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## **NEWS JUNKIE OR ONLY ACCIDENTALLY INFORMED? AN IN-SITU STUDY ON SITUATIONAL TYPES AND INDIVIDUAL REPERTOIRES OF MOBILE NEWS ACCESS AMONG GERMAN YOUNG ADULTS**

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### **Mobile news consumption – a microcosmos reflecting the changes in our news behaviors**

Over the past three decades our media ecologies have undergone a substantial transformation, not at least changing the ways in which we get in touch with the news. Online media have increased the amount of news we can access in an unprecedented way, making processes of personal news curation (Thorson & Wells, 2016) ever more important. In addition to the amount of news, ways of access have also increased: intermediaries like search engines, news aggregators or social media have unbundled the news from their traditional formats (Ju et al., 2014), providing increased opportunities for additional curation processes such as algorithmic, social, or strategic curation of news (Thorson & Wells, 2016).

These tremendous changes must be viewed ambivalently. High hopes for more equality in the access to news and a better-informed electorate as a result (e.g., Benkler, 2006) are contrasted by fears of news avoidance (Marcinkowski & Došenović, 2020), filter bubbles (Pariser, 2011), a news-finds-me perception (Gil de Zúñiga & Diehl, 2019), and increasing knowledge gaps (Heiss & Matthes, 2019), with recent empirical evidence leaning towards rather pessimistic perspectives (e.g., Gil de Zúñiga & Diehl, 2019; Heiss & Matthes, 2019).

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However, most of the research to date focusses on one specific kind of news access, e.g., news consumption via social media, and its effects, neglecting the fact that users combine several ways to access the news throughout their daily lives, creating their individual media use repertoires (Hasebrink & Domeyer, 2012). Or, speaking more methodologically, by focusing on specific forms of news access and their effects, we are prone to confound variance stemming from within users' daily lives as variance between users.

In order to disentangle these variances within our daily lives from differences between users, we need to analyze access to news on a situational level. Being meta-media (Humphreys et al., 2018), mobile media constitute an excellent microcosmos to study situational variability in news access. They accompany users throughout their daily lives (Ling, 2012), providing permanent access to news in a wide variety of ways from direct access to news sites or apps, over intermediaries like news aggregators to social media (Westlund, 2015). Therefore, we ask:

*RQ1: What types of mobile news access can be identified in young adults' daily lives?*

As mentioned above, types of access do not merely vary between users, but also within users' daily lives, leading to individual mobile news repertoires. Hence, we further ask:

*RQ2: Which mobile news repertoires can be uncovered based on the previously identified access types?*

## **Method**

To answer these questions, we conducted an experience sampling study (Naab et al., 2019) among young adults in Germany in December 2019. For two weeks, participants received three text messages per day at random points in time, directing them to a questionnaire asking whether they had read, watched or listened to news via their smartphones during the previous hour and how they had accessed these news (see Fig. 1 for details on procedure and sample, table 2 for measures). Data collection resulted in a hierarchical structure, with news access situations being nested in participants.

## **Results: Types of mobile news access and users' mobile news repertoires**

A multilevel latent class analysis (Lukočienė et al., 2010) using Latent GOLD (Magidson & Vermunt, 2016) firstly identified five situational types of mobile news access (see table 1). Most news access types included a form of reading, with listening and watching being relevant to only one type (class 2). Two access types related to direct access within a journalistic context (classes 1&5) and two to access via social media (classes 3&4). Hence, situational types do reflect a broad spectrum of mobile news access (for details, see table 2).

Going beyond this situational level, multilevel LCA also identified four types of users' mobile news repertoires (see table 1), i.e., indicating the prevalence of situational types of mobile news access across users' daily lives into user types. All of these mobile news

repertoires combine several of the situational access types with none of the repertoires relying on only one situational access type. In addition, although these mobile news repertoires differ considerably in their combinations of situational access types, all contained at least some amount of direct access to journalistic products (for details, see table 2).

## Discussion

By focusing on the situational level of mobile news access and investigating the prevalence of situational access types within users' daily lives to types of mobile news repertoires, we highlighted that differences within (mobile) news use should not only be studied as differences between people, but also as variances within users' daily lives. Going along with this, we also see that no mobile news repertoire in our study solely relied on news access via intermediaries such as social media. Hence, we call for a more nuanced view on (mobile) news access when gauging the positive and negative effects of changes in the ways we get in touch with the news.

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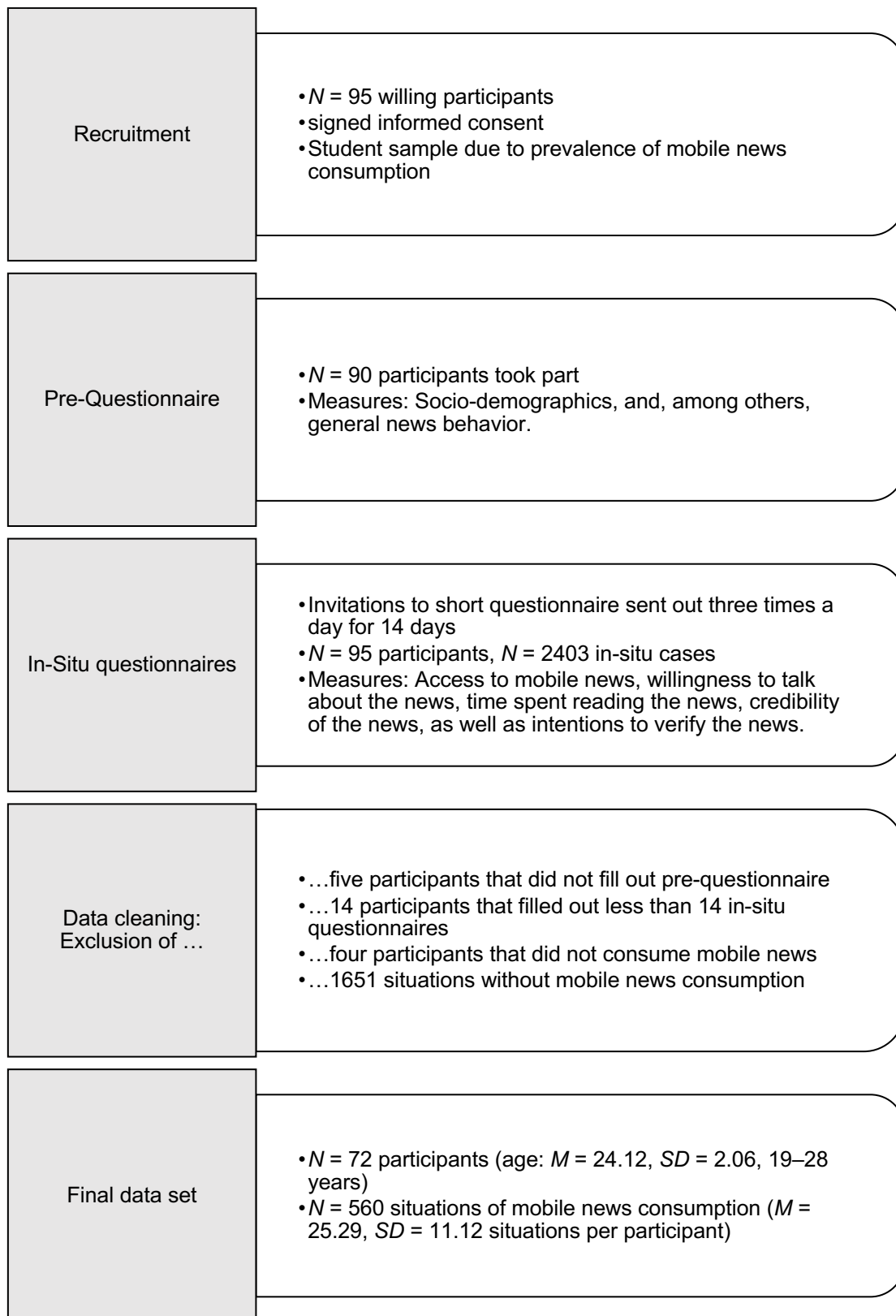
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## Tables and Figures

Figure 1. Data collection procedure and sample description.



*Table 1. Information criteria for various cluster solutions for mobile news access type and types of mobile news repertoires.*

| Model number | Number of situational classes | Number of person-level classes | LL              | BIC            | Npar       | CE          |
|--------------|-------------------------------|--------------------------------|-----------------|----------------|------------|-------------|
| 1            | 1                             | 1                              | -2188.59        | 4458.44        | 19         | 0.00        |
| 2            | 2                             | 1                              | -1804.46        | 3771.43        | 38         | 0.00        |
| 3            | 3                             | 1                              | -1594.10        | 3431.98        | 57         | 0.00        |
| <b>4</b>     | <b>4</b>                      | <b>1</b>                       | <b>-1430.02</b> | <b>3185.06</b> | <b>76</b>  | <b>0.00</b> |
| 5            | 5                             | 1                              | -1412.91        | 3232.10        | 95         | 0.00        |
| 6            | 6                             | 1                              | -1405.37        | 3298.29        | 114        | 0.01        |
| 7            | 7                             | 1                              | -1397.74        | 3364.27        | 133        | 0.00        |
| 8            | 8                             | 1                              | -1397.19        | 3444.43        | 152        | 0.00        |
| 9            | 9                             | 1                              | -1397.76        | 3526.84        | 171        | 0.00        |
| 10           | 10                            | 1                              | -1392.52        | 3597.60        | 190        | 0.00        |
| 11           | 4                             | 1                              | -1430.02        | 3185.06        | 76         | 0.00        |
| 12           | 4                             | 2                              | -1366.66        | 3075.45        | 80         | 0.00        |
| 13           | 4                             | 3                              | -1346.75        | 3052.74        | 84         | 0.00        |
| <b>14</b>    | <b>4</b>                      | <b>4</b>                       | <b>-1336.04</b> | <b>3048.43</b> | <b>88</b>  | <b>0.00</b> |
| 15           | 4                             | 5                              | -1327.65        | 3048.74        | 92         | 0.00        |
| 16           | 4                             | 6                              | -1321.42        | 3053.39        | 96         | 0.00        |
| 17           | 4                             | 7                              | -1318.47        | 3064.60        | 100        | 0.00        |
| 18           | 4                             | 8                              | -1317.16        | 3079.10        | 104        | 0.00        |
| 19           | 4                             | 9                              | -1316.08        | 3094.04        | 108        | 0.00        |
| 20           | 4                             | 10                             | -1315.07        | 3109.12        | 112        | 0.00        |
| 21           | 1                             | 4                              | -2188.59        | 4471.27        | 22         | 0.00        |
| 22           | 2                             | 4                              | -1744.22        | 3676.61        | 44         | 0.00        |
| 23           | 3                             | 4                              | -1504.92        | 3292.10        | 66         | 0.00        |
| 24           | 4                             | 4                              | -1336.04        | 3048.43        | 88         | 0.00        |
| <b>25</b>    | <b>5</b>                      | <b>4</b>                       | <b>-1284.70</b> | <b>3039.83</b> | <b>110</b> | <b>0.00</b> |
| 26           | 6                             | 4                              | -1263.58        | 3091.68        | 132        | 0.01        |
| 27           | 7                             | 4                              | -1237.65        | 3133.90        | 154        | 0.01        |
| 28           | 8                             | 4                              | -1220.93        | 3194.55        | 176        | 0.02        |
| 29           | 9                             | 4                              | -1206.71        | 3260.20        | 198        | 0.05        |
| 30           | 10                            | 4                              | -1186.48        | 3313.82        | 220        | 0.03        |

*Note:*

72 participants, 560 situations.

LL = log likelihood, BIC = Bayesian information criterion based on the number of person-level cases, Npar = number of parameters, CE = classification error.

Procedure to determine optimal model based on (Lukočienė et al., 2010).

Step 1: Estimation of number of situation level classes.

Step 2: Estimation of number of person-level classes with fixed number of situation level classes from step 1.

Step 3: Redetermination of situation level classes with fixed number of person-level classes from step 2.

Bayesian Information criterion (BIC) based on the number of person-level cases.

*Table 2. Description of mobile news access types and types of mobile news repertoires based on multilevel latent class analysis.*

|   | <i>Situational class 1</i> | <i>Situational class 2</i>      | <i>Situational class 3</i>    | <i>Situational class 4</i>   | <i>Situational class 5</i>   |
|---|----------------------------|---------------------------------|-------------------------------|------------------------------|------------------------------|
|   | <i>Direct app access</i>   | <i>Listening &amp; watching</i> | <i>Social media (textual)</i> | <i>Social media (visual)</i> | <i>Direct website access</i> |
| <i>Relative class size</i>  | 41.2%                      | 16.9%                           | 15.6%                         | 14.0%                        | 12.3%                        |
| <b>Mobile news repertoires (and relative size of resp. classes)<sup>1</sup></b> |                            |                                 |                               |                              |                              |
| Direct news access (34.1 %)   | <b>75.7%</b>               | 8.1%                            | 1.9%                          | 1.4%                         | 12.9%                        |
| Mixed readers (31.0 %)  | <b>20.6%</b>               | 16.3%                           | <b>48.1%</b>                  | 0.1%                         | <b>14.9%</b>                 |
| Visual social media and news apps (21.8 %)                                      | <b>28.3%</b>               | 8.8%                            | 0.1%                          | <b>54.1%</b>                 | 8.8%                         |
| Listening and news apps (13.1 %)  | <b>21.9%</b>               | <b>54.8%</b>                    | 0.1%                          | 13.0%                        | 10.3%                        |
| <b>Reception mode<sup>2</sup></b>   |                            |                                 |                               |                              |                              |
| Reading   | <b>94.2%</b>               | 0.2%                            | <b>94.7%</b>                  | <b>74.6%</b>                 | <b>98.5%</b>                 |
| Watching  | 5.8%                       | 23.7%                           | 5.3%                          | <b>25.4%</b>                 | 1.5%                         |
| Listening   | 0%                         | <b>75.1%</b>                    | 0%                            | 0%                           | 0%                           |
| Missing   | 0%                         | 1.1%                            | 0%                            | 0%                           | 0%                           |
| <b>Point of access</b>  |                            |                                 |                               |                              |                              |
| Website (news or other)   | 0%                         | 0%                              | 0%                            | 0%                           | <b>99.7%</b>                 |
| News app  | <b>66.2%</b>               | 0.1%                            | 0.1%                          | 0.1%                         | 0.1%                         |
| News widget of smartphone   | <b>22.9%</b>               | 0%                              | 0%                            | 0%                           | 0%                           |
| Social media  | 0%                         | 0.1%                            | <b>99.8%</b>                  | <b>99.8%</b>                 | 0.1%                         |
| Messenger app   | <b>4.6%</b>                | 0%                              | 0%                            | 0%                           | 0%                           |
| E-Mail (e.g., newsletter of news medium)  | <b>5.8%</b>                | 0%                              | 0%                            | 0%                           | 0%                           |
| Media library / Streaming-service-app   | 0%                         | <b>70.8%</b>                    | 0%                            | 0%                           | 0%                           |
| Webradio / Radio-App  | 0%                         | <b>27.9%</b>                    | 0%                            | 0%                           | 0%                           |
| Missings  | 0.4%                       | 1.1%                            | 0%                            | 0%                           | 0%                           |
| <b>Social Media</b>   |                            |                                 |                               |                              |                              |
| Facebook  | 0%                         | 0%                              | <b>53.5%</b>                  | 0%                           | 0%                           |
| Instagram   | 0%                         | 0%                              | 2.6%                          | <b>84.7%</b>                 | 0%                           |
| Twitter   | 0%                         | 0%                              | <b>32.0%</b>                  | 5.4%                         | 0%                           |
| YouTube   | 0%                         | 0%                              | 0%                            | <b>8.5%</b>                  | 0%                           |
| Snapchat  | 0%                         | 0%                              | 0%                            | 1.2%                         | 0%                           |
| Other   | 0%                         | 0%                              | <b>11.7%</b>                  | 0%                           | 0%                           |
| missings  | <b>100%</b>                | <b>99.9%</b>                    | 0.2%                          | 0.2%                         | <b>99.9%</b>                 |
| <b>Type of website</b>  |                            |                                 |                               |                              |                              |
| News website  | 0%                         | 0%                              | 0%                            | 0%                           | <b>83.7%</b>                 |
| Other website   | 0%                         | 0.1%                            | 0.1%                          | 0.1%                         | <b>15.9%</b>                 |
| Missings  | <b>100%</b>                | <b>100%</b>                     | <b>99.9%</b>                  | <b>100%</b>                  | 0.4%                         |

*Note:*

72 participants, 560 situations.

Dimensions measured as single selection (categorical).

<sup>1</sup> conditional probabilities per group: When belonging to type 1, 75.7 percent of news consumption situations are type 1 situations. 34.1 percent of participants belong to type 1 (reliance on journalistic curation).

<sup>2</sup> conditional probabilities, for example: When belonging to situation class 1, the probability of that situation being comprised of accessing the news via reading is 94.2 percent.