



What are the most effective strategies of web-push in a probability-based panel?

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# Background

Design features of web-push methods in cross-sectional mixed-mode surveys

- Sequential design > concurrent design (e.g. Dillman, Smyth, & Christian 2014; Dillman 2017)
- Cash Incentives > higher web response (Messer & Dillman 2011; Biemer et al. 2017)
- Less attention has been paid to how web-push methods work in longitudinal studies





#### **Research Questions**

What is an effective strategy to push respondents to switch the survey mode from mail to web?



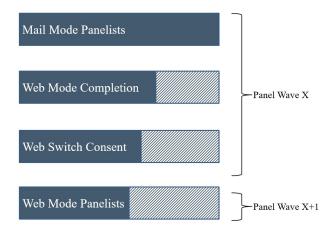


#### **Research Questions**

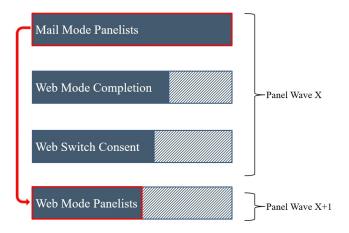
- What is an effective strategy to push respondents to switch the survey mode from mail to web?
- What is an effective strategy to push mail mode respondents to complete the web mode in a single wave?



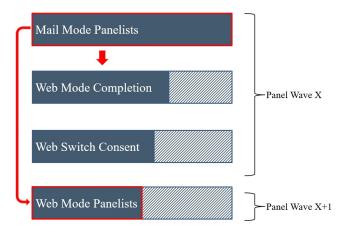




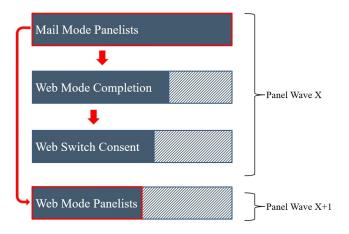




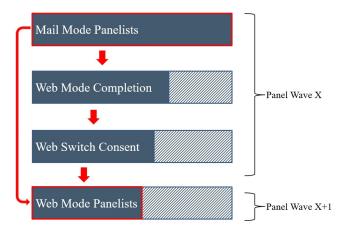




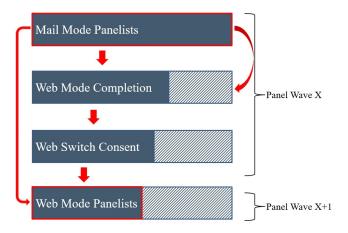




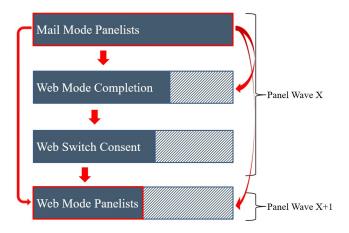
















#### Hypotheses Single wave web completion

- Hypothesis 1: Offering the web mode sequentially results in a higher web completion than offering the web mode concurrently.
- Hypothesis 2: Offering a prepaid web-push incentive results in a higher web completion than offering a promised web-push incentive.

#### Long term web mode switch

- Hypothesis 3: Offering the web mode sequentially results in a higher web mode switch than offering the web mode concurrently.
- Hypothesis 4: Offering a prepaid web-push incentive results in a higher web mode switch than offering a promised web-push incentive.



# **Data: The GESIS Panel**

- Open probability-based mixed-mode panel
- Around 5,700 panelists from three cohorts (October 2018)
  - Web-based surveys (approx. 67% of panelists)
  - Mail surveys (approx. 33% of panelists)
- Bi-monthly data collection
- Regular prepaid incentive: 5 EUR sent with each invitation letter





Treatment	-2 Weeks	0 Weeks	+2 Weeks
group (n)	Early Invitation	Regular Invitation	Reminder

1) concurrent/promised (632)

2) sequential/promised (631)

3) sequential/prepaid (633)

N = 1896



Treatment	-2 Weeks	0 Weeks	+2 Weeks
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Treatment group (n)	-2 Weeks Early Invitation	0 Weeks Regular Invitation	+2 Weeks Reminder
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		<ul> <li>mail questionnaire</li> <li>€5 regular incentive</li> </ul>	
2) sequential/promised (631)			

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Treatment	-2 Weeks	0 Weeks	+2 Weeks
group (n)	Early Invitation	Regular Invitation	Reminder
1) concurrent/promised (632)		<ul> <li>▶ login credentials</li> <li>+ €10 promised</li> <li>mail questionnaire</li> <li>€5 regular incentive</li> </ul>	

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N = 1896

H1 + H3: sequential > concurrent



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N = 1896

H1 + H3: sequential > concurrent

H2 + H4: prepaid > promised



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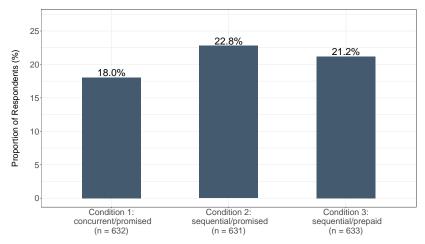
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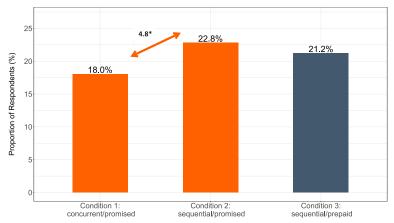


#### **Single Wave Web Completion**



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#### Hypothesis 1: Sequential > Concurrent

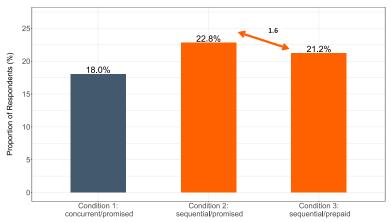


\**p*-value for a one-tailed test: p = 0.02; Holm-Bonferroni correction for multiple comparisions: p = 0.04





#### Hypothesis 2: Prepaid > Promised

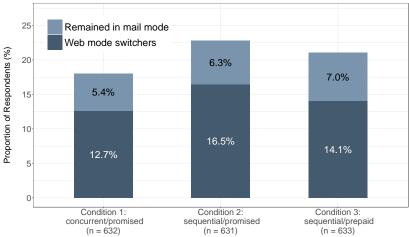


p-value for a one-tailed test: p = 0.76; Holm-Bonferroni correction for multiple comparisions: p = 0.76



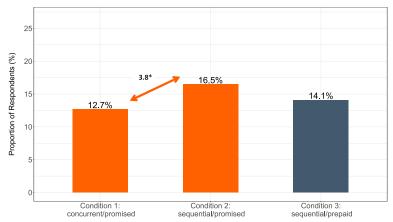


#### **Final Web Mode Switch**



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#### Hypothesis 3: Sequential > Concurrent

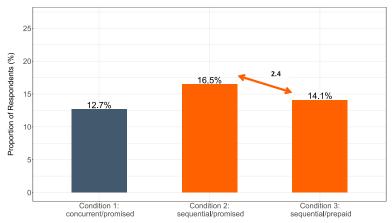


\**p*-value for a one-tailed test: p = 0.03; Holm-Bonferroni correction for multiple comparisions: p = 0.05





#### Hypothesis 4: Prepaid > Promised



p-value for a one-tailed test: p = 0.88; Holm-Bonferroni correction for multiple comparisions: p = 0.88





#### Conclusions

- A considerable number of panel members who started in the mail mode was willing to switch to the web.
- Prepaid incentives do not push more respondents into the web mode than promised incentives, neither for a single wave nor permantetly.
- A sequential approach is more effective than a concurrent approach to push respondents to complete a single survey in the web mode and finally switch to the web mode.
- The mail mode is still needed since many respondents do not have web access or prefer to participate in the mail mode.



# Thank you for your attention!

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