

Online Appendix: Anchoring and Interactivity in the Digital Age: How Online Interfaces Reshape Credit Card Repayment Decisions

Elisa Durán-Micco*, Denise Laroze†, & Daniel Schwartz‡

* Department of Industrial Engineering, University of Chile, Chile.

† Centro de Investigación en Complejidad Social, Universidad del Desarrollo, Santiago, Chile. ‡ Department of Industrial Engineering, University of Chile, and Instituto Sistemas Complejos de Ingeniería (ISCI), Chile.

Introduction to the Online Appendix

This Online Appendix is supplementary material for the paper "Anchoring and Interactivity in the Digital Age: How Online Interfaces Reshape Credit Card Repayment Decisions."

This document contains two sections:

Section A includes the complete experimental questionnaire, with instructions, treatment screens, and questions as presented to participants in the pre-registered online experiment. The materials are provided in the order that participants encountered them.

Section B includes supplementary data analysis that provides robustness to estimations presented in the main text.

All replication materials for this study, including the pre-registration, ethics documentation, raw data, and analysis code, are publicly available at our GitHub repository: <https://github.com/deniselaroze/Anchoring-and-Interactivity-in-the-Digital-Age>

Section A - Experiment Questionnaire

Consent1 - Thank you very much for participating in this survey. We are interested in your opinion about using credit cards, which allow the acquisition of products and services through debt that must be paid off later. We appreciate your time and dedication in sharing your opinion. The survey will take about 4 minutes. All answers are anonymous and confidential. Please answer the following question before you start:

I confirm I am over 18 years old, my participation is voluntary, and I know I can terminate my participation at any time.

☐ Yes

☐ No

ProlificID - What is your Prolific IDPlease note that this response should auto-fill with the correct ID

Q145 - Now, we will check if you are eligible to participate in this survey

CountryResidence - In which country do you currently reside?

▼ United States of America ... Zimbabwe

CreditCardOwned - Which of these credit cards do you own? You can select more than one option.

- ☐ Visa
 - ☐ MasterCard
 - ☐ American Express
 - ☐ Other
 - ☐ ☒ None
-

Intro - On the next screen, you will find information about a credit card payment. Imagine it is your card, and you are about to make your monthly payment. Considering this scenario, decide how much to pay.

Please continue to view the payment website.

[Standard Payment Baseline Screen]

Which payment option will you choose?:

- ☐ Statement balance
 - ☐ Minimum payment
 - ☐ Other amount (\$) _____
-

[Statement Balance Treatment Screen]

Which payment option will you choose?:

- ☐ Statement balance
- ☐ Minimum payment
- ☐ Other amount (\$) _____
-

[Table Treatment Screen]

Which payment option will you choose?:

- ☐ Statement balance
- ☐ Minimum payment
- ☐ Other amount (\$) _____
-

[Slider – Low Treatment Screen]

Which payment option will you choose?:

- ☐ Statement balance
- ☐ Minimum payment
- ☐ Other amount (\$) _____
-

[Slider – High Treatment Screen]

Which payment option will you choose?:

- ☐ Statement balance
- ☐ Minimum payment
- ☐ Other amount (\$) _____
-

S1 - How confident are you that the decision you made regarding the payment amount was the right one?

	Extremely unconfident	Very unconfident	Unconfident	Neither confident nor unconfident	Confident	Very confident	Extremely confident
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

LateFees_Intro - For the upcoming two questions, you'll be provided with fictional credit card statements. Answer to the best of your ability, and if you are unsure, feel free to indicate so.

LateFees1 - Given the following credit card statement:

Credit Card Bill	
Statement balance	\$1,840
Minimum payment	\$37
Current balance	\$2,120
Credit limit	\$3,000

Please indicate the lowest amount that should be paid to avoid late fees, even if interest charges must be paid.

- ☐ \$0
 - ☐ \$37
 - ☐ \$1,840
 - ☐ \$2,120
 - ☐ \$3,000
 - ☐ It is not possible to know this information
 - ☐ I am not sure
-

LateFees2 - Given the following credit card statement:

Credit Card Bill	
Statement balance	\$1,355
Minimum payment	\$41
Current balance	\$1,713
Credit limit	\$2,000

Please indicate the lowest amount that must be paid to avoid interest charges.

- ☐ \$0
- ☐ \$41
- ☐ \$1,355
- ☐ \$1,713
- ☐ \$2,000
- ☐ It is not possible to know this information
- ☐ I am not sure

FL Intro - The following three questions aim to measure certain financial concepts. Answer to the best of your ability, and if you are unsure, feel free to indicate so.

FL1 - Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- ☐ More than \$102
 - ☐ Exactly \$102
 - ☐ Less than \$102
 - ☐ Don't know
 - ☐ Refuse to answer
-

FL2 - Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy...

- ☐ More than today
 - ☐ Exactly the same as today
 - ☐ Less than today
 - ☐ Don't know
 - ☐ Refuse to answer
-

FL3 - Do you think the following statement is true or false? Buying a single company stock usually provides a safer return than a stock mutual fund.

- ☐ True
- ☐ False
- ☐ Don't know
- ☐ Refuse to answer

DebtAversion1 - To what extent do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am the type of person who enjoys spending money in the present and then figures out how to manage in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am the type of person who prefers to live without getting into debt or borrowing money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DemographicsIntro - Finally, please answer the following three questions about yourself.

Demo_UsualPayment - What's your typical credit card bill payment in the last 12 months?

- ☐ The full statement balance
 - ☐ An amount between the minimum payment and the statement balance
 - ☐ Only the minimum payment
 - ☐ Less than the minimum payment
-

Demo_Education - What is the highest level of education you have achieved?

- ☐ Less than a high school diploma or equivalent
 - ☐ High school graduate
 - ☐ Some college but no degree
 - ☐ Bachelor's degree
 - ☐ Advanced degree (Master's degree, professional degree, or doctoral degree)
-

Demo_Income - What is your household's annual income?

- ☐ \$24,999 or under
- ☐ \$25,000 to \$44,999
- ☐ \$45,000 to \$64,999
- ☐ \$65,000 to \$94,999
- ☐ \$95,000 to \$134,999
- ☐ \$135,000 to \$249,999
- ☐ \$250,000 or over

End Prolific - Thank you for participating in this study. Please click the button below to be redirected back to Prolific and register your submission.

Free1 - Thank you for your participation. Now that you have finished the survey, we invite you to optionally share a final reflection about the survey.

When you were first presented with a credit card statement in this survey, what factors did you consider when deciding how much to pay?

Free2 - Do you have any general comments about the survey? Any question that was difficult to understand?

Section B - Supplementary Data Analyses

	Standard	Statement Balance	Slider Low	Slider High	Reference Table	Total	P-value
Age							
<i>Mean (SD)</i>	40.5 (13.2)	39.4 (12.2)	40.4 (13.2)	40.7 (13.0)	40.7 (13.5)	40.32 (13.0)	0.45
Gender							
<i>Female</i>	52.49%	50.10%	47.31%	50.71%	49.30%	49.98%	0.58
Education							
<i>Less than high school diploma</i>	0.00%	0.60%	0.60%	0.40%	0.60%	0.44%	0.54
<i>High school graduate</i>	12.13%	8.58%	11.78%	10.71%	8.35%	10.31%	0.15
<i>Some college but no degree</i>	23.26%	24.15%	22.95%	25.66%	27.24%	24.65%	0.48
<i>Bachelor's degree</i>	43.54%	44.31%	46.31%	44.44%	44.14%	44.55%	0.93
<i>Advanced degree</i>	21.07%	22.36%	18.36%	18.38%	19.68%	19.98%	0.45
Household Income							
<i>\$24,999 or under</i>	9.94%	6.99%	7.58%	9.09%	9.54%	8.63%	0.38
<i>\$25,000 to \$44,999</i>	14.71%	14.37%	15.57%	15.15%	15.31%	15.02%	0.99
<i>\$45,000 to \$64,999</i>	14.91%	19.56%	17.37%	18.59%	17.10%	17.50%	0.36
<i>\$65,000 to \$94,999</i>	20.48%	21.96%	22.16%	20.20%	21.87%	21.33%	0.92
<i>\$95,000 to \$134,999</i>	17.89%	18.36%	17.17%	17.17%	17.89%	17.70%	0.99
<i>\$135,000 to \$249,999</i>	19.09%	13.97%	16.57%	16.97%	15.90%	16.50%	0.29
<i>\$250,000 or over</i>	2.98%	4.79%	3.59%	2.42%	2.39%	3.24%	0.18
Financial literacy							
<i>Mean (SD)</i>	2.48 (0.81)	2.46 (0.82)	2.42 (0.86)	2.43 (0.83)	2.40 (0.84)	2.44 (0.83)	0.54
Total N	503	501	501	495	503	2503	

Table B.1: Characteristics of participants assigned to each of the treatments.

	(1) Minimum	(2) Revolving	(3) Full
Statement Balance	0.164 (0.214)	−0.433** (0.142)	0.309* (0.131)
Reference Table	0.138 (0.215)	0.134 (0.134)	−0.170 (0.127)
Slider-Low	0.164 (0.214)	0.268* (0.132)	−0.306* (0.127)
Slider-High	0.112 (0.217)	−0.089 (0.137)	0.039 (0.129)
Constant	−2.320*** (0.156)	−0.744*** (0.095)	0.358*** (0.091)
Log Likelihood	−810.418	−1,552.942	−1,688.764
<i>N</i>	2,503	2,503	2,503

Table B.2: Logit regression models for repayment outcomes. Robust standard errors in parentheses.* $p < .05$, ** $p < .01$, *** $p < .001$

	Financial Literacy (1)	Understand (Yes) (2)	Debt Aversion (3)	Gender (Male) (4)	SES (High) (5)
Statement Balance	-0.012 (0.101)	0.098* (0.038)	-0.028 (0.110)	0.022 (0.044)	0.054 (0.079)
Slider-Low	-0.220* (0.099)	-0.047 (0.038)	-0.034 (0.108)	-0.120** (0.044)	-0.093 (0.079)
Slider-High	-0.101 (0.099)	0.021 (0.038)	-0.024 (0.112)	0.002 (0.044)	-0.015 (0.078)
Reference Table	-0.157 (0.098)	-0.007 (0.038)	0.100 (0.111)	-0.084 (0.044)	-0.134 (0.077)
Moderator (X)	0.063* (0.027)	0.231*** (0.044)	0.106*** (0.014)	0.035 (0.044)	0.054*** (0.012)
Statement Balance x X	0.035 (0.038)	-0.089 (0.061)	0.017 (0.020)	0.100 (0.061)	0.005 (0.018)
Slider-Low x X	0.061 (0.038)	-0.087 (0.064)	-0.008 (0.020)	0.082 (0.063)	0.005 (0.018)
Slider-High x X	0.047 (0.038)	-0.023 (0.062)	0.005 (0.020)	0.015 (0.062)	0.008 (0.018)
Reference Table x X	0.050 (0.038)	-0.099 (0.064)	-0.027 (0.020)	0.081 (0.062)	0.026 (0.018)
Constant	0.432*** (0.071)	0.513*** (0.027)	0.040 (0.075)	0.572*** (0.031)	0.377*** (0.055)
R^2	0.042	0.038	0.095	0.020	0.054
N	2502	2502	2501	2503	2501

Table B.3: Linear regression models to examine heterogeneous treatment effects, using full payment as dependent variable. Robust standard errors in parentheses. Robust standard errors in parentheses. * $p < .05$, ** $p < .01$, *** $p < .001$

	(1) Satisfaction
Statement Balance	0.003 (0.079)
Reference Table	−0.097 (0.079)
Slider-Low	−0.172* (0.084)
Slider-High	−0.211* (0.087)
Constant	5.859*** (0.056)
R ²	0.004
N	2,502

Table B.4: Linear regression model for satisfaction. Robust standard errors in parentheses.* $p < .05$, ** $p < .01$, *** $p < .001$