## Factors Influencing Perceived Legitimacy of Social Scoring Systems: Subjective Privacy Harms and the Moderating Role of Transparency

## **Supplementary File**

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## Appendices

|               | b1         | b3      | pc2        | t2      | pc1     | naı          | na2     | tr1     | ob1  | f1      | f2     | comp   | α    |
|---------------|------------|---------|------------|---------|---------|--------------|---------|---------|------|---------|--------|--------|------|
| Proc. Justice |            | -       |            |         |         |              |         |         |      |         |        |        |      |
| b1            |            |         |            |         |         |              |         |         |      |         |        |        | 0.79 |
| b3            | 0.64***    |         |            |         |         |              |         |         |      |         |        |        | 0.81 |
| pc2           | 0.54***    | 0.46*** |            |         |         |              |         |         |      |         |        |        | 0.78 |
| t2            | 0.61***    | 0.53*** | 0.61***    |         |         |              |         |         |      |         |        |        | 0.79 |
| pc1           | 0.40***    | 0.34*** | 0.57***    | 0.38*** |         |              |         |         |      |         |        |        | 0.83 |
| Legitimacy    |            |         |            |         |         |              |         |         |      |         |        |        |      |
| nai           | 0.69***    | 0.63*** | 0.54***    | 0.65*** | 0.33*** |              |         |         |      |         |        |        | 0.65 |
| na2           | 0.54***    | 0.46*** | 0.50***    | 0.59*** | 0.34*** | 0.59***      |         |         |      |         |        |        | 0.72 |
| tr1           | 0.60***    | 0.47*** | 0.50***    | 0.65*** | 0.36*** | $0.72^{***}$ | 0.57*** |         |      |         |        |        | 0.65 |
| ob1           | $0.22^{*}$ | 0.28**  | $0.25^{*}$ | 0.26**  | 0.27**  | 0.38***      | 0.24*   | 0.36*** |      |         |        |        | 0.83 |
| Favorability  |            |         |            |         |         |              |         |         |      |         |        |        |      |
| f1            | 0.41***    | 0.26**  | 0.43***    | 0.34*** | 0.35*** | 0.32**       | 0.12    | 0.29**  | 0.15 |         |        |        | 0.51 |
| f2            | 0.36***    | 0.38*** | 0.23*      | 0.19    | 0.26*** | 0.28**       | 0.03    | 0.18    | 0.08 | 0.52*** |        |        | 0.51 |
| comp          | 0.22*      | 0.16    | 0.13       | 0.21*   | 0.00    | 0.21*        | 0.04    | 0.18    | 0.04 | 0.15    | 0.12   |        |      |
| ctrl1         | -0.09      | 0.01    | -0.10      | -0.18   | -0.18   | -0.04        | 0.03    | -0.07   | 0.06 | -0.25*  | -0.23* | -0.20* |      |

| Ab.  | Question  | Sources                               |
|------|---|---------------------------------------|
|      | Perceived Procedural Justice  | (Alessandro et al., 2021; Lee et al., |
| bı   | I feel the institution acted for the well-being of the community.                         | 2019; Tyler & Jackson, 2013)          |
| b2   | The institution made decisions that were good for everyone in the community.              | -                                     |
| b3   | The institution did what is necessary to help the community.                              |                                       |
| dı   | I think the institution treated community members with dignity and respect.               |                                       |
| C1   | I understood the rules and methods the institution used to decide on my standing.         |                                       |
| t1   | I knew how my behavior would impact my standing.  |                                       |
| t2   | I think the mechanism the institution used to assess my standing was fair.                |                                       |
| pc1  | I was able to influence the data that the institution considered to evaluate my standing. |                                       |
| pc2  | I was able to influence my standing such that I am satisfied with it.                     |                                       |
|      | Perceived Legitimacy  | (Jackson et al., 2023)                |
| ob1  | I felt a moral duty to do what the institution asked participants of the community to do. |                                       |
| na1  | I generally support how the institution acted.  |                                       |
| na2  | The institution had the same sense of right and wrong as I do.                            |                                       |
| tr1  | I could trust the institution to make the right decisions.                                |                                       |
|      | Perceived Favorability  | (Tyler & Jackson, 2013)               |
| f1   | Generally speaking, I am satisfied with how the experiment went for me.                   |                                       |
| f2   | I generally liked how I was treated by other community members.                           |                                       |
| f3   | Having the institution in the community was favorable to me.                              |                                       |
| f4   | I am satisfied with my final standing.  |                                       |
|      | Subjective Privacy Harm   | (Calo, 2011)                          |
| ctrl | I felt controlled by the institution.   |                                       |
|      | Intention to Comply   |                                       |
| comp | Suppose you would participate in another session of this experiment, under the exact same |                                       |
| -    | conditions. Suppose in round 1 of the experiment, you are the second mover, and your      |                                       |
|      | interaction partner sends you 10 monetary units. You receive 20 monetary units. How much  |                                       |
|      | would you send back?  |                                       |
|      | Table 5. Constructs and Sources of the Survey (Ab.: Abbreviation)                         |                                       |

| All Treatments                                       | DF | AIC     | BIC     | Chisq. | Chisq.<br>Diff. | DF<br>Diff. | Pr<br>(>Chisq) |  |  |
|--|----|---------|---------|--------|-----------------|-------------|----------------|--|--|
| Unconstrained path model                             | 40 | 2660.93 | 2855.75 | 45.83  |                 |             |                |  |  |
| Without path Fav $\rightarrow$ Leg                   | 43 | 2659.61 | 2845.44 | 50.51  | 3.67            | 3           | 0.300          |  |  |
| With invariant path PJ $\rightarrow$ Leg             | 45 | 2659.67 | 2839.50 | 54.57  | 5.82            | 2           | 0.054          |  |  |
| With invariant path Fav $\rightarrow$ PJ             | 47 | 2664.57 | 2838.41 | 63.48  | 7.38            | 2           | 0.025          |  |  |
| Scoring Treatments                                   |    |         |         |        |                 |             |                |  |  |
| Unconstrained path model                             | 88 | 2722.78 | 2895.38 | 118.35 |                 |             |                |  |  |
| Without path Fav $\rightarrow$ Leg                   | 93 | 2720.46 | 2879.98 | 126.03 | 7.35            | 5           | 0.196          |  |  |
| With invariant path PJ $\rightarrow$ Leg             | 94 | 2732.03 | 2888.94 | 139.60 | 6.40            | 1           | 0.011          |  |  |
| With invariant path Fav $\rightarrow$ PJ             | 94 | 2726.85 | 2883.75 | 134.43 | 5.56            | 1           | 0.018          |  |  |
| Table 6. Comparison of Model Fits for the Core Model |    |         |         |        |                 |             |                |  |  |