work.html>

Almost 70 percent of gay and lesbian couples met online

[https://www.nytimes.com/2015/06/14/opinion/sunday/
how-to-make-online-dating-work.html](https://www.nytimes.com/2015/06/14/opinion/sunday/how-to-make-online-dating-work.html)



MODERN DATING

Myths



[http://abcnews.go.com/GMA/video/
tinder-survey-reveals-users-love-46967445](http://abcnews.go.com/GMA/video/tinder-survey-reveals-users-love-46967445)

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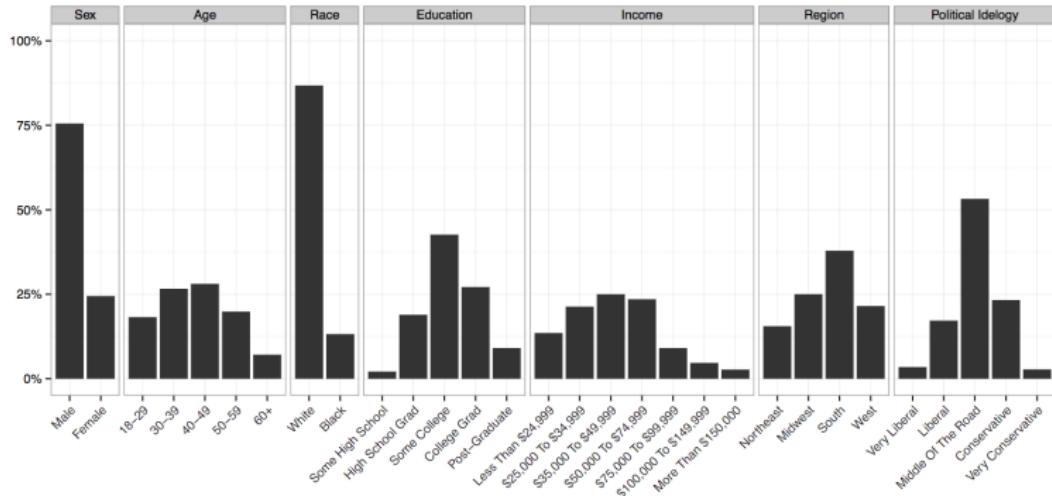
How to evaluate corporate research?

- ▶ Can you read it?
- ▶ Can you read the details of the methodology? (sample, questionnaire)
- ▶ Was there a pre-analysis plan?
- ▶ Has it been peer reviewed?

Political Ideology and Racial Preferences in Online Dating

Ashton Anderson,^a Sharad Goel,^b Gregory Huber,^c Neil Malhotra,^a Duncan J. Watts^b

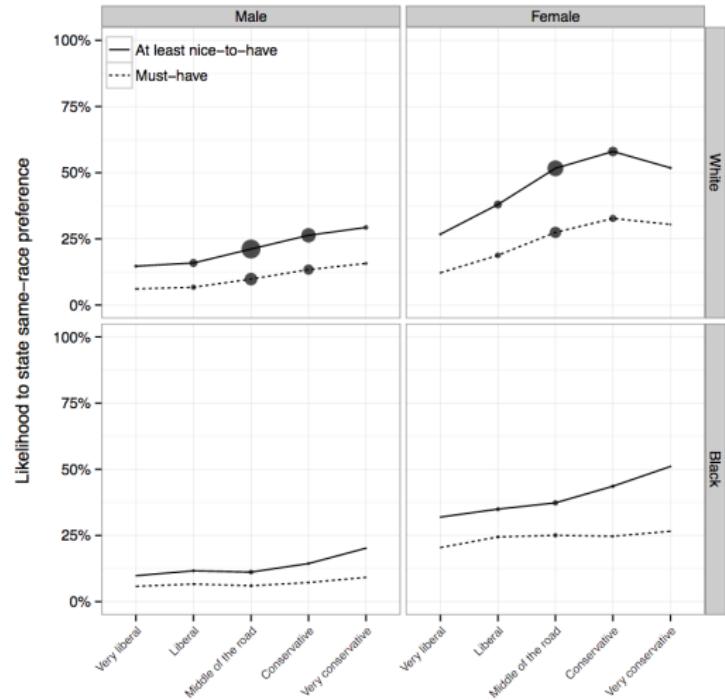
a) Stanford University; b) Microsoft Research; c) Yale University

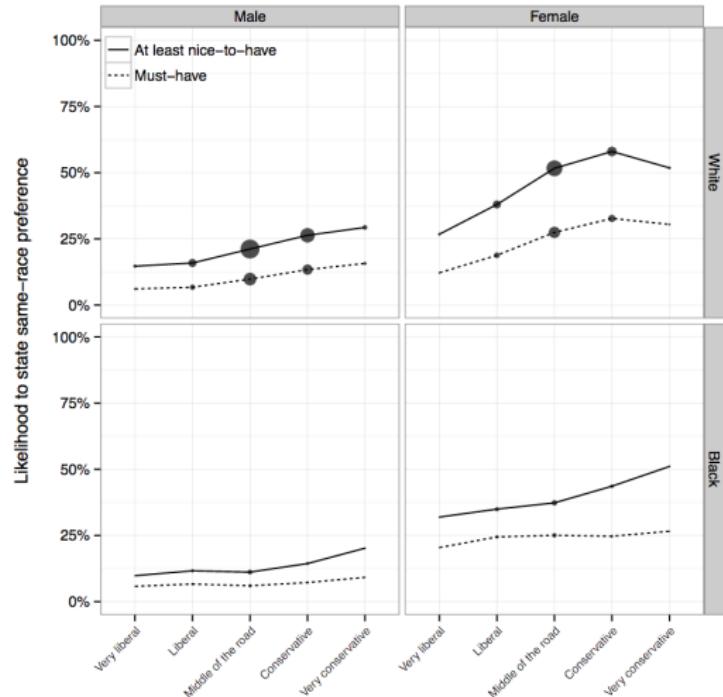


Note that they only include Whites and Blacks

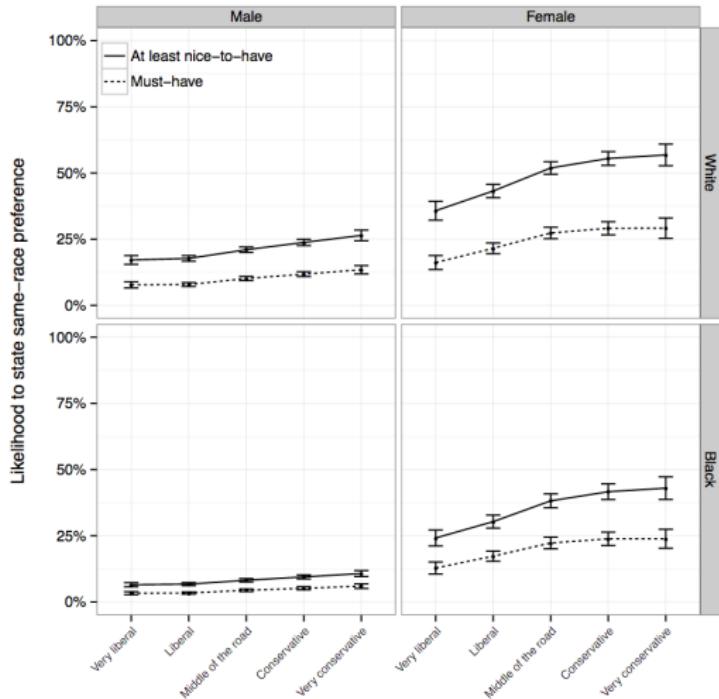
- ▶ Stated preferences: what you say you want
- ▶ Revealed preferences: what you do

stated preferences

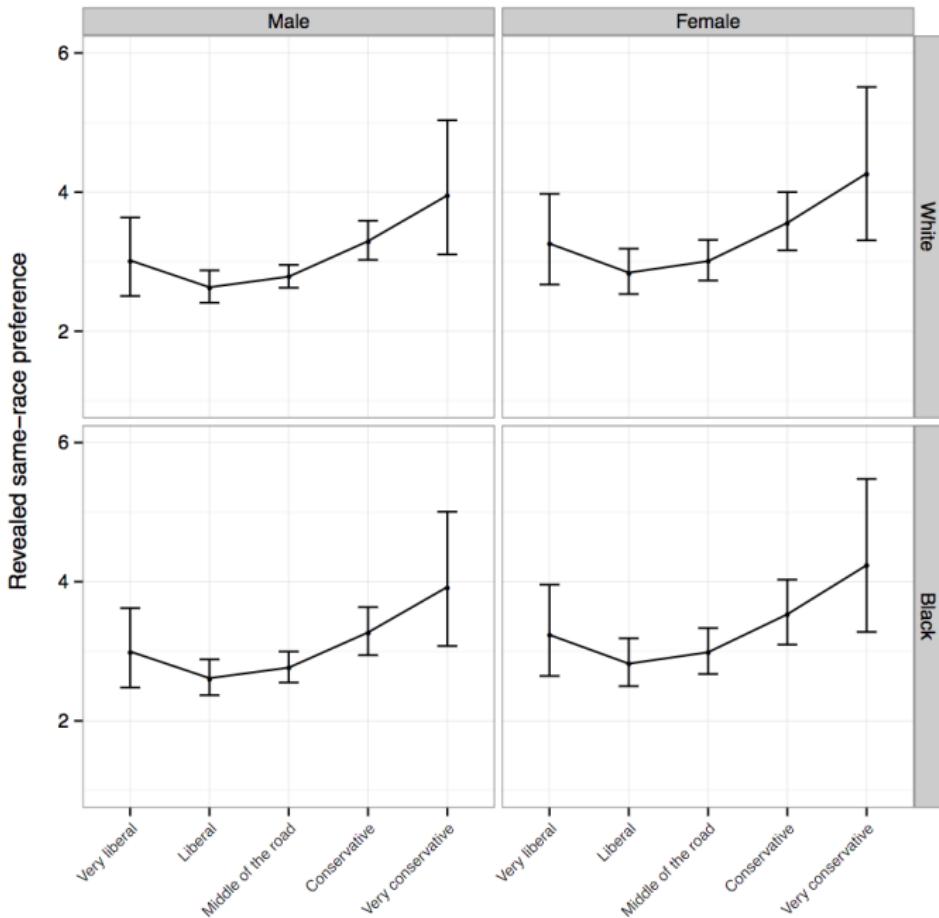


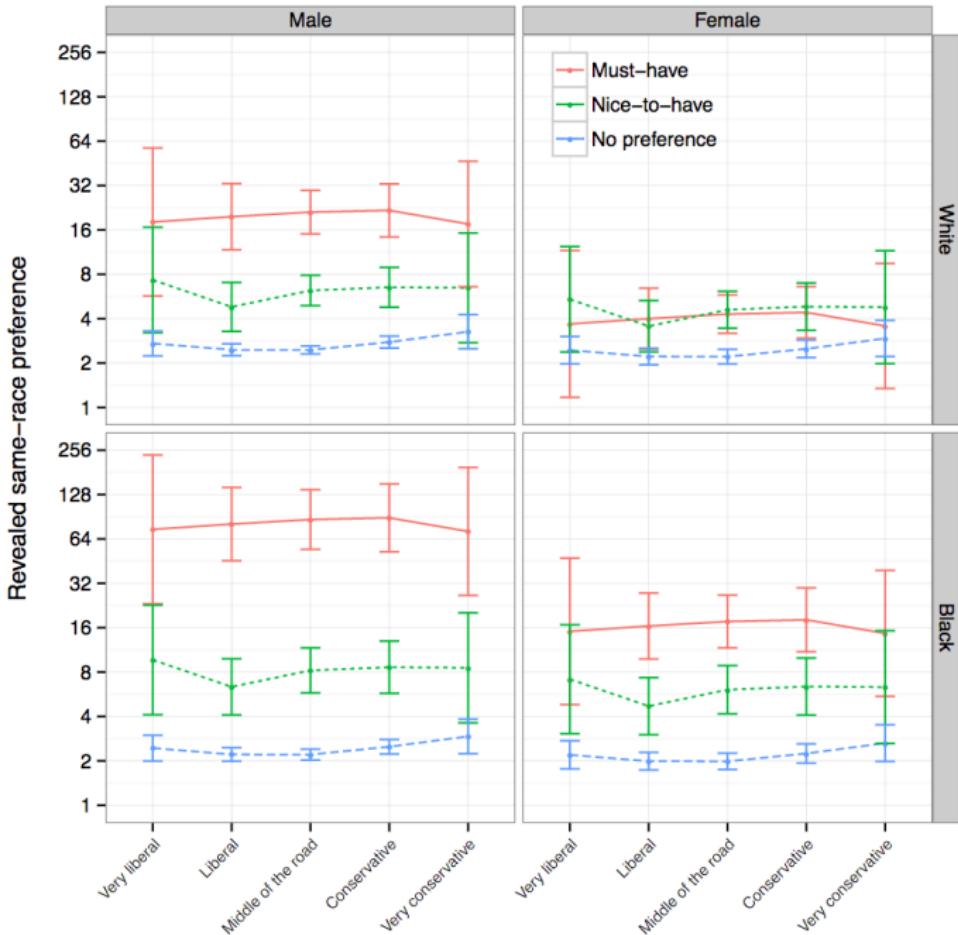


Maybe this is caused by something correlated with conservativeness. So, we can do statistical adjustments (take Soc305/Pol 345)



Revealed preferences





Studying Online Behavior: Comment on Anderson et al. 2014

Kevin Lewis

University of California, San Diego

- ▶ Who is in their sample? Who isn't in their sample?

- ▶ Who is in their sample? Who isn't in their sample?
- ▶ What kind of dating site? Both population and algorithmic confounding

Is it important to study dating in the absence of physical context?

ALPHABET AND ATTRACTION:
AN UNOBTRUSIVE MEASURE OF THE EFFECT OF
PROPINQUITY IN A FIELD SETTING¹

MADY WECHSLER SEGAL²

Department of Sociology, Eastern Michigan University

<http://dx.doi.org/10.1037/h0037446>

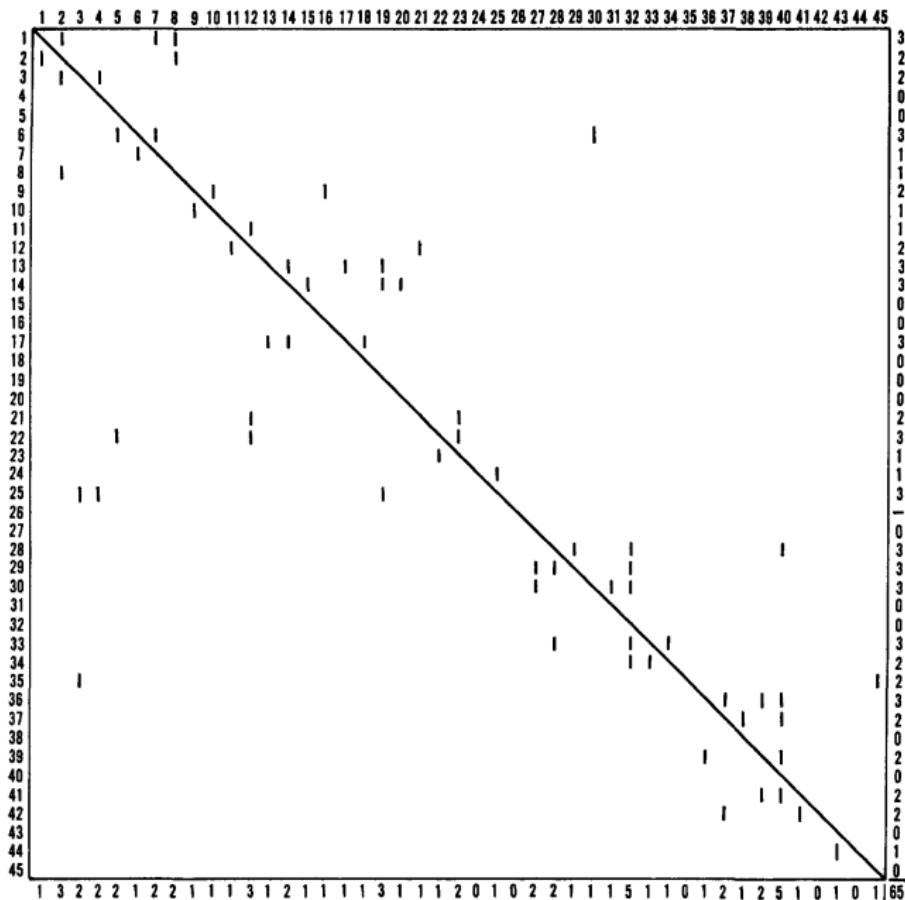
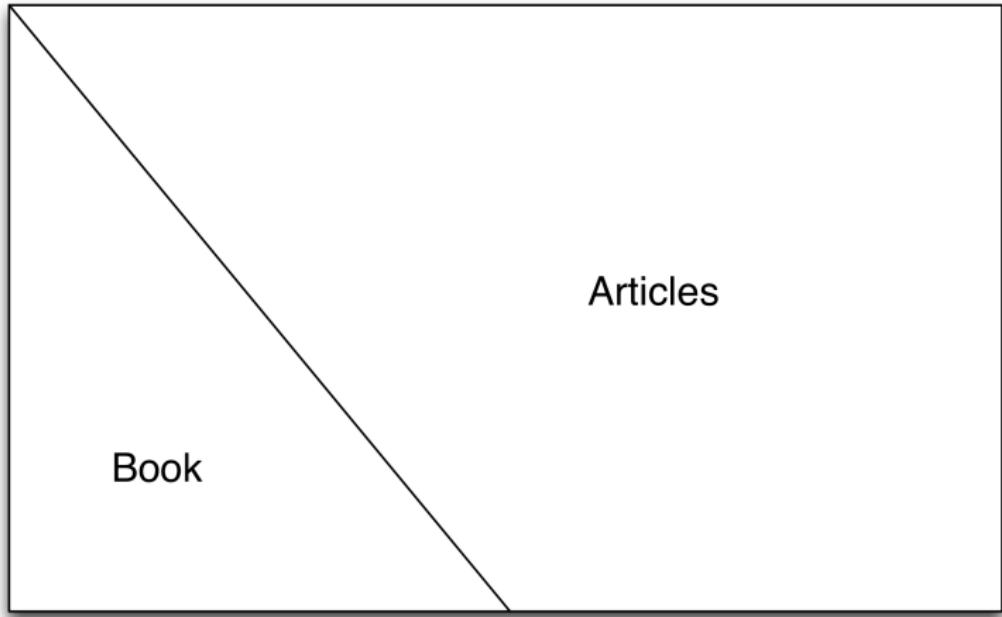


FIGURE 1. Matrix of friendship choices. (Numbers across the top of the matrix indicate place in alphabetical order of *chosen*. Numbers down the left of the matrix indicate place in alphabetical order of *chooser*.)

Here are some more things to read about online dating:

- ▶ Lewis (2013) “The limits of racial prejudice.” *PNAS*.
<http://dx.doi.org/10.1073/pnas.1308501110>
- ▶ Bruch et al (2016) “Extracting multistage screening rules from online dating activity data.” *PNAS*.
<http://dx.doi.org/10.1073/pnas.1522494113>
- ▶ Huber and Malhotra, “Political Homophily in Social Relationships: Evidence from Online Dating Behavior.” *The Journal of Politics*, <http://dx.doi.org/10.1086/687533>.
- ▶ Rudder (2015) Dataclysm. <http://dataclysm.org/>
- ▶ OKCupid Blog. <https://theblog.okcupid.com/>
- ▶ Ansari and Klinenberg (2015) Modern Romance.
https://en.wikipedia.org/wiki/Modern_Romance:_An_Investigation



Concepts

Midterm

Applications

Final

- ▶ Students will be able to **describe** the major concepts used in the study of networks.

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- ▶ Students will be able to **use** the major concepts in the study of networks to gain insight into real-world phenomena.
- ▶ Students will be able to **evaluate** real, modern research that connects the concepts of networks to real-world phenomena.
- ▶ Students will be able to **begin to create** new research that connects the major ideas and models of networks to real-world phenomena.

Have a great precept