## Supplementary Material

## 1 Data Cleaning

A total of 367 complete datasets were collected. Participants below the age of 18 were excluded from final analyses ( $n=12$ ) because participation was only allowed from the age of 18. Additionally, participants indicating being older than 100 years were excluded ( $n=1$ ). Finally, $n=1$ participant was excluded due to choosing the same response option throughout all items of the Big Five Inventory indicating careless responding. This leads to an effective sample size of $N=353$ ( $n=215$ men; $n=136$ women; $n=2$ "third gender") participants. However, several participants stated they did not use social media platforms such as Facebook or Instagram $(n=106)$, or that they did not use messenger services ( $n=8$ ), or that they did neither use social media nor messenger services ( $n=29$ ). We decided to exclude these participants because asking a person about whether and how much he/she would be willing to pay for a service he/she does not use seemed not valid. Therefore, the final sample consisted of $N=210$ ( $n=117 \mathrm{men} ; n=91$ women; $n=2$ "third gender") participants.

2 Principal Component Analysis on the Four Items about whether Participants were
Willing to Pay for Social Media
The Principal Component Analysis revealed one eigenvalue higher than 1 (eigenvalue $=3.05$ ). The scree plot is shown in Supplementary Figure 1.


Supplementary Figure 1. Scree plot on the four items on the willingness to pay for social media i) "if thereby it is ensured that my data accrued there are not used for marketing purposes", ii) "if thereby it is ensured that my data accrued there are better protected", iii) "if thereby it is ensured that the social media offers are designed in a way that does not aim to prolong the time users spend online", iv) "if thereby it is ensured that the problem of fake news and radicalization is reduced".

3 Distributions of Responses to the Items on How Much Participants would be Willing to Pay for Social Media / Messenger Services


Supplementary Figure 2. Histogram of the variable on how much money participants would be willing to pay per month for a single social media (Facebook, Instagram) service; the x -axis shows the amount of money and the $y$-axis the number of participants indicating to be willing to pay the respective amount of money (after dealing with univariate outliers).

Supplementary Table 1.
Distribution of how much money participants would be willing to pay per month for a single social media (Facebook, Instagram) service (after dealing with univariate outliers)

| $€$ | 0.00 | 0.30 | 0.50 | 1.00 | 2.00 | 2.50 | 3.00 | 3.80 | 4.00 | 4.99 | 5.00 | 8.00 | 10.00 | 12.50 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| count | 93 | 1 | 4 | 23 | 18 | 2 | 9 | 1 | 1 | 1 | 43 | 2 | 8 | 4 |



Supplementary Figure 3. Histogram of the variable on how much money participants would be willing to pay per month for a single messenger service; the x -axis shows the amount of money and the $y$-axis the number of participants indicating to be willing to pay the respective amount of money (after dealing with univariate outliers).

Supplementary Table 2.
Distribution of how much money participants would be willing to pay per month for a single messenger service (after dealing with univariate outliers)

| $€$ | 0.00 | 0.30 | 0.50 | 1.00 | 1.50 | 2.00 | 2.50 | 2.99 | 3.00 | 4.00 | 5.00 | 7.00 | 10.00 | 12.50 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| count | 61 | 1 | 4 | 39 | 1 | 28 | 3 | 1 | 12 | 1 | 49 | 1 | 4 | 5 |

# 4 Correlations between the Big Five and each Item on whether Participants were Willing to Pay for Social Media 

### 4.1 Descriptive Statistics

Supplementary Table 3.
Descriptive statistics of each item on whether participants were willing to pay for social media in the total sample ( $N=210$ )

|  | Marketing | Data <br> Protection | Prolongation of <br> Online Time | Fake News and <br> Radicalization |
| :--- | :---: | :---: | :---: | :---: |
| $M(S D)$ | $2.54(1.22)$ | $2.67(1.29)$ | $2.40(1.25)$ | $2.98(1.41)$ |

Note: Marketing: "[...] if thereby it is ensured that my data accrued there are not used for marketing purposes", Data Protection: "[...] if thereby it is ensured that my data accrued there are better protected", Prolongation of Online Time: "[...] if thereby it is ensured that the social media offers are designed in a way that does not aim to prolong the time users spend online", Fake News and Radicalization: "[...] if thereby it is ensured that the problem of fake news and radicalization is reduced". Friedman test statistics: $\chi_{2}(3)=58.93, p<.001$; significant differences were found between each pair of items according to Wilcoxon Signed-Rank tests (all p-values < .029).

### 4.2 Correlations

Supplementary Table 4.
Correlations between the Big Five and each item on whether participants were willing to pay for social media

|  | Marketing | Data <br> Protection | Prolongation of Online Time | Fake News and Radicalization |
| :---: | :---: | :---: | :---: | :---: |
| Openness | $\begin{gathered} r_{\mathrm{s}}=0.13 \\ p=.068 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.10, \\ p=.136 \end{gathered}$ | $\begin{aligned} r_{\mathrm{s}} & =0.14, \\ p & =.041 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.09 \\ & p=.184 \end{aligned}$ |
| Conscientiousness | $\begin{gathered} r_{\mathrm{s}}=-0.04 \\ p=.591 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.02, \\ p=.775 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.13 \\ p=.066 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.04 \\ p=.588 \end{gathered}$ |
| Extraversion | $\begin{gathered} r_{\mathrm{s}}=0.02, \\ p=.808 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.01, \\ p=.915 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.00 \\ p=.961 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.05 \\ p=.508 \end{gathered}$ |
| Agreeableness | $\begin{aligned} r_{\mathrm{s}} & =0.21, \\ p & =.002 \end{aligned}$ | $\begin{aligned} r_{\mathrm{s}} & =0.11, \\ p & =.122 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.18, \\ p=.009 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.07, \\ p=.320 \end{gathered}$ |
| Neuroticism | $\begin{aligned} r_{\mathrm{s}} & =-0.07 \\ p & =.344 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=-0.08, \\ p=.241 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.00 \\ p=.965 \end{gathered}$ | $\begin{aligned} r_{\mathrm{s}} & =0.02, \\ p & =.800 \end{aligned}$ |

Note: Spearman correlations corrected for age are presented in this table. Marketing: "[...] if thereby it is ensured that my data accrued there are not used for marketing purposes", Data Protection: "[...] if thereby it is ensured that my data accrued there are better protected", Prolongation of Online Time: " $[\ldots]$ if thereby it is ensured that the social media offers are designed in a way that does not aim to prolong the time users spend online", Fake News and Radicalization: "[...] if thereby it is ensured that the problem of fake news and radicalization is reduced".

Supplementary Table 5.
Correlations between the Big Five and each item on whether participants were willing to pay for social media in males and females separately

|  | $\begin{aligned} & \text { Males } \\ & (n=117) \end{aligned}$ |  |  |  | Females$(n=91)$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Marketing | Data <br> Protection | Prolongation of Online Time | Fake News and Radicalization | Marketing | Data <br> Protection | Prolongation of Online Time | Fake News and Radicalization |
| Openness | $\begin{aligned} & r_{s}=0.15, \\ & p=.106 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.12, \\ p=.216 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.19, \\ p=.044 \end{gathered}$ | $\begin{aligned} & r_{\mathrm{s}}=0.08, \\ & p=.366 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.09, \\ & p=.374 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.10 \\ & p=.369 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.11, \\ & p=.324 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.09, \\ p=.423 \end{gathered}$ |
| Conscientiousness | $\begin{gathered} r_{\mathrm{s}}=-0.01 \\ p=.880 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.00 \\ p=.994 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.14, \\ p=.144 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.08 \\ p=.366 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.04, \\ p=.715 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.03 \\ p=.750 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.11, \\ p=.316 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.01, \\ p=.930 \end{gathered}$ |
| Extraversion | $\begin{aligned} & r_{\mathrm{s}}=0.06, \\ & p=.528 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.06, \\ & p=.520 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.08, \\ p=.370 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.03, \\ p=.777 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.08, \\ p=.439 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.08, \\ p=.445 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.14, \\ p=.193 \end{gathered}$ | $\begin{aligned} r_{\mathrm{s}} & =-0.13, \\ p & =.211 \end{aligned}$ |
| Agreeableness | $\begin{aligned} & r_{\mathrm{s}}=0.19, \\ & p=.041 \end{aligned}$ | $\begin{gathered} r=0.12 \\ p=.198 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.26, \\ p=.004 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=0.07, \\ p=.435 \end{gathered}$ | $\begin{aligned} & r=0.22, \\ & p=.034 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.09, \\ & p=.422 \end{aligned}$ | $\begin{aligned} & r_{\mathrm{s}}=0.11, \\ & p=.318 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.03, \\ p=.749 \end{gathered}$ |
| Neuroticism | $\begin{gathered} r_{s}=-0.11, \\ p=.249 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.07 \\ p=.425 \end{gathered}$ | $\begin{aligned} r_{\mathrm{s}} & =-0.02, \\ p & =.836 \end{aligned}$ | $\begin{gathered} r_{\mathrm{s}}=0.08, \\ p=.374 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.08, \\ p=.476 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.14, \\ p=.193 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.01, \\ p=.902 \end{gathered}$ | $\begin{gathered} r_{\mathrm{s}}=-0.12, \\ p=.272 \end{gathered}$ |

Note: Spearman correlations corrected for age are presented in this table. Marketing: "[...] if thereby it is ensured that my data accrued there are not used for marketing purposes", Data Protection: "[...] if thereby it is ensured that my data accrued there are better protected", Prolongation of Online Time: "[...] if thereby it is ensured that the social media offers are designed in a way that does not aim to prolong the time users spend online", Fake News and Radicalization: "[...] if thereby it is ensured that the problem of fake news and radicalization is reduced". Two participants stated "third gender" as their gender identity and are not included in this table due to the low number of individuals in this group.

