

# **Digital Frontiers Seminar: Man and Machine (2): Online and Offline Sensing of Public Sentiments on National Day Rally 2016**

**Thursday, 23 February 2017**

**Seminar Room 3-1, Level 3, Manasseh Meyer Building**

**Digital Frontiers Seminar:  
Man and Machine (2): Online and Offline Sensing of Public Sentiments on National Day Rally 2016**

# **Part II Survey and Offline Sensing**

**Dr Carol Soon**  
Senior Research Fellow  
Institute of Policy Studies

# Survey and Offline Sensing

23 February 2017

# Project Team



Jiang Jing  
Aek Palakorn Achananuparp  
Dai Bing Tian  
Lim Ee-Peng



Carol Soon  
Tan Tarn How  
Nadzirah Samsudin  
Valerie Yeo

# Objectives of Survey

1. To determine Singaporeans' media usage pertaining to National Day Rally (NDR) 2016, and their interest and sentiments towards NDR issues.
2. To triangulate online sensing and analytics with surveys, so as to develop a tool that analyses public opinion across different domains in the long term.

# Research Questions

## Engagement with NDR 2016

- Who were the Singaporeans who engaged with NDR?
- How did Singaporeans engage with NDR?
- What were their media consumption habits?
- What did they do online?

## Reactions to NDR Issues

- How interested were Singaporeans in the NDR issues?
- How did they feel towards those issues?
- Did their interests and sentiments differ according to demographics?
- Were there differences between online users and non-users?

## Comparison with Online Sensing

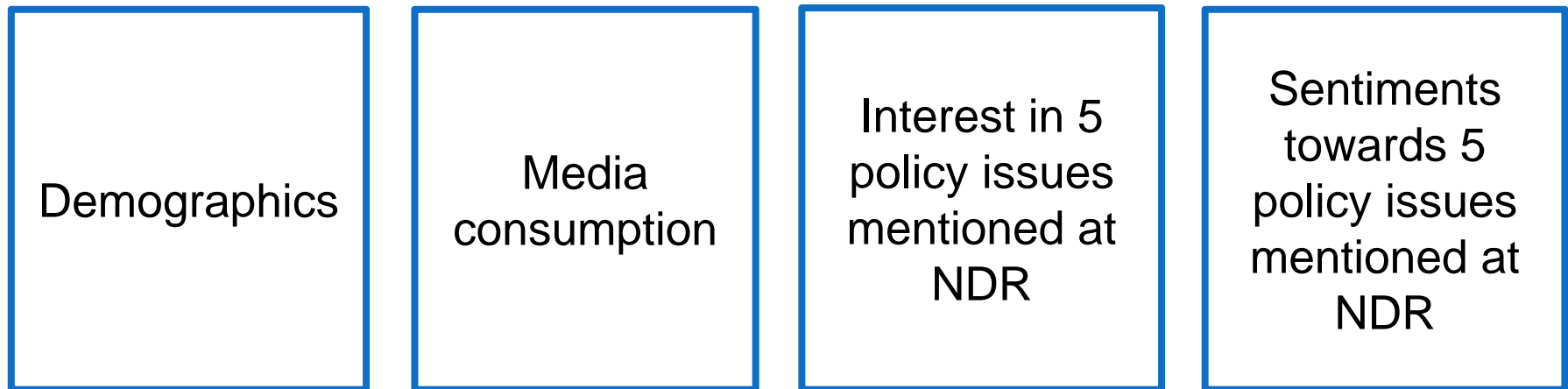
- To what extent did offline sentiments converge with online sentiments?

# Methodology

- An online survey was conducted with Singaporeans who engaged\* with NDR 2016 (N=2,000)

\*Watched/listened live \*Watched/listened a repeat telecast/recording  
\*Read or heard reports \*Heard about it from other people

- Survey was conducted with from 31 Aug -13 Sep 2016
- Respondents were asked questions on:



# Demographics of Respondents

## Age

21-29	20.6%
30-39	25.9%
40-54	36.9%
55-64	12.2%
65 and above	4.6%

## Income

None to \$1,999	12.3%
\$2000 - \$4999	25.4%
\$5000 - \$6999	18.1%
\$7000 and above	44.3%

## Ethnicity

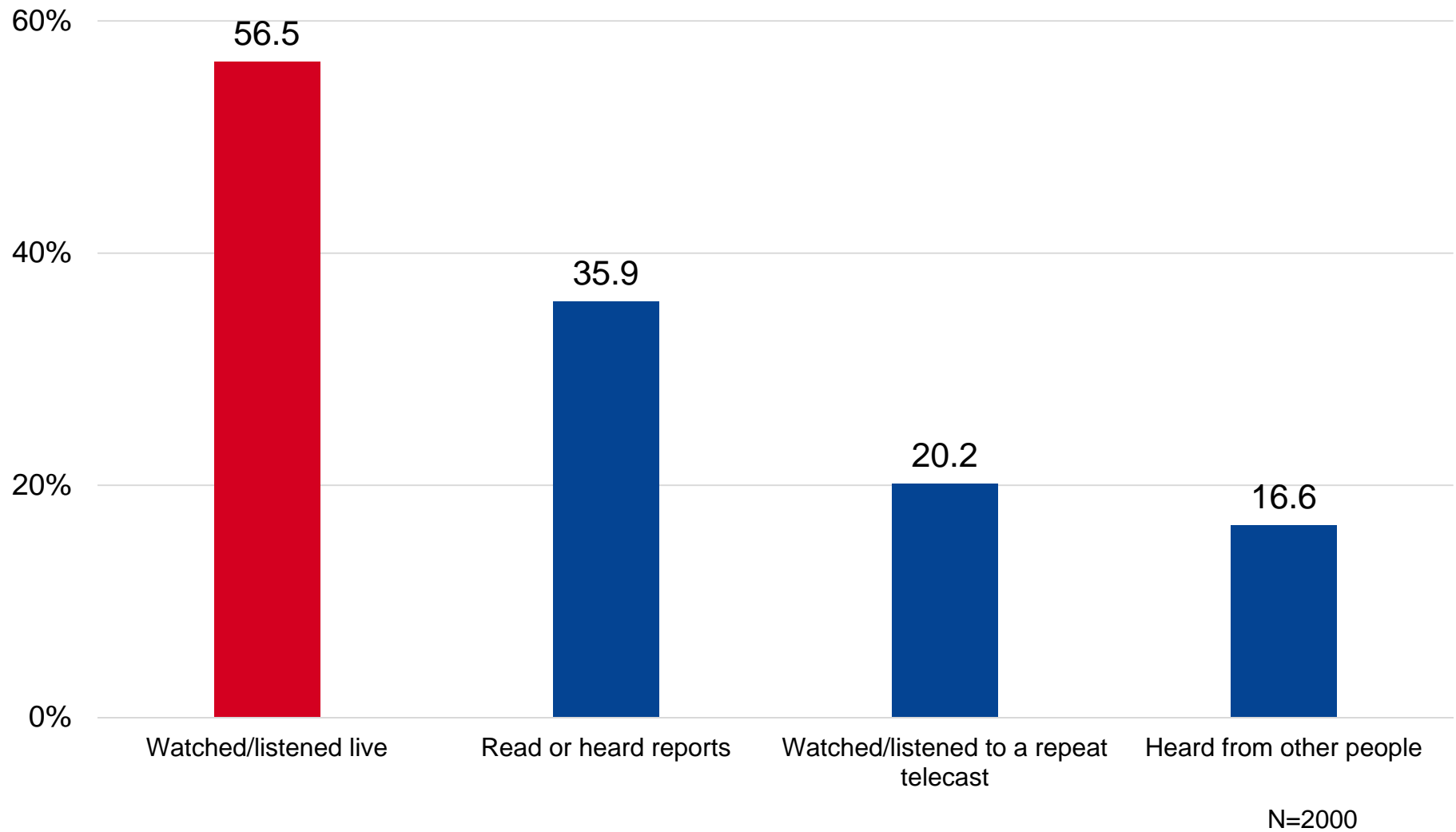
Chinese	77.6%
Malay	11.4%
Indian	8.3%
Others	2.8%

## Education

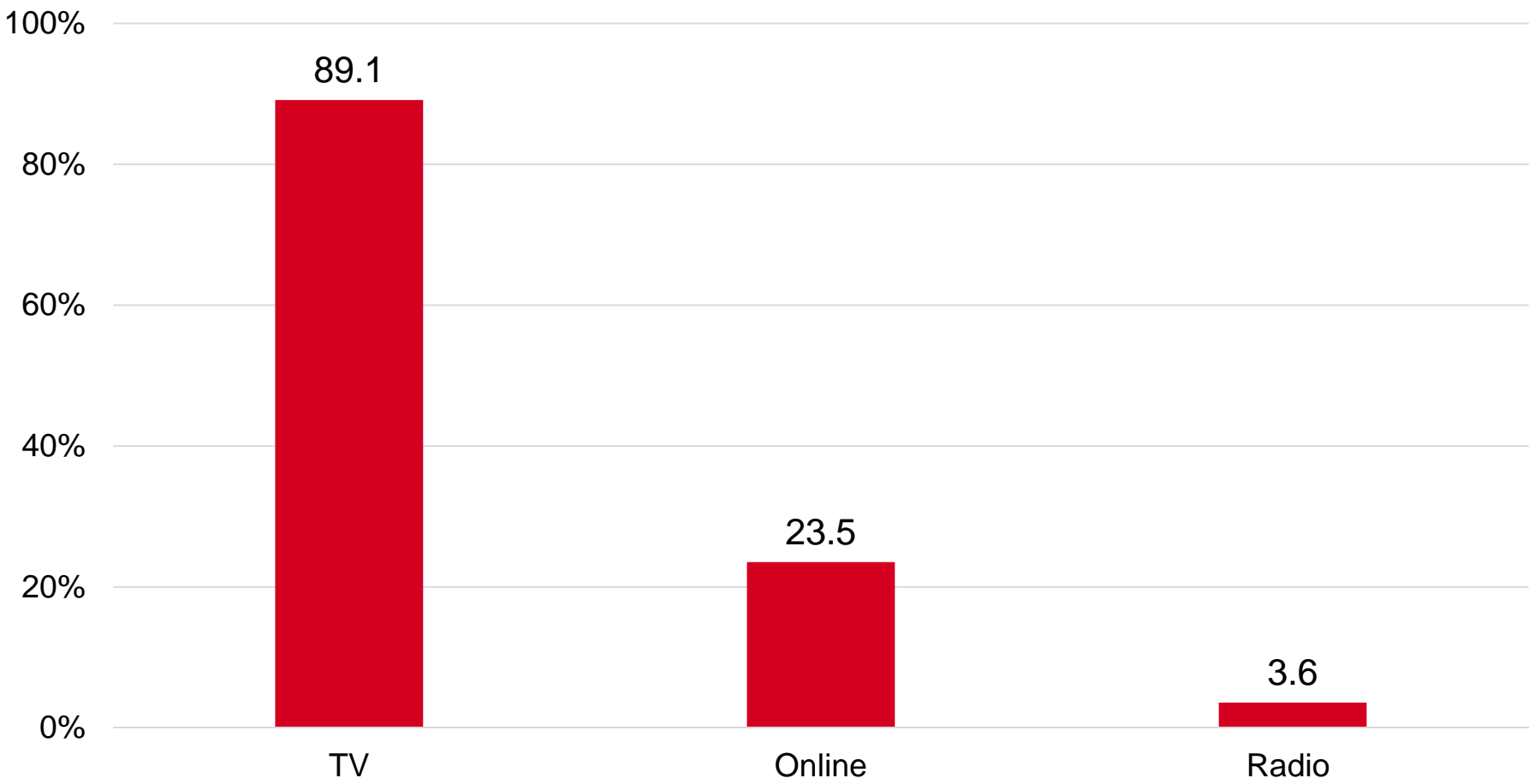
PSLE and below	0.9%
Secondary	13.7%
Post-secondary	9.7%
Diploma and professional qualifications	29%
First degree and postgraduate	46%
Others	0.9%



# How Singaporeans Engaged with NDR



# Among those who watched or listened to the NDR ...



n=1389

# Which Media Did People Use?

## Social media

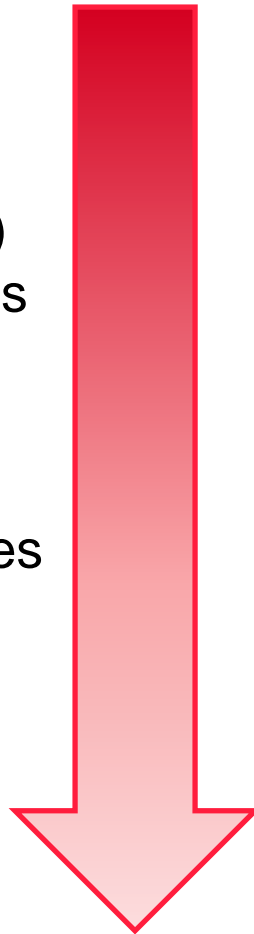
1. Facebook (51.6%)
2. Blogs or YouTube sites of individuals or groups (26%)
3. Instant messaging platforms (22.6%)
4. Online discussion forums/portals (18.6%)
5. Other social networking sites (e.g. Instagram, Twitter) (13.2%)

None of the above (28.3%)

## Mainstream media

1. Television (69.7%)
2. Print newspapers (54.6%)
3. Online websites of Singapore mass media (48.4%)
4. Political parties' and politicians' social networking sites (18.6%)
5. Radio (13.7%)

None of the above (3.1%)



N=2,000

# What People Did Online

## Blogs/YouTube

- Wrote a post or made a video
- Commented on a post/video
- Shared relevant information
- Followed a blogger/YouTuber

## Facebook

- Wrote a post
- Commented on a page/post
- Liked a page or a post
- Shared information
- Followed someone
- Learnt more about family members'/friends'/colleagues' views
- Learnt more about Singaporeans' views

## Other SNS

- Posted a tweet/photo
- Replied/reposted
- Liked a tweet/photo
- Shared information
- Followed someone
- Learnt more about family members'/friends'/colleagues' views
- Learnt more about fellow Singaporeans' views

## Discussion Forums

- Started a discussion thread
- Shared relevant information
- Followed a thread

1 = Never, 2 = 1 to 3 times, 3 = 4 to 6 times,  
4 = 7 to 9 times, 5 = 10 times or more

# What People Did Online (NDR)

## Instant Messaging

- Started a discussion
- Participated in a discussion
- Asked for information
- Shared relevant information
- Learnt more about family members' /friends'/colleagues' views

## Mainstream Media Sites

- Commented on an article
- Shared an article
- Learnt more about Singaporeans' views

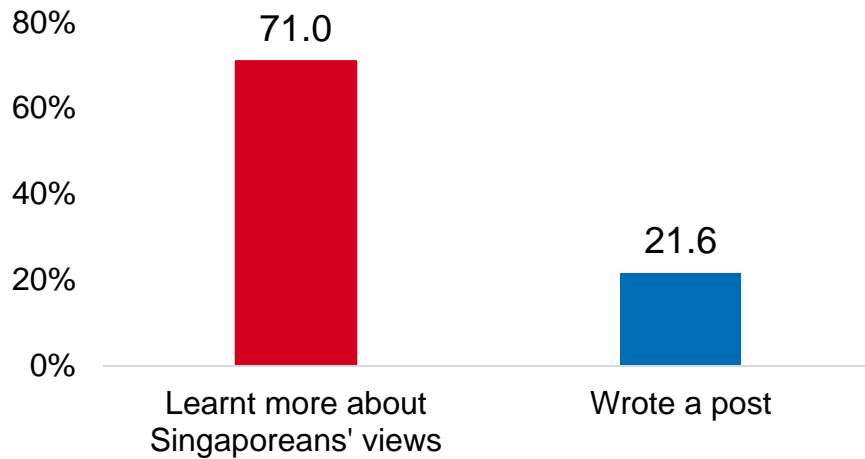
## Political Parties & Politicians' SNS and Websites

- Commented on a page/post
- Liked/used emoticons on a page/post
- Shared information
- Learnt more about fellow Singaporeans' views on the National Day Rally 2016 speech

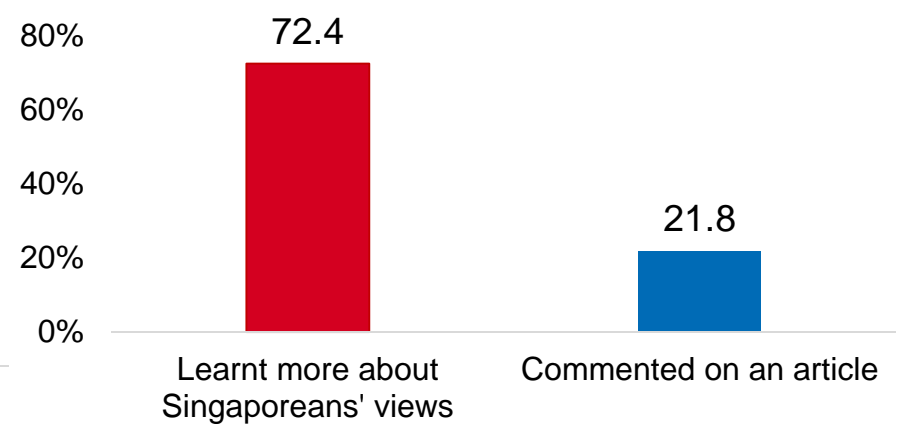
1 = Never, 2 = 1 to 3 times, 3 = 4 to 6 times, 4 = 7 to 9 times, 5 = 10 times or more

# What People Did Online

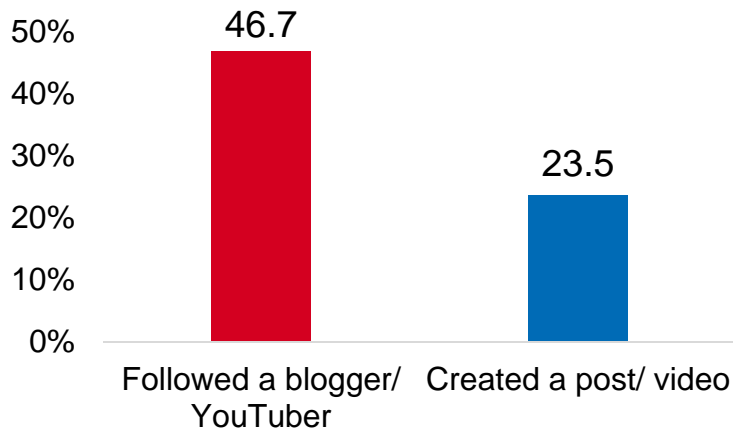
#1 Facebook n=1032



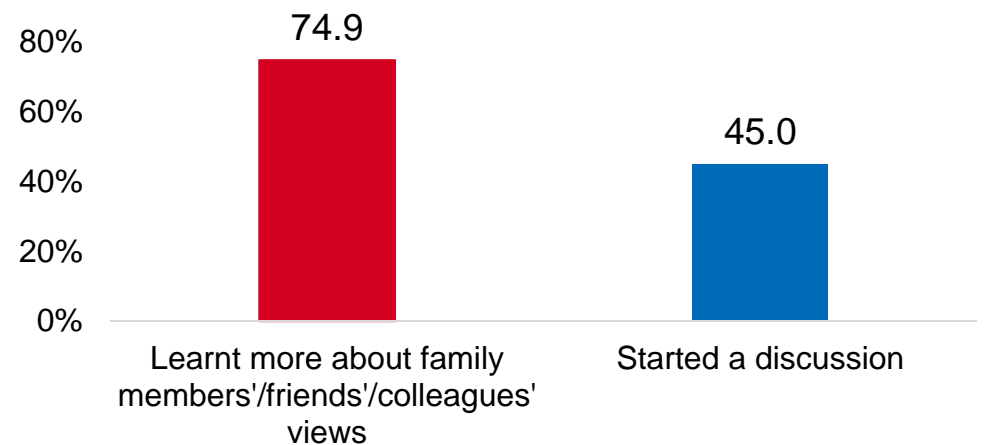
#2 Online MM websites n=967



#3 Blogs and YouTube n= 520

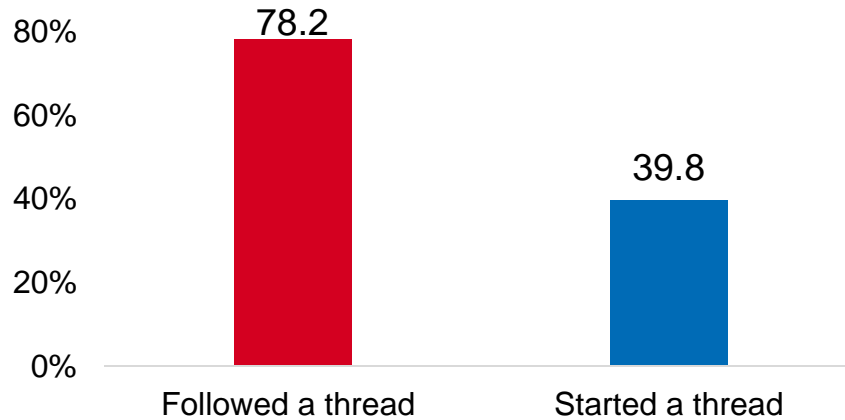


#4 Instant Messaging n=451

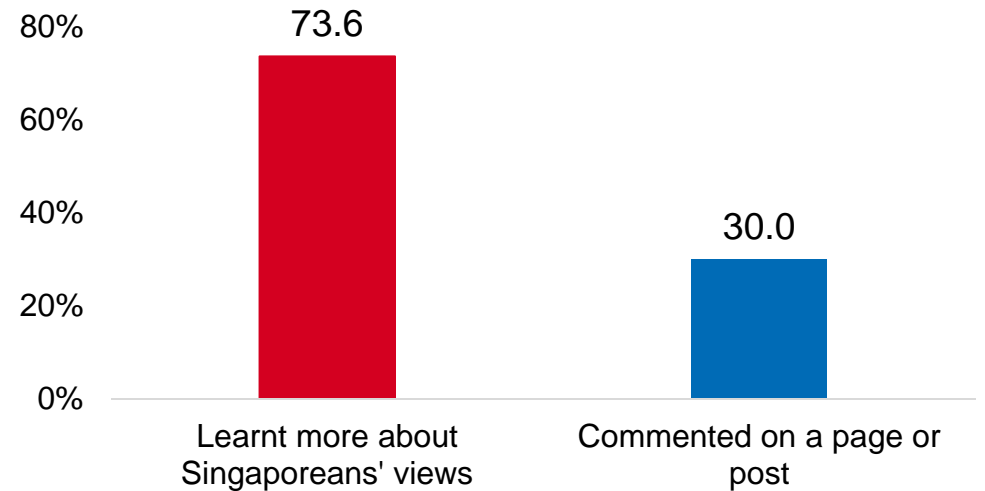


# What People Did Online

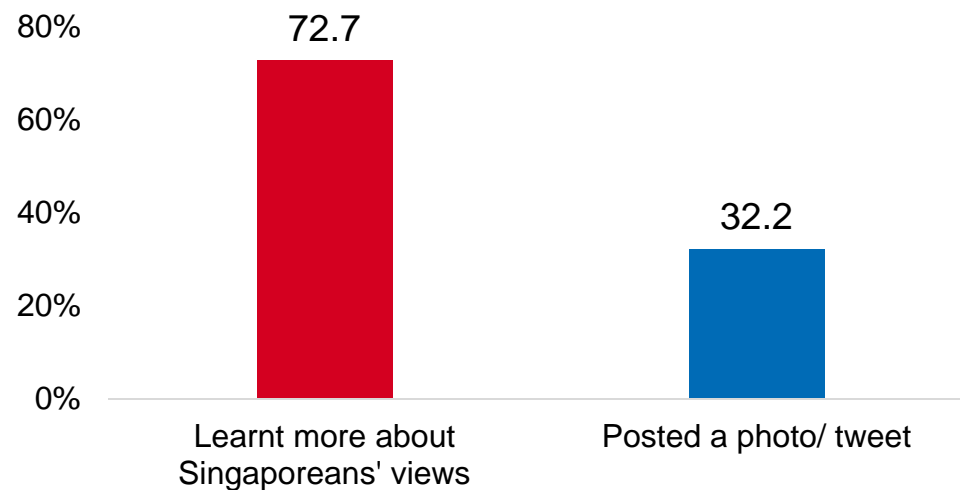
#5 Forums n= 372



#6 Political Parties' Websites/SNS n=371



#7 Other SNS n=264



# List of Issues

- Selection of issues

Minority  
representation  
for Elected  
Presidency

Policies that deal with  
disruption to economy

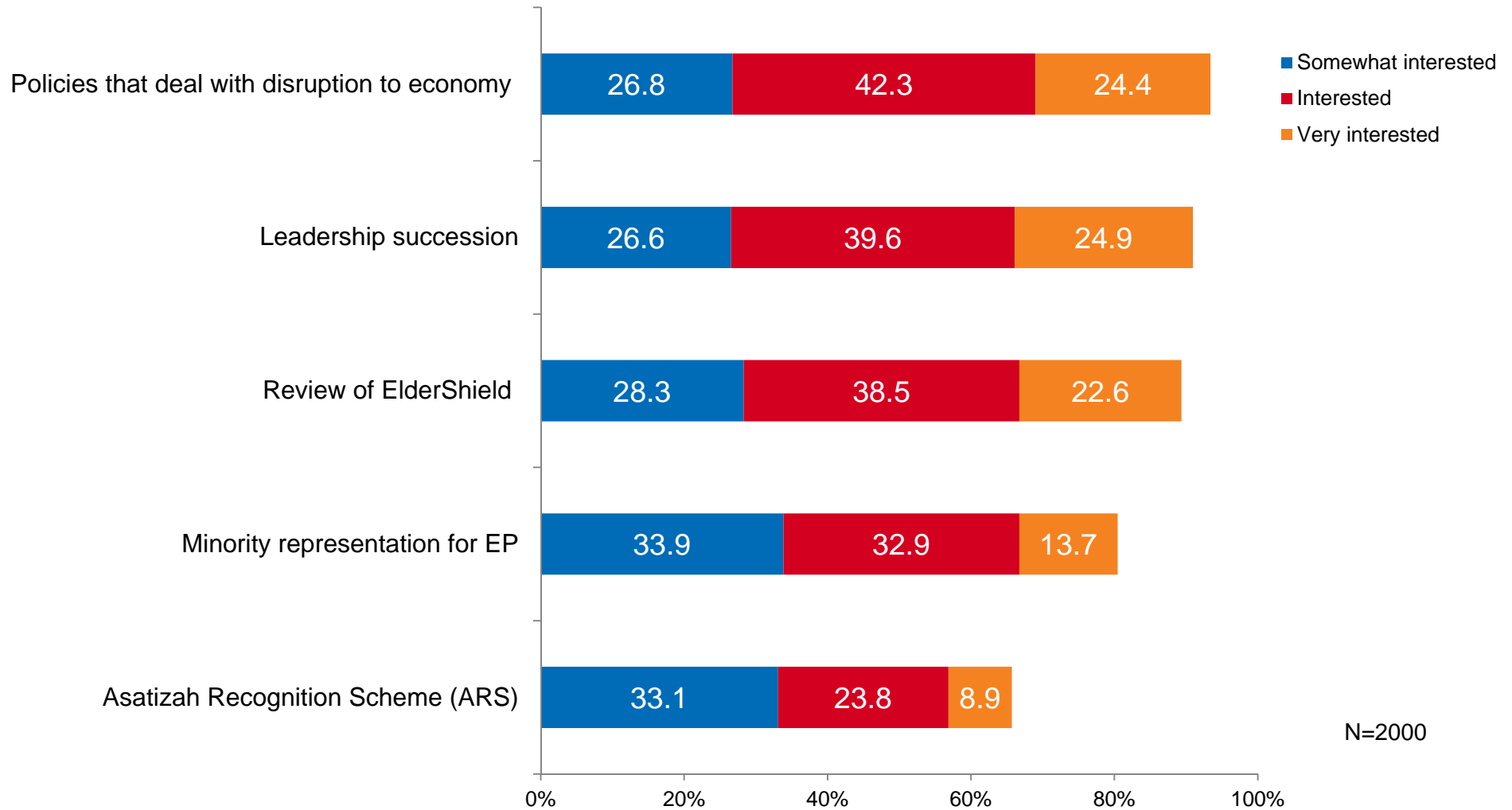
Review of  
ElderShield

Register Islamic  
teachers (Asatizah  
Recognition Scheme)

Steps government is  
taking for leadership  
succession



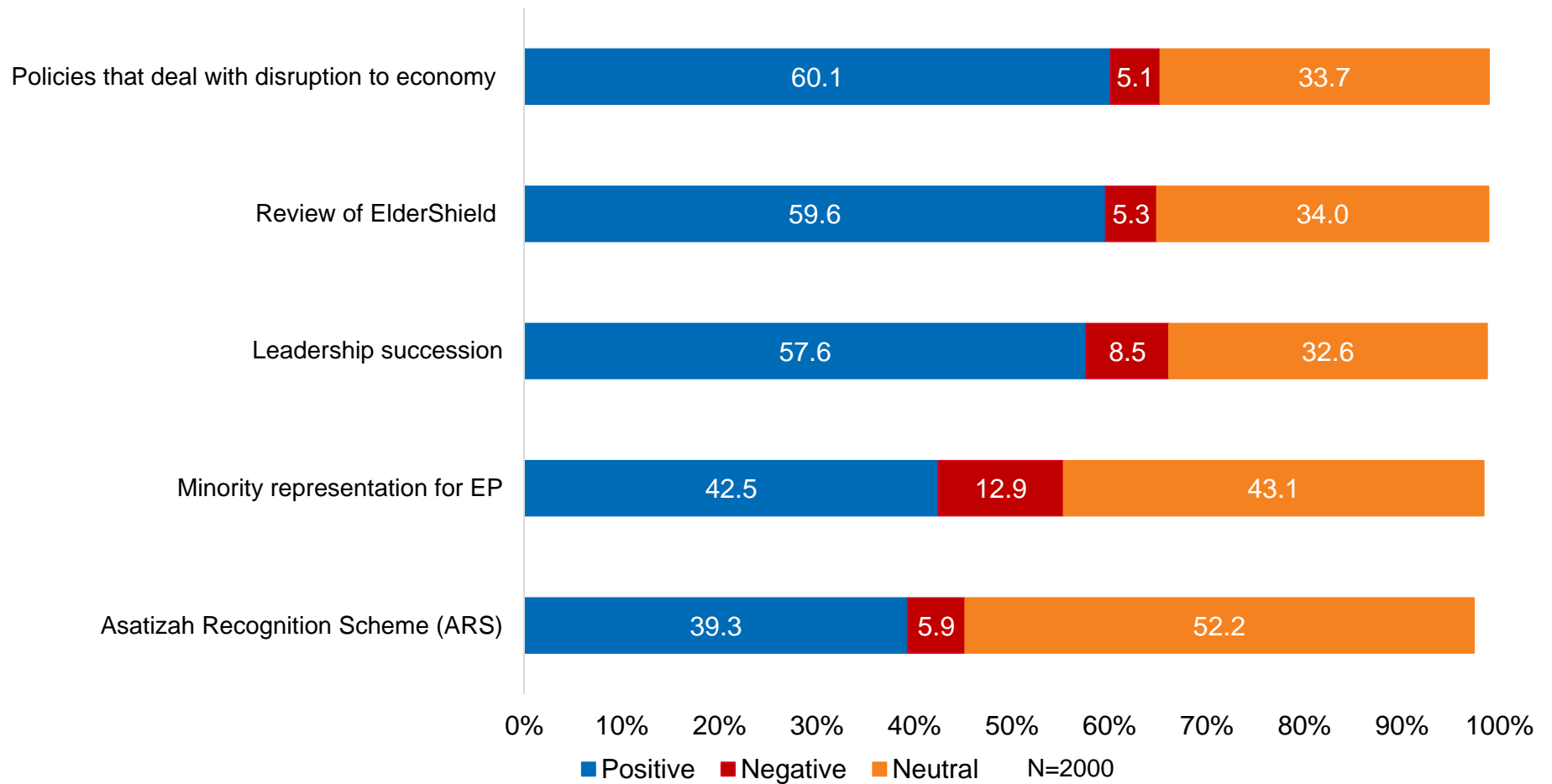
# Interest in NDR Issues



# Interest in NDR Issues\*

Issue	Policies that deal with disruption to economy	Leadership succession	ElderShield	Minority representation for EP	Asatizah Registration Scheme (ARS)
Race	X	X	X	Minorities more interested, Indians most interested	Minorities more interested, Malays most interested
Age	X	Older respondents more interested, 55-64 years most interested	Older respondents more interested, 55-64 years most interested	X	X
Income	X	Higher income respondents more interested	X	X	X
Education	Higher educated respondents more interested, 1 <sup>st</sup> degree/ postgrad most interested	Higher educated respondents more interested, 1 <sup>st</sup> degree/ postgrad most interested	X	X	X

# Sentiments towards NDR Issues



# Sentiments towards NDR Issues\*

Issue	Policies that deal with disruption to economy	ElderShield	Leadership succession	Minority representation for EP	Asatizah Registration Scheme (ARS)
Race	X	X	Indians most positive	Minorities more positive, Indians most positive	Malays most positive
Age	Older respondents more positive, 65 and above most positive	Older respondents more positive, 55-64yrs most positive	Older respondents more positive, 55-64yrs most positive	Older respondents more positive, 65 and above most positive	Older respondents more positive, 65 and above most positive
Income	X	X	X	X	X
Education	Sec-level most positive, followed by 1 <sup>st</sup> degree/post grad most positive	X	X	Sec-level most positive	Higher educated respondents more positive, 1 <sup>st</sup> degree/ postgrad most positive

\*  $p < 0.05$

# Online Users and Non-Users\*

Issue	Policies that deal with disruption to economy	ElderShield	Leadership succession	Minority representation for EP	Asatizah Registration Scheme (ARS)
Interest	X	X	X	X	X
Sentiments	X	Non-Users more positive	Non-Users more positive	X	X

# Comparison of Online Sensing and Survey





All 2,000 respondents  
Online users (n=1,535)  
Active users (n=110)



Active users: Those who participated in >50% of high-engagement activities (e.g. creating online and participating in discussions).

# Interest in Topics

Online Sensing	Survey		
General	Users & Non-users (N=2,000)	Online Users (n=1,535)	Active Users (n=110)
Leadership succession	Disruption to economy	Disruption to economy	Disruption to economy
Disruption to economy 	Leadership succession	Leadership succession 	Leadership succession
Minority rep for EP	ElderShield	ElderShield	Minority rep for EP
ARS	Minority rep for EP	Minority rep for EP	ElderShield
ElderShield	ARS	ARS	ARS

# Interest in Topics

Online Sensing						Survey		
General	MSM	Facebook	Twitter	Blogs	Forums	Users & Non-users (N=2,000)	Online Users (n=1,535)	Active Users (n=110)
Leadership succession	Leadership succession	Leadership succession	Disruption to economy	Leadership succession	Leadership succession	Disruption to economy	Disruption to economy	Disruption to economy
Disruption to economy	Disruption to economy	Disruption to economy	Leadership succession	Minority rep for EP	Minority rep for EP	Leadership succession	Leadership succession	Leadership succession
Minority rep for EP	Minority rep for EP	Minority rep for EP	ARS	Disruption to economy	Disruption to economy	ElderShield	ElderShield	Minority rep for EP
ARS	ARS	ARS	ElderShield	ARS	ARS	Minority rep for EP	Minority rep for EP	ElderShield
ElderShield	ElderShield	ElderShield	Minority rep for EP	ElderShield	ElderShield	ARS	ARS	ARS



# Positive Sentiments

## Online Sensing vs Survey

Most positive



Least positive

Online Sensing	Users & Non-users (N=2,000)	Online users (N=1,535)	Active users (n=110)
Leadership succession	Disruption to economy	Disruption to economy	Disruption to economy
Disruption to economy	ElderShield	ElderShield	Leadership succession
ElderShield	Leadership succession	Leadership succession	ElderShield
ARS	ARS	ARS	ARS
Minority rep for EP	Minority rep for EP	Minority rep for EP	Minority rep for EP

# Summary

- TV and print newspapers most popular sources of information, Facebook most popular for engagement.
- Respondents most interested in policies related to the economy. They also felt most positively towards them.
- Online sensing reflected offline sentiments more closely than offline interest.
- Online sensing reflected active users' interest and sentiments most closely.
- Next steps

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