A Value-Driven Approach to the Online Consent Conundrum: A Study with the Unemployed

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Keywords: Values, Value Creators, Consent Forms, Unemployed.

Abstract: Online services are required to gain informed consent from users to collect, store and analyse their personal data, both intentionally divulged and derived during their use of the service. There are many issues with these forms: they are too long, too complex and demand the user's attention too frequently. Many users consent without reading so do not know what they are agreeing to. As such, granted consent is effectively uninformed. In this paper, we report on two studies we carried out to arrive at a value-driven approach to inform efforts to reduce the length of consent forms. The first study interviewed unemployed users to identify the values they want these forms to satisfy. The second survey study helped us to quantify the values and value creators. To ensure that we understood the particular valuation of the unemployed, we compared their responses to those of an employed demographic and observed no significant differences between their prioritisation on any of the values. However, we did find substantial differences between values and value creators, with effort minimisation being most valued by our participants.

1 INTRODUCTION

The requirement for mandating informed consent to permit online data gathering and processing inherits the paradigm from the fields of medicine and research (Beauchamp, 2011). Legislation such as the European Union's General Data Protection Regulation (GDPR) forces online service providers to ask users to consent to collection, storage and processing of their data. There are, unfortunately, many reasons for the failure of this mechanism to obtain truly informed consent.

Solove (2012, p. 1888) writes that "consent is not meaningful in many contexts involving privacy" because "*(1) people do not read privacy policies; (2) if people read them, they do not understand them; (3) if people read and understand them, they often lack enough background knowledge to make an informed choice; and (4) if people read them, understand them, and can make an informed choice, their choice might be skewed by various decision making difficulties*". Solove is suggesting that people are not granting *informed* consent. Users cope with the frequent unusable consent forms they encounter by dismissing them (without reading them) (Parfenova et al., 2024). This means that consent forms, in general, do not fulfil their core purpose (Chomanski and Lauwaert, 2023). The length of privacy policies deters online users from engaging with them (McDonald and Cranor (2008)), given the effort required. If the length can be reduced, it would likely mitigate the situation, but such shortening must be done mindfully. One way to do so is to ensure that the forms provide only the information that satisfies users' values. As yet, we do not know what these values are, and in the absence of this, consent forms strive towards comprehensive coverage of all information. We identified these values by interviewing unemployed users. Having derived a set of values from a qualitative analysis, we carried out a second study to determine how users (specifically our target users, the unemployed) would comparatively rate the derived values (Section 2). Section 3 reports on our findings.

2 METHOD

2.1 Research Questions and Study Design

We conducted two studies, with the following research questions and designs. **Study 1:** What are the informed consent-related values and value creators for the unemployed? A laddering interview design

van Schaik, P. and Renaud, K.
A Value-Driven Approach to the Online Consent Conundrum: A Study with the Unemployed.
DOI: 10.5220/0013083300003899

In *Proceedings of the 11th International Conference on Information Systems Security and Privacy (ICISSP 2025) - Volume 1*, pages 133-140
ISBN: 978-989-758-735-1; ISSN: 2184-4356

(Dolan, 1989) was used to elicit values and value creators that contribute to informed consent in the context of online services. The *output* of the study was a hierarchical set of values and value creators. We also measured privacy literacy (Trepte et al., 2015).

Study 2: How do unemployed people weight the values and value creators in the informed consent context, and how do these differ from the way the employed rank these?

A two-group independent measures design was used. The groups were unemployed and employed people. The *output* of the study was a quantified hierarchical structure of values and value creators with value and value-creator weightings separate for employed vs unemployed participants.

2.2 Participants

Studied Demographic. We chose to focus on values of the unemployed, and their experiences in engaging with online consent forms. Seabright (2010) explains that the unemployed inhabit 'information islands'. Unlike the employed who benefit from regular security awareness training, there are no bridges for the unemployed to gain up-to-date information. This means that it is easy for misunderstandings to gain traction because people are out of touch with the latest security advice. Seabright says that society does not construct bridges to increasingly isolated unemployed communities. The cyber security field is dynamic and fluid due to the sustained and inventive efforts of cyber criminals. This demographic is thus more vulnerable to losing their privacy. Moreover, declining to give consent might be infeasible if monetary rewards are dependent on consent, perhaps more likely a pressure point for the unemployed.

Study 1. Thirteen unemployed participants responded to an invitation from a previous study (Van Schaik et al. (2024)). They were compensated for their time through a voucher or a SIM card 30 gigabytes of free data to use on their smartphone.

Study 2. One hundred and two unemployed participants and the same number of employed participants, 115 female (68 unemployed, 47 employed) and 89 male (34 unemployed, 55 employed), were recruited through via an online survey panel and compensated for their time according to the panel's rate. Their mean age was 52 (SD = 15).

2.3 Materials

Study 1. A laddering interview guide was created and used. Two scales were used: the Online Privacy Literacy Scale (OPLIS) (Trepte et al., 2015) was used to measure specific privacy knowledge. (Details of our OPLIS scoring scheme are presented under Study 2, as the development of this scheme required a larger sample than that of Study 1.) In this sample the mean was 12.92 (SD =3.12), which corresponds to approximately a 57 percentile rank according to Masur et al. (2017).

Study 2. An AHP survey was created according to guidelines for survey construction (Dolan et al., 1989; Dolan, 2008), using the output of Study 1 (a hierarchy of values and value creators) as input. All the possible pairs of values underlying the higher-order goal of informed consent were formed as well as all the possible pairs of value creators underlying each value. The collective pairs were presented sequentially (first the value pairs [randomised] and then the value creator pairs for each value [values randomised; value creator pairs randomised within values]). Participants had to evaluate the relative importance within each pair (for example, the importance of the value of control relative to that of fairness). As in Study 1, OPLIS measured privacy literacy. The Affinity for Technology Interaction scale (ATI) measured "*the tendency to actively engage in intensive technology interaction*" (Franke et al., 2019, p. 456).

2.4 Procedure

Study 1. Because of pandemic restrictions and to reach a geographically UK-wide audience, interviews were conducted remotely by VoIP or by telephone, recorded and automatically transcribed. Afterwards, the recordings were played back and any corrections were made to the transcripts. In each interview, the participant was asked to identify value creators (*what* an online consent form should provide) and subsequently for each value creator one or more values (*why* the value creator is important). Interviews lasted from 14 to 34 minutes. After each interview, the participant was directed to an online survey to complete OPLIS.

Study 2. Participants were directed to an online survey that administered demographic questions, a series of AHP pairwise comparisons, OPLIS and the ATI scale.

Ethics. Research ethics approval was obtained from the University of Strathclyde and from REPHRAIN, National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online.

2.5 Data Analysis

Study 1. We used the framework of means-ends chain analysis to identify people's needs (value) and how

these could be achieved (value creators) (Kilwinger and van Dam, 2021). Both researchers coded an initial set of five transcripts. Their individual coding schemes were discussed and a final coding scheme was agreed. One of the authors then coded all the transcripts.

Study 2. AHP analysis of response consistency and weightings was conducted (Dolan et al., 1989). Analysis of variance (ANOVA) techniques were used to analyse differences between unemployed and employed participants on the AHP weightings.

3 FINDINGS

3.1 OPLIS & ATI

The original OPLIS has four dimensions to measure online privacy literacy: institutional practices, technical aspects of data protection, data protection law, and data protection strategies. As explained by Edelsbrunner (2022), knowledge in different domains are often best assessed with formative measurement. Therefore, we created a measure consisting of items from each of these four dimensions. From each dimension, we selected two items, based on the percentage of the sample that answered correctly: between 25 pct and 50 pct, the item with the minimum correctness and, between 50 pct and 75 pct, the item with the maximum correctness. This procedure ensured an equal mix of more difficult and easier items. A t test showed that online privacy literacy did not differ between employed (M = 56.86; SD = 23.57) and unemployed (M = 53.19; SD = 20.79) participants, t = 1.18, df = 198.89, p = 0.24, d = 0.17.

Factor analysis of the Study 2 data was conducted on the ATI and produced a one-factor solution, with 56 pct of variance explained. Factor scores were calculated and used in subsequent analysis. A t test showed that affinity for technology interaction was higher in employed (M = 0.14; SD = 1.02) than in unemployed (M = -0.18; SD = 0.91) participants, t = 2.84, df = 199.31, p = 0.005, d = 0.40.

3.2 Study 1

Study 1 sought to identify a hierarchical means-end structure of informed consent for online services (Figure 1).

Five values were identified: (1) control, (2) uncertainty avoidance, (3) loss aversion, (4) effort minimisation and (5) fairness. Under each value, two or more *value creators* were identified. The value creators (means) underlying each value (end) would contribute to the value. In turn, the values would contribute to the higher-order goal of informed online consent decision-making. The values and underlying value creators are presented here, with illustrative quotations, where P<number> represents a quoted numbered participant.

3.2.1 Control

Control was defined as a user's feeling that they have control. Three value creators contributing to the value of control were identified.

(1) Payment for Data (being paid for giving data/having one's data captured by an online service). Participants expected to be paid for the data they provided, but this was not often not the case: "*I'm a big fan, by the way, of this idea that they pay me for it ... If they're making money off it, I should get my cut.*" (P55)

(2) Access to Services (not having to sign up for certain services in order to be able to read the pages) (see *Fairness* [value], *Should consent be required*[value creator])

(3) Range of Choice Options (having a range of choice options in responding to an online consent form, for example, only the options of accept all or reject all, or a larger set of more fine-grained options that offers more choice).

Participants expected they would be able to select which data will be shared: "*What I want to see in these forms is ... can I selectively choose? Alright, you can have my location, but you can't have something else. You can't track me for example, as I'm using the website.*" (P26) "*You see particulars, my location or something, but I don't remember consenting to that.*" (P26)

3.2.2 Uncertainty Avoidance

Uncertainty avoidance was defined as a user's desire to gain information to reduce or remove uncertainty. Eight value creators contributing to the value of uncertainty avoidance were identified. agree to it and otherwise they would not offer the service.(P29)

(1) Consumers' Rights (information about consumers' rights when they use the specific online service that is provided).

Consumers' rights in consent documents were seen as beneficial for both users and service companies: "*I suppose it should provide what they expect of me and what I can expect of them.*" (P56) "*I would*

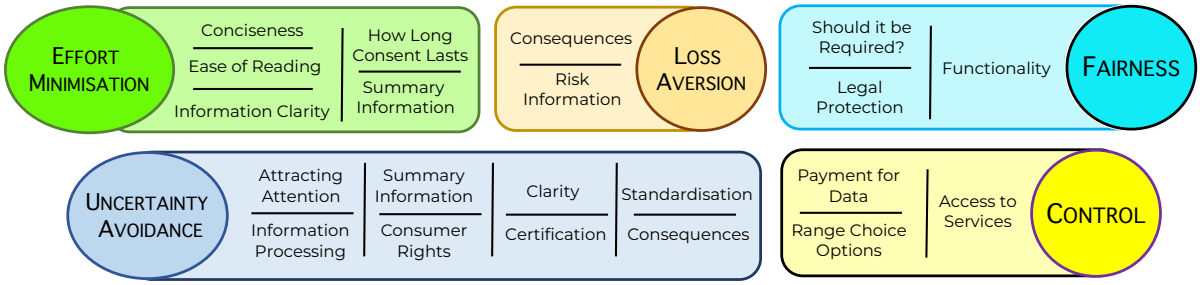


Figure 1: Means-end hierarchy of user values and value creators contributing to informed consent decision making.

like to know what my rights are as a consumer so if there was just a sheet of main bullet points that probably would be better." (P73)

(2) Information Processing (information about what happens to the user's personal data).

Participants expected that a consent document would explain how their data would be stored and be processed, and why: "*Information in such a consent form would include how they handle data and privacy [and] whether they hold data on computers in the USA.*" (P33) "*When information is stored or where it is stored* " (P57)

(3) Attracting your Attention (highlighting important information to attract a your attention). Participants expected that critical information in a consent document would be highlighted in order to attract users' attention before they decided to consent: "*I'm always very of the idea that it should be clear, and if it is very important, it should have something like a red box around it ... should be highlighted ... the ability to follow you to other websites ... The ability to sell the information to unknown and any third party without either compensating me for it or asking my permission.* " (P55)

(4) Information Clarity (how easy it is to understand the online consent text (simplicity and comprehensibility of text) [see effort minimisation].

(5) Consequences (information linked to important consequences for the online-service user) [see loss aversion].

(6) Standardisation (standardisation of forms according to relevant information categories for users).

Standardisation, together with shortening consent documents, would also facilitate users' reading and understanding as a basis for making a consent decision: "*If it was shorter; I think if it if it was standardised so you knew what certain sentences meant and so it was just more bullet points and you knew what that referred to instead of it being a long complex thing all the time.*" (P77)

(7) Certification (a sign presented on the consent form to show certification by a trusted party). Certification with icon visualization could communicate consent information quickly and clear. "*[If] it was icons that you got used to know what they mean, like the Facebook icons. Yes, [if] there was an icon 'we sell your data'. [It] would just be quick when you get used to seeing [the icon], when you know instantly what we were signing up to.*" (P77)

(8) Summary Information (summary consent information, with links to further details, for example, clickable icons that link to detailed information).

The expectation was that providing summary information with links to detailed information would reduce the required reading time to make a consent decision, make it more likely that users would read the information and cater for users with different needs in terms of information detail: "*[A] bit more streamlined so you've got four options, so you don't have to click through. You might have the option to go through and read more information, but you shouldn't have to. It should give you a brief summary of each thing that can select.*" (P83)

3.2.3 Effort Minimisation

Effort minimisation was defined as a reduction in the effort required to process the information that is presented. Five value creators contributing to the value of effort minimisation were identified.

(1) Conciseness (conciseness of text, for example, using bullet points). Concise writing in consent documents could facilitate reading and understanding: "*Should follow guidance from the Plain English Campaign. Online consent forms should be brief and concise ... [The] benefit should be easily read and understood in 2 to 3 minutes.*" (P33)

(2) Ease of Reading (how easy it is to read the online consent text, for example in terms of font size). Text should facilitate reading, for example by use of the sufficiently large font, but participants' experience was the opposite: "*Should also make the type (font) bigger. Should use normal print.*" (P33)

(3) How Long Consent Lasts (one-time consent process or consent required each time the online service is accessed). Participants experienced the same consent process on repeat use of the same application, which was seen as inefficient: "*I always find it quite strange when they have to ask again.*" (P55)

(4) Information Clarity (how easy it is to understand the online consent text). Participants felt that online consent text should be understandable also by non-specialist users in technology and data protection. "*Someone like me who is not very techy doesn't really understand ... any information.*" (P26) "*A bit more simple, a lot less kind of like jargon and lingo*". (P57)

(5) Summary Information (summary consent information, with links to further detail (for example, clickable icons that link to detailed information) [see *Uncertainty Avoidance*]

3.2.4 Fairness

Fairness was defined as a user's feeling that their personal rewards and costs and those of another party are in balance with each other. Three value creators contributing to the value of fairness were identified.

(1) Should Consent be Required? (feeling that the user's need for consent is in balance with the extent of the functionality that the online service or website provides to the user).

Participants felt that consent procedures should be proportionate int that users' effort should be in balance with the functionality that consent gives access to: "*But you know if all I really want to do is look at a picture or read a very brief article, I don't want to read 30 pages of terms and conditions.*" (P55)

(2) Functionality (feeling that the nature or volume of personal data the user provides is in balance with the functionality they receive from the online service or website)

Users realised that online services often operate a business where, as a condition for using an online service for free of monetary change, users give their personal data. Users consented although they did not (fully) agree: "*You make a deal with the devil. You've got to pay the price. So, yeah, I'm kind of one of those where if I want to use a service, I have to accept that I give them my data and they use it the way they see fit.*" (P55)

(3) Legal Protection (feeling that the user's difficulty of understanding the complexity of the text is in balance with protection that the text gives the online service provider against legal action).

The use of specialist legal language that was challenging for users to understand was seen as unfair: "*I think it should be clear enough that you don't have to have done a law course at university to understand the basics.*" (P55) "*It would be important to avoid legalese in the phrasing of these standardised forms.*" (P64)

3.2.5 Loss Aversion

Loss aversion was defined as a user's preference to avoid losses. Two value creators contributing to the value of loss aversion were identified.

(1) Risk Information (risk-related data and communication of potential risk). A strategy for users to reduce risk was to stay with trusted major companies rather than rely on consent documents: "*I don't even look if I know a company's name ... I tend to just trust it anyway. So that's why I tend to stick with the big names of the brand.*" (P57)

(2) Information about Consequences (information linked to important risky consequences for the user).

Participants believed that about information risky consequences of consent for online services was not always available to or not read by users, with serious potential consequences. In response, a strategy was for users to reduce the personal information they gave away: "*I mean you sign up to one site and you didn't know but probably ... access to God knows how many countries ... data being sold to Russia and China or whatever exactly that they would be doing on a daily basis without [you] knowing.*" (P77)

3.3 Study 2

Study 2 sought to quantify the perceived relative importance of the values and value creators identified in Study 1.

Consistency. Consistency (of comparative judgment) ratios were calculated for the top-level goal of informed online consent from the pairwise compared values and for each of four of the five values from the pairwise compared values. (Consistency did not apply to the value of loss aversion, as there were two value creators.) According to the standard cut-off for

consistency (consistency ratio, CR < 0.10) 27 pct to 36 pct of cases was consistent, and 63 pct to 69 pct was consistent with a cut-off of 0.20.

Weightings, sensitivity analysis. Sensitivity analysis was conducted in the subsequent analysis of weightings for values and value creators to establish the robustness of the findings. The pattern of results of means and confidence intervals for informed online consent and each of the five values was the same for the two cut-offs; the pattern of inferential statistics was the same for the two cut-offs (see results below).

Weightings. The means with confidence intervals (Diagrams in Figure 2) show substantial variability among the values for informed online consent and among the value creators for each value (except for loss aversion). t-tests showed no effect of employment status on any of the weightings. Two-way mixed ANOVA, with Greenhouse-Geisser correction for sphericity, showed *no main effect of employment status and no interaction effect of status with value or value creator on any of the measures*, for informed online consent or any of the four values. Two-way mixed ANCOVA showed that neither were ATI and OPLIS significant covariates. Therefore, the results of one-way repeated-measures ANOVA with value or value creator as the independent variable, corrected for sphericity, are reported here. The results for CR < 0.10 are reported here (the results for CR < 0.20 [available on request] follow the same pattern). The main effects of value (for informed online consent) and value creator (for each of the values) are reported here as well as pairwise comparisons.

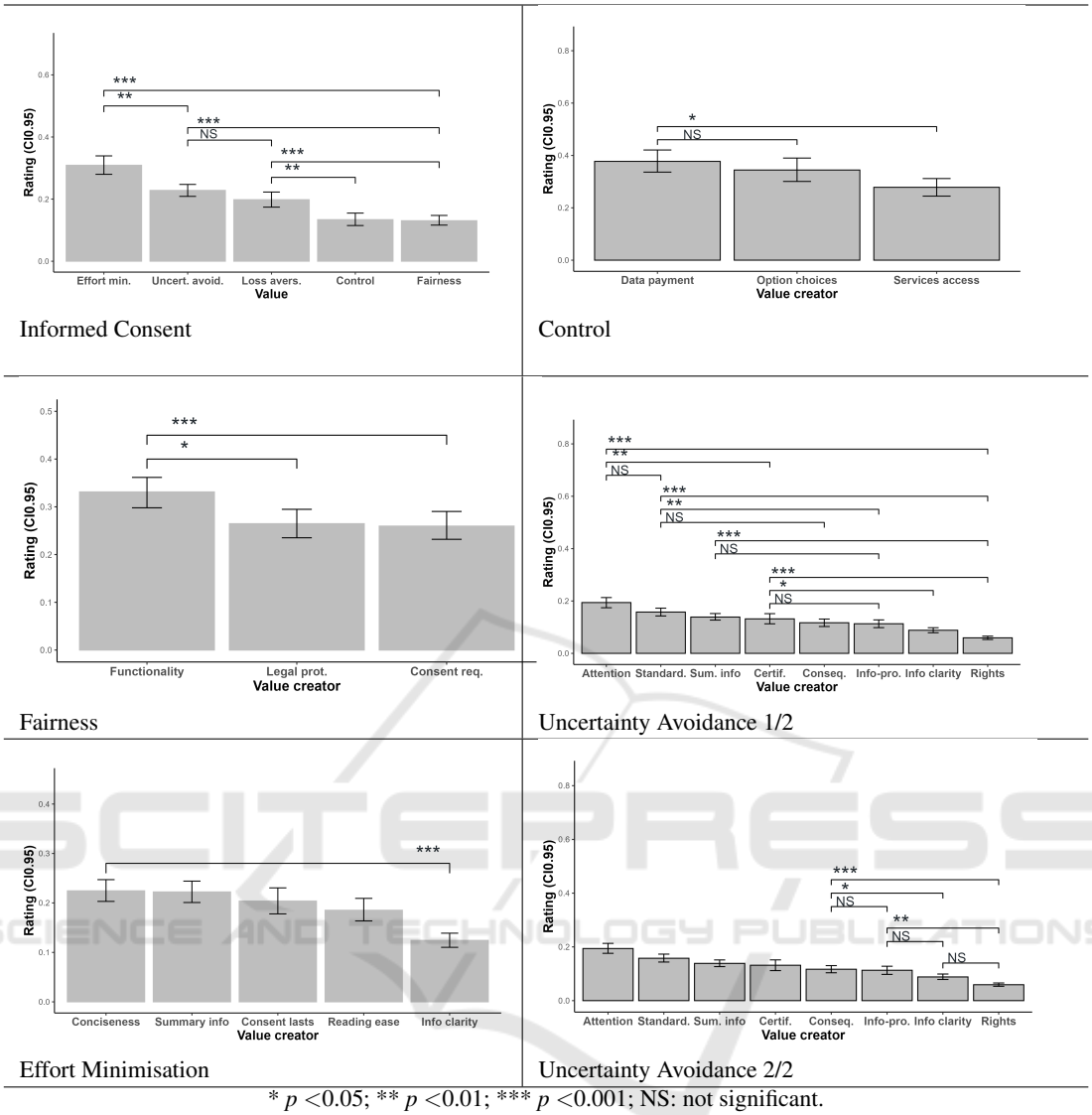
For *informed online consent*, the effect of value was significant, F (3.12, 227.75) = 33.67, $p < 0.001$, *pes* = 0.32. Effort minimisation was the dominant value (greater mean than that of the other values), followed by uncertainty avoidance and loss aversion. For the value of *control*, the effect of value creator was significant, F (1.85, 105.62) = 3.74, $p = 0.03$, *pes* = 0.06. The mean for payment for data was greater than that for access to services. For the value of *fairness*, the effect of value creator was significant, F (1.97, 140.14) = 8.08, $p < 0.001$, *pes* = 0.10. Functionality was the dominant value (greater mean than that of the other value creators). For the value of *uncertainty avoidance*, the effect of value creator was significant, F (4.89, 246.89) = 20.20, $p < 0.001$, *pes* = 0.32. Attracting your attention was the most dominant value creator (higher mean than that of the other value creators, except for Standardisation), followed by Standardisation, and summary information and certification. For the value of *effort minimisation*, the effect of value creator was significant, F (3.26, 205.53) = 10.29, $p < 0.001$, *pes* = 0.14. Information clarity had the lowest weighting (mean smaller than that of the other value creators); the other value creators were not significantly different. For the value of *loss aversion*, the effect of value creator was not significant, F (1, 203) = 2.61, $p = 0.11$, *pes* = 0.01.

4 DISCUSSION & REFLECTION

The relative quantification of values and value creators shown in Figure 2 is instructive. In particular, the results show that effort minimisation is most important. This justifies our proposal of reducing length of policies so as to reduce effort. However, the second most important one is uncertainty avoidance, so it is important to ensure that in reducing length we ensure that the information people want is easily accessed. We can use the value creators as a steer in terms of what information people want to see in a consent form.

The surprising finding is related to the relatively low ranking of control. This is interesting because the very consent form mechanism is based on the assumption that users want to control their privacy, in other words have control over who has their data and how these are used (Human Rights Watch, 2018). The relatively low ranking of control, accompanied by the low ranking of consumer rights as a value creator, by both unemployed and employed participants, calls this assumption into question. This apparent indifference might be due to the issues mentioned earlier, namely the frequency with which users are presented with these forms, and the effort that is required to process them. It might be that they are making a perfectly reasonable trade-off in order to be able to get anything done at all.

The other surprising low-ranked value is fairness, because we know that humans have a deep need to be treated fairly (Folger et al., 1998; Folger and Cropanzano, 2001; Nicklin et al., 2011; Folger and Cropanzano, 2011; Ganegoda and Folger, 2015; Folger and Shukla, 2019). Even so, our participants indicated that this value did not mean as much to them as the other values. It might be that people have come to expect to be treated unfairly in this domain, or that effort minimisation and uncertainty avoidance are just that much more important in this context.



* p <0.05; ** p <0.01; *** p <0.001; NS: not significant.

Figure 2: Value Creator Weightings for Informed Online Consent Means with Confidence Intervals.

5 CONCLUSION & FUTURE WORK

To address problems associated with online consent from a user's perspective, we suggest a value-driven approach which can be used to remove information (and shorten the policy) by providing information that users value rather than all possible information in the consent form. To apply this approach, we needed to understand what users value. We decided to focus on the values of unemployed users given the particular challenges they face in protecting their privacy online.

The *raison d'être* for this research was thus to inform a value-driven approach in reducing the length of consent forms, with a specific focus on unemployed users. We carried out two studies which, together, delivered a quantified hierarchy of values and value creators. This will inform the next stage of our study where we will carry out an empirical study to compare user preference and comprehension of a traditional consent form versus a value-driven consent form.

As future work, it would be very interesting and important to explore the reasons behind these rankings so that we understand users' thought processes when contemplating and dealing with online consent forms.

REFERENCES

Beauchamp, T. L. (2011). Informed consent: its history, meaning, and present challenges. *Cambridge Quarterly of Healthcare Ethics*, 20(4):515–523.

Chomanski, B. and Lauwaert, L. (2023). Online consent: how much do we need to know? *AI & SOCIETY*, pages 1–11. https://doi.org/10.1007/s00146-023-01790-2.

Dolan, J. G. (1989). Medical decision making using the analytic hierarchy process: choice of initial antimicrobial therapy for acute pyelonephritis. *Medical Decision Making*, 9(1):51–56.

Dolan, J. G. (2008). Shared decision-making - transferring research into practice: The analytic hierarchy process (ahp). *Patient Education and Counseling*, 73(3):418 – 425. 10.1016/j.pec.2008.07.032.

Dolan, J. G., Isselhardt, B. J., and Cappuccio, J. D. (1989). The analytic hierarchy process in medical decision making: a tutorial. *Medical Decision Making*, 9(1):40–50. https://doi.org/10.1177/0272989X8900900108.

Edelsbrunner, P. A. (2022). A model and its fit lie in the eye of the beholder: Long live the sum score. *Frontiers in Psychology*, 13:986767. https://doi.org/10.3389/fpsyg.2022.986767.

Folger, R. and Cropanzano, R. (2001). Fairness theory: Justice as accountability. In Greenberg, J. and Cropanzano, R., editors, *Advances in Organizational Justice*, volume 1, pages 1–55. Stanford University Press.

Folger, R. and Cropanzano, R. (2011). Social hierarchies and the evolution of moral emotions. In Schminke, M., editor, *Managerial Ethics*, pages 225–252. Routledge. https://doi.org/10.4324/9780203852460.

Folger, R. and Shukla, J. (2019). A fairness theory update. In Lind, E. A., editor, *Social Psychology and Justice*, pages 110–133. Routledge. https://doi.org/10.4324/9780203852460.

Folger, R. G., Folger, R., and Cropanzano, R. (1998). *Organizational Justice and Human Resource Management*, volume 7. Sage.

Franke, T., Attig, C., and Wessel, D. (2019). A Personal Resource for Technology Interaction: Development and Validation of the Affinity for Technology Interaction (ATI) Scale. *International Journal of Human-Computer Interaction*, 35(6):456 – 467. 10.1080/10447318.2018.1456150.

Ganegoda, D. B. and Folger, R. (2015). Framing effects in justice perceptions: Prospect theory and counterfactuals. *Organizational Behavior and Human Decision Processes*, 126:27–36. https://doi.org/10.1016/j.obhdp.2014.10.002.

Human Rights Watch (2018). The eu general data protection regulation. https://www.hrw.org/news/2018/06/06/eu-general-data-protection-regulation.

Kilwinger, F. B. and van Dam, Y. K. (2021). Methodological considerations on the means-end chain analysis revisited. *Psychology & Marketing*, 38(9):1513–1524. https://doi.org/10.1002/mar.21521.

Masur, P. K., Teutsch, D., and Trepte, S. (2017). Entwicklung und validierung der online-privatheitskompetenzskala (OPLIS). *Diagnostica*.

McDonald, A. M. and Cranor, L. F. (2008). The cost of reading privacy policies. *Isjlp*, 4:543.

Nicklin, J. M., Greenbaum, R., McNall, L. A., Folger, R., and Williams, K. J. (2011). The importance of contextual variables when judging fairness: An examination of counterfactual thoughts and fairness theory. *Organizational Behavior and Human Decision Processes*, 114(2):127–141. https://doi.org/10.1016/j.obhdp.2010.10.007.

Parfenova, D., Niftulaeva, A., and Carr, C. T. (2024). Words, words, words: participants do not read consent forms in communication research. *Communication Research Reports*, pages 1–11.

Seabright, P. (2010). *The company of strangers*. Princeton University Press.

Solove, D. J. (2012). Introduction: Privacy self-management and the consent dilemma. *Harv. L. Rev.*, 126:1880.

Trepte, S., Teutsch, D., Masur, P. K., Eicher, C., Fischer, M., Hennhöfer, A., and Lind, F. (2015). Do people know about privacy and data protection strategies? Towards the "Online Privacy Literacy Scale" (OPLIS). In Gutwirth, S., Leenes, R., and de Hert, P., editors, *Reforming European data protection law*, pages 333–365. Springer.

Van Schaik, P., Irons, A., and Renaud, K. (2024). Privacy in uk police digital forensics investigations. In *HICSS*, pages 1901–1910.