Colors Can Help Consumers Understand Contracts

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Abstract

Empirical evidence suggests that consumers have a limited understanding of the contracts they sign. Scholars have found that the major approaches for improving understanding of consumer contracts, such as writing key contract terms in all-caps, are ineffective. Against this background, we: (i) introduce a more nuanced definition of contract understanding; (ii) run two experiments to show that highlighting key contractual terms using colors can significantly improve contract understanding; and (iii) use a Saliency Attentive Model (SAM) to investigate the mechanism through which colors affect understanding of key clauses. Our results suggest that policymakers should encourage firms to flag the key terms of online contracts using colors instead of by writing such terms in all-caps. The SAM suggests that at least in part our results are driven by the isolation effect, which would allow policymakers to predict when colors are likely to be effective in improving comprehension of contractual terms.

Keywords: colors, framing, conspicuous clauses

1. INTRODUCTION

People are routinely faced with take-it-or-leave-it consumer contracts that have direct implications for their lives (Sommers, 2021). But while the duty to read doctrine assumes that a reasonable person would read an agreement before assenting to its terms (Benoliel and Becher, 2019), ample empirical evidence suggests that people spend an extremely limited amount of time reading take-it-or-leave-it (or "adhesive") consumer contracts (Marotta-Wurgler, 2011, Bakos et al., 2014). This poses two issues (Ayres and Schwartz, 2014). First,

it is problematic to infer consent if consumers have not read the terms they have allegedly consented to. Second, firms do not need to compete to offer better terms if consumers do not read and understand what they are signing. Policymakers have attempted to address these problems in a variety of ways, ranging from requiring companies to use simple language in adhesive contracts to imposing limits on the length of consumers' contracts (Section 2.1).

One important strategy is requiring that particularly significant terms be written in a "conspicuous" manner in order to be enforceable. The most common way that companies attempt to meet "conspicuousness" tests is by writing the relevant term in all capital letters ("all-caps"). The "century-old belief, held by courts, legislators, and consumer protection agencies alike, [is] that all-caps improve consumer notice of important terms in their agreements" (Arbel and Toler, 2020). While the use of all-caps in consumer contracts is pervasive, scholars have tested the effectiveness of this (and other) approach(es) to flag important contractual terms, and the results have been disappointing (Ben-Shahar and Chilton, 2016, Arbel and Toler, 2020).

The widespread use of all-caps to emphasize important clauses traces its roots to court decisions that date back over a century (Arbel and Toler, 2020). As early as the year 1899, courts held that writing a waiver provision in all-caps was per se effective in rendering the term conspicuous and hence enforceable.[1] At the time, contracts were generally redacted on paper, and therefore relying on capital letters was the most obvious and cost-effective way to emphasize an important clause. In the modern era, by contrast, take-it-or-leave-it consumer contracts are routinely signed online. This introduces new possibilities for contract design, while at the same time introducing new challenges.

The new possibilities emerge because it is cheap and easy to experiment with contractual design online. The cost of printing paper contracts using color, for example, is significant, whereas online it is essentially free. Online contracts also introduce new and significant challenges, however. In fact, consumers in the online setting may never even have the

[1] Toy v. Long Is. R.R. Co., 26 Misc. 792, 793, 56 N.Y.S. 182, 182 (N.Y. App. Term 1899)

contract terms before their eyes as the contract might be hidden behind hyperlinks. Courts have held that the continued browsing of a website, or clicking of a button, may under certain circumstances bind consumers to contract terms accessible at a hyperlink that the consumer need not actually visit (Section 2.1). If consumers never click the link, they will never notice or read *any* of the contract's terms, however conspicuous they may be.

Our study focuses on the new possibilities online contracts present, rather than on the new problems introduced by so-called "browsewrap" and "clickwrap" agreements. It explores how, *assuming an online contract is actually viewed by a consumer*, key contract terms may be designed to increase the likelihood that consumers will notice, read and comprehend them. Specifically, in this article we advance and test the hypothesis that colors can be more effective than all-caps in directing readers' attention to the most important terms of a contract and in improving contract understanding. Further, we start investigating the impact on readers' understanding of key features of colors, like hue and contrast. Last, we use a Saliency Attentive Model (SAM) to investigate the mechanism through which colors affect understanding of key clauses.* Relying on colors is a natural choice because they have proven extremely effective in directing people's attention in other domains (Singh, 2006), are among the very few attributes that "undoubtedly" guide visual search (Wolfe and Horowitz, 2017), and because they can affect cognitive task performance (Mehta and Zhu, 2009, Elliot and Maier, 2014).

To test our hypothesis, we devise two online experiments with an identical structure on Prolific.co (N = 4000 in Experiment I and N = 1600 in Experiment II). Experiment I aimed at establishing that colors can be effective in improving contract understanding. To this end, we tested the effectiveness of yellow highlight because previous studies in other domains had identified yellow as particularly effective (Strobelt et al., 2015), and because yellow is among the colors that stimulate the most photoreceptors in the human eye (Terrado et al., 2022). Experiment II aimed at investigating which features of colors can affect contract understanding. Therefore, we replicated the same experiment (but with a different sample of respondents) and tested the effect of four different colors. The first color was a high

contrast green because it is one of the few colors that against a black text provides a contrast comparable to that of a yellow highlight. The remaining colors were a red, a blue and a low contrast yellow (see Section 3 for the precise features of these colors). We selected these three colors because they have an almost identical contrast with a black text, which allows us to isolate the effect of hue.

The focus of the experiments was the terms and conditions (T&C) of an Amazon gift card, in which the company name was omitted. At the beginning of the experiments, the respondents in all groups saw the same text, which informed them that they had entered a lottery and they could decide their possible prize. The choice we offered was between a $20 cash payment via Prolific.co or an Amazon gift card worth $25. Immediately below, we included the T&C of the gift card. This setting had the important advantage of not informing respondents that our main focus was their understanding of the T&C, which may have dramatically altered respondents' behavior (Ben-Shahar and Chilton, 2016).

The T&C of Amazon gift cards consist of eight sections. The section "Limitation of Liability" is the only one that appears in all-caps, and the treatment involved changing its format. In Experiment I respondents were randomly assigned to one of four different groups. A first group of respondents was assigned to the all-caps group and saw the T&C with the original formatting. The other respondents were assigned to one of the following groups: lower case, capital letters yellow and lower case yellow. After exposing respondents to the T&C, we asked questions designed to test their comprehension. Experiment II was launched with a new sample of respondents; it was identical to Experiment I except that the section Limitation of Liability appeared highlighted in one of the four colors selected (high contrast green, red, blue, low contrast yellow).

In the first experiment, we find that yellow is extremely effective in fostering understanding of the treated section, while confirming the result of previous studies that all-caps is ineffective (Arbel and Toler, 2020). In our second experiment, we observe that hue matters, as colors with different hue but the same contrast have a different impact on understanding. Moreover, we find that high contrast colors do *not* systematically outperform low contrast

colors. A hypothesis is that, above a certain threshold, increasing contrast no longer necessarily improves understanding. Further, we observe that all colors tested perform significantly better than all-caps and that different colors are more effective in improving different dimensions of understanding.

Last, we use the Saliency Attentive Model developed by Cornia et al. (2018) and applied also in Li & Camerer (2022) and in Bose et al. (2022) to investigate a possible mechanism through which colors might be affecting understanding. Our results provide preliminary evidence that – unlike all-caps – in our experiment colors trigger the well-known isolation effect (Hunt and Lamb, 2001, Chee and Goh, 2018). The basic idea behind the isolation effect is that when an item is made distinctive from other items, encoding of the information related with that item will be improved (Von Restorff, 1933, Chee and Goh, 2018).[2]

Our paper makes a number of contributions to the literature. First, it starts exploring the role that colors may play in designing online contracts. Our results suggest that colors are significantly more effective than capital letters in directing consumers' attention and in improving their understanding, a finding with important implications for policymakers in a variety of domains (see Section **??**). Our experiment also starts shedding some light on how to identify the most effective colors to improve consumers' understanding. Second, our paper introduces a more nuanced and layered definition of contract understanding. In particular, previous studies have attempted to measure understanding relying exclusively on multiple-choice questions in which the correct answer closely matches the wording used in the text given to respondents (Ben-Shahar and Chilton, 2016). However, this approach has many drawbacks (see Section 2.2), including the fact that multiple-choice questions framed in this way test visual memory and answer recognition more than reading comprehension (Sam et al., 2018). Third, thanks to the use of a Saliency Attentive Model our paper uncovers a possible mechanism through which colors can improve understanding. In particular, colors can increase the distinctiveness of the key contractual clauses, and by doing so improve

[2]Encoding is defined as initial learning of information (McDermott and Roediger, 2018).

information encoding. If this is indeed the mechanism at play, two important consequences follow: (1) by running a Saliency Attentive Model on the target text policymakers can immediately determine whether the use of colors is likely to be effective; (2) it offers insights on how to frame contracts to maximize colors' effect on respondents' understanding (see Section 5.2.1). Last, the experiments were carried out using a high external validity setting that did not involve deception. Respondents were not explicitly primed to focus unnaturally on reading the T&C, yet their choice of the prize was consequential. Respondents were not deceived, because those who won the lottery were in fact awarded the prize of their choice.

Our paper proceeds as follows. We begin by describing the background literature, with a particular focus on the legal landscape, the literature on text comprehension and the role that colors play in influencing perception and cognitive task performance. We then describe in detail our experiments and present our results. Finally, we discuss the implications of our results for future research and policy.

2. BACKGROUND LITERATURE

2.1. Legal Background

If you indicate acceptance of a written contract, courts will typically hold that you are bound by all the terms contained therein, regardless of whether you read them or not.[3] This principle, which gives rise to the so-called "duty to read," flows from the objective theory of assent—because courts assume that a reasonable person would read a written offer in its entirety before indicating acceptance, it matters not whether you actually did so (Benoliel and Becher, 2019). In the context of negotiated contracts between parties with equal bargaining power, the duty to read has many laudable qualities. For example, it encourages contracting parties to read offers carefully and to bargain over objectionable

[3]See, e.g., Marin Storage & Trucking, Inc. v. Benco Contracting & Eng'g, Inc., 89 Cal. App. 4th 1042, 1049 (2001) ("Every contract requires mutual assent or consent [], and ordinarily one who signs an instrument which on its face is a contract is deemed to assent to all its terms. A party cannot avoid the terms of a contract on the ground that he or she failed to read it before signing.").

terms ex ante, and ex post it protects a counterparty's reasonable expectations and aids in judicial administrability. In the ubiquitous context of take-it-or-leave consumer contracts (also called "contracts of adhesion" or "standard form contracts"), however, the duty to read has been subject to immense academic critique.[4]

Consumers have no ability to bargain over objectionable terms in take-it-or-leave-it contracts, and empirical studies show that overwhelmingly consumers do not read all of the terms in such contracts (Marotta-Wurgler, 2011, Bakos et al., 2014). This undermines the reasonableness of inferring blanket assent. It may also lead to inefficiencies, as companies may exploit consumers' inattentiveness to include one-sided terms, without suffering any concomitant demand loss. Although market discipline might constrain such behavior if, for example, a sufficiently large "informed minority" of consumers exist and are willing to reject a contract if such terms are included (Schwartz and Wilde, 1978), the likelihood that enough consumers will become informed to correct for the imperfections in the market for take-it-or-leave-it contracts has been questioned (Cruz and Hinck, 1995, Bakos et al., 2014).

Commentators have suggested a variety of remedies for this "no-reading problem" (Ayres and Schwartz, 2014). Many advocate for substantive regulation of the terms of standard form contracts—either through legislation or judicial invalidation of provisions deemed to be unfair (Llewellyn, 2016, Keeton, 1970, Rakoff, 1983, Meyerson, 1992, Burke, 1999). Others advocate for interventions that would increase the likelihood that consumers read and comprehend important terms in standard form contracts (Bar-Gill, 2003, Ayres and Schwartz, 2014). Examples of such interventions might include length limitations, requirements that terms be written in "plain English" rather than legal jargon, mandated standardization in disclosure format, and—of particular relevance to our study—rules that require certain terms to be "conspicuous" as a prerequisite to enforceability.

Contract law has embraced conspicuousness requirements as an antidote to the no-reading problem in several contexts. For example, Article 2 of the Uniform Commercial

[4]For an introduction to this voluminous literature, see Ayres and Schwartz (2014) p.555, n.28, and Warkentine (2007) pp. 484-505.

Code ("UCC"), which has been adopted in each of the fifty states, requires that any written term in a contract for the sale of goods that excludes or modifies the implied warranty of merchantability or fitness be "conspicuous" to be enforceable.[5] Article 2A of the UCC imposes a similar conspicuousness requirement on terms in consumer leases that disclaim warranties or prohibit transfer.[6] The enforceability of provisions in insurance contracts that are contrary to the "reasonable expectations" of insureds also sometimes turns on whether the provisions were sufficiently conspicuous.[7] More generally, courts weigh the conspicuousness (or not) of one-sided terms in standard-form contracts when determining whether procedural unconscionability exists,[8] as they do when judging the enforceability of contractual waivers of rights, such as the right to a jury trial.[9] It is also the case that courts have broadly held that parties are not bound by provisions in documents that are not obviously contractual in nature unless the provisions are "conspicuous."[10]. This is not directly relevant

[5]U.C.C. § 2-316.

[6]U.C.C. §§ 2A-214(2) and 2A-303.

[7]7 Corbin on Contracts § 29.9 (2022).

[8]See 7 Corbin on Contracts § 29.4 (2022) and cases cited therein. Most courts require some element of both procedural and substantive unconscionability for a term to be unenforceable on unconscionability grounds (Warkentine, 2007)

[9]Conspicuousness is one factor that courts consider in determining the effectiveness of a waiver of one's federal constitutional right to a jury trial. 8 Moore's Federal Practice - Civil § 38.52[3][c] (2022). With respect to the waiver of state constitutional rights, some courts have held that "a conspicuous provision is prima facie evidence of a knowing and voluntary waiver and shifts the burden to the opposing party to rebut it." In re GE Capital Corp., 203 S.W.3d 314, 316 (Tex. 2006).

[10]Such documents "may include receipts provided when a customer checks a parcel, baggage, or a coat; invoices; bank passbooks; new vehicle brochures; automobile parking lot tickets; websites selling books or other goods or services; the documentation inside the boxes of a mass-produced consumer products such as smartphones, and all manner of others." 1 Corbin on Contracts § 2.12 (2022). The same doctrine applies when someone views a webpage that, on its face, does not appear to be a contract but contains a contractual provision. Id. § 2.12[2]. Conspicuousness requirements also play an important role in determining the enforceability of online contracts when the terms of those contracts are hidden behind a hyperlink. It is common in the online setting for contract terms to be visible only if the consumer clicks a hyperlink, with actual clicking of the hyperlink not a prerequisite for the consumer to manifest assent. Courts determine the

to our present study, which is focused on how to increase the likelihood that consumers will notice and comprehend key terms in contracts that they actually view. It is worth noting, however, that in recent years courts have taken a fairly expansive view of the relevant criteria for judging the conspicuousness of a hyperlink, or of a notice that contractual terms lie behind a hyperlink, including by considering the role of color. *See, e.g.*, *Oberstein v. Live Nation Entm't, Inc.*, 60 F.4th 505, 518 (9th Cir. 2023); *Berman*, 30 F.4th at 857; *Soliman v. Subway Franchisee Adver. Fund Trust, Ltd.*, 999 F.3d 828, 835–836 (2d Cir. 2021); *Nicosia*, 834 F.3d at 237. Our findings lend credence to this approach, and the SAM based rule we suggest herein (Section []) could assist companies in creating conspicuous hyperlinks and notices, just as it could assist them in rendering conspicuous key terms within a contract.

Conspicuousness requirements are intended to protect consumers from "unexpected and unbargained language" by requiring that the regulated terms be written in a manner that will draw attention.[11] The UCC defines a "conspicuous" term as one "so written, displayed, or presented that a reasonable person against which it is to operate ought to have noticed it."[12] To remedy the no-reading problem, of course, terms must not only be noticed: they must also be read and comprehended. Implicit in the rationale for conspicuousness requirements, therefore, is the assumption that consumers are more likely to read and comprehend provisions that are noticeable than those which are not.

However, with respect to the most common method firms use to meet "conspicuousness" tests—writing a term in all-caps—this assumption appears to be faulty. Writing terms in the body of a contract in all-caps is discouraged in legal writing style guides (Butterick and Garner, 2010, Adams, 2004), given that most readers judge all-caps to be less legible than

enforceability of contract terms in this setting by, *inter alia*, evaluating the *conspicuousness* of the hyperlink as well as any notices to the consumer that behind the hyperlink are contractual terms that will bind the consumer if he or she takes particular actions. *See, e.g.*, *Berman v. Freedom Fin. Network, LLC*, 30 F.4th 849, 857 (9th Cir. 2022); *Cullinane v. Uber Techs., Inc.*, 893 F.3d 53, 62–64 (1st Cir. 2018);*Nicosia v. Amazon.com*, 834 F.3d 220, 233–34 (2d Cir. 2016).

[11]U.C.C. § 2-316, commentary.

[12]UCC § 1-201(10).

lower case type and all-caps print greatly retards speed of reading (Tinker, 1963). Based on the results of an experimental survey, Arbel and Toler (2020) reject the possibility that writing contract terms in all-caps meaningfully improves comprehension and find that the use of all-caps has a strong negative effect on older respondents' understanding. The use of all-caps in the body of standard form contracts is nevertheless pervasive, presumably because courts have tended to treat such terms as per se conspicuous for over a century (Arbel and Toler, 2020).[13] Many have criticized this tendency (Preston, 2014, Sableman, 2016, Arbel and Toler, 2020), including members of the American Law Institute ("ALI"). The ALI's tentative draft Restatement of the Law of Consumer Contracts takes the position that, in judging whether procedural unconscionability is present, courts should focus not on formalistic use of all-caps, but rather on the salience of a contractual term.[14] The ALI commentary explains that "using salience to determine whether disclosure was successfully conspicuous would provide appropriate underpinning to the conspicuousness test," as the "test should examine whether the term was surprising to many consumers."[15] "Using large typeface or all-caps in printing the standard terms," the commentary continues, "should not guarantee conspicuousness or salience."[16]

Scholars have expressed pessimism about the ability of other disclosure formatting practices to solve the no-reading problem, as well. Ben-Shahar and Chilton (2016) report on an experimental survey they conducted that tested, inter alia, the effect of certain disclosure

[13]A few state statutes require the use of all-caps. See, e.g., ARS § 44-287(B)(4); Code of Ala. § 5-18A-13(m). The UCC provides that "[w]hether a term is 'conspicuous' or not is a decision for the court," but goes on to state that conspicuous terms include headings "in capitals equal to or greater in size than the surrounding text, or in contrasting type, font, or color to the surrounding text of the same or lesser size." UCC § 1-201(10). As for the conspicuousness of terms in the body of a contract, the UCC does not mention capital letters, instead providing that conspicuous terms include those "in larger type than the surrounding text, or in contrasting type, font, or color to the surrounding text of the same size, or set off from surrounding text of the same size by symbols or other marks that call attention to the language." Id.

[14]Restatement of the Law, Consumer Contracts Tent. Draft 2-6.

[15]Id.

[16]Id.

"best practices" on respondents' comprehension of privacy terms, such as the use of clear titles and headers and the use of easily readable type in a legible size. The best practices tested had essentially no effect on respondents' comprehension of the privacy terms, and nearly all respondents clicked through the disclosures without taking time to read them regardless of the formal properties of the disclosures. Ben-Shahar and Chilton (2016) also tested the effect of a warning-label-style disclosure of the sort recommended by Ayres and Schwartz (2014) on respondents' understanding of privacy terms. Respondents in the warning label treatment only showed marginal improvements in understanding. The authors cast their study as contributing to a skeptical view of the merits of disclosure simplification as a means of improving consumer understanding of contract terms.

2.2. Understanding

As discussed in the previous section, how best to remedy the no-reading problem in contract law is a pressing question that has received significant attention. Another important and challenging question is how to assess reading comprehension of legal texts.

One strand of literature takes an indirect route, using the time spent reading contract clauses as a proxy for understanding. For instance, Bakos et al.(2014) observe that only one or two in 1,000 shoppers access a product's end-user license agreements (EULAs) for one second or more. From this they infer that the percentage of consumers who are informed about products' EULAs is minimal. A similar conclusion is reached also by Marotta-Wurgler (2011). In a study of clickstreams of consumers, she observes that only a minimal fraction of consumers reads EULAs for a meaningful amount of time, regardless of whether they are presented as clickwraps that specifically require assent or as browsewraps.

The studies more closely related to ours assess reading comprehension by asking respondents questions regarding a text that they have just seen. First, in Ben Shahar and Chilton (2016) respondents were deceptively told that they were participating in a survey on risky sexual practices, and were then shown the privacy disclosure of the app. Comprehension was assessed by asking five multiple-choice questions, in which respondents had to identify the right answer among four alternatives. The correct answers were worded in a way that closely

matched the text included in the privacy disclosure.[17] For instance, the correct answer for one of the multiple choice questions was "[w]e will retain your data indefinitely," while in the privacy disclosure it was indicated that "[w]e retain the information indefinitely." Similarly, the correct answer for another multiple choice question was "[w]e share data with commercial health insurance companies," and the exact same wording appeared in the privacy disclosure. They then compared various ways of presenting information and found that none effectively increased the number of correct answers provided to the comprehension questions. Arbel and Toler (2020) adopt a similar approach to test comprehension, but they rely on a single multiple choice question, in which respondents were given five alternative options from which to choose.

The literature on reading assessment, however, has long established that "it is inadequate to measure the understanding of text by only one method" ((Alderson, 2000) p.207). This is because text understanding is complex and multifaceted, and every test has its shortcomings. Multiple-choice questions in particular suffer from several significant limitations. To begin, multiple-choice questions might not assess knowledge or understanding, but merely answer recognition (Sam et al., 2018). This issue is likely to be especially severe when the correct answer uses either the same or a very similar wording as the original text (as in (Ben-Shahar and Chilton, 2016)). Moreover, respondents might identify the correct answer by chance, which is especially problematic when the sample is small or when few questions are asked (as in Arbel and Toler (Arbel and Toler, 2020)). In addition, cueing is unavoidable when using multiple choice questions (Sam et al., 2018), and there are well known skills – like being able to identify improbable distractors – that allow respondents to improve their accuracy but that are unrelated with comprehension (Alderson, 2000). In fact, there are test-coaching schools teaching specifically how to deal with multiple choice questions (Alderson, 2000). Finally, when dealing with real life problems – and in particular with legal issues – people are rarely presented with a menu of options from which to pick the best course of action

[17]The only exception is the last understanding question, as the correct answer is "We did not mention a policy on how we respond to data breaches."

(Sam et al., 2018).

Against this background, we develop a layered definition of understanding which combines different kinds of questions in order to test various aspects of reading comprehension (see Section 3 and Table 2).

2.3. Colors

2.3.1. The role of colors

A vast body of scholarship has established that how information is presented has a significant impact on peoples' behaviors and preferences (Tversky and Kahneman, 1985, Chong and Druckman, 2007). Colors are a key component of information visualization, and yet their role has largely been overlooked by policymakers and legal scholars alike. There are several reason to consider color an especially promising tool in the area of take-it-or-leave-it consumer contracts.

To begin with, marketing research shows that people generally make up their mind about a product in the first 90 seconds and that about 62-90 percent of the assessment is based on colors alone (Singh, 2006). Thus, colors are crucial in very quick interactions, like the ones that people have with take-it-or-leave-it consumer contracts. Second, colors have a strong impact on how people react to information presented on a computer screen, for example by influencing the perceived speed of a download (Gorn et al., 2004). Therefore, they are particularly effective in the setting in which most take-it-or-leave-it consumer contracts are signed. Moreover, colors can convey messages in a very effective manner due to mental associations. For example, in many countries red immediately conveys risk (Leonard, 1999), which suggests that some colors can be used to flag clauses that present particular risks for the consumers.

Researchers have also shown that colors affect cognitive task performance. For example, Elliot et al. (2009) find that individuals who viewed red before carrying out mental tasks performed worse than those who viewed green or achromatic colors. Mehta and Zhu (2009) suggest that the effect of colors on cognitive task performance is more nuanced, as they observe that red improves performance on detail-oriented tasks, whereas blue improves

performance on creative tasks. Therefore, it is reasonable to expect that an appropriate choice of colors can not only help direct consumers' attention, but also influence cognitive performance and hence contract understanding.

However, the impact of colors is context-dependent. For instance, in affiliative interactions people wearing red are perceived more attractive (Elliot and Pazda, 2012), whereas people consume less food when it is served on red plates and drink significantly less from cups with red labels (Genschow et al., 2012, Bruno et al., 2013). Moreover, the use of colors can backfire. For example, color-coding systems in which the colors used do not match readers' predictions can create significant processing costs (Lin et al., 2013). Therefore, in order to identify the right colors to use it is important to investigate how people relate with colors when interacting with legal documents, instead of borrowing insights from other domains.

2.3.2. The RGB color space

To this point, we have referred to colors using words like "red", "blue" or "yellow". However, scholars have long developed more rigorous classifications (Fairchild, 2013). For the purpose of this paper, we will use the RGB color space, as it refers to the way in which colors are processed in the human visual system (Loesdau et al., 2014). In the RGB color space (Figure 1), colors are defined by a set of red, green, and blue coordinates, which can have values between 0 and 255. For example, the coordinates rgb (255, 0, 0) indicate a "pure" red. Considering only integers, in the RGB space there are over 16 million uniquely defined colors. An obvious corollary is that identifying the best color to emphasize key clauses is impossible. A more interesting question is which features of colors affect understanding.

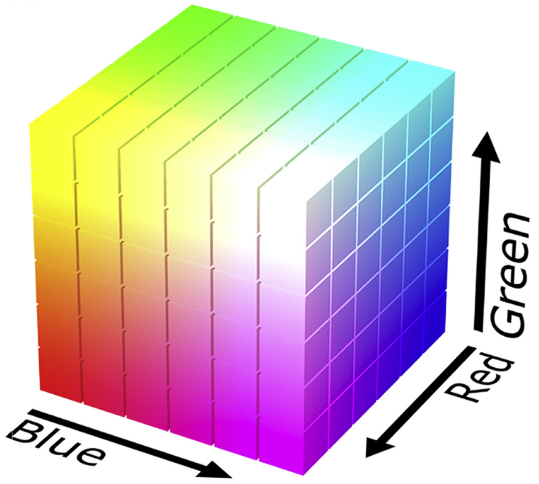

Figure 1: The RGB Color space (Popov et al., 2018)

3. METHOD

The study was divided between two experiments. Experiment I aimed at determining whether that colors can be effective in improving consumers' understanding of take-it-or-leave consumer contracts. Experiment II aimed at investigating the role played by contrast and hue. Table 1 indicates the colors used in the two experiments. It also lists the contrast ratios of each selected color against the text that appears in the T&C. All such ratios meet or exceed the 4.5:1 minimum contrast ratio required for Level AA compliance with the Web Content Accessibility Guidelines ("WCAG AA"). The guidelines, developed by the World Wide Web Consortium's Web Accessibility Initiative, set international standards for how to make web sites, applications, and other digital content accessible to people with disabilities.

3.1. Experiment I

We devised a double-blind experiment and recruited a sample of n = 4000 U.S. residents on Prolific.co. All participants were paid $1.1 for taking part in the experiment. Moreover, all participants were entered in the lottery described below.

The respondents were randomly assigned to one of four different groups: all-caps, lower case, all-caps yellow and lower case yellow. We relied on yellow because previous studies

Color	RGB	Contrast
Experiment I		
High contrast yellow	255, 255, 17	17.64:1
Experiment II		
Low contrast yellow	133, 133, 0	4.82:1
Red	255, 9, 0	4.77:1
Blue	0, 124, 255	4.8:1
High contrast green	0, 255, 0	13.8:1

Table 1: RGB coordinates and contrast of the colors used in the two experiments

carried out in other domains found that it is effective in highlighting portions of text (Strobelt et al., 2015). The T&C are written in an almost pure black (rgb 15,17,17).

At the beginning of the experiment, the respondents in all groups saw the same text: "In taking part in this experiment you will automatically be entered into our lottery. We will select 30 winners. You must decide if you want to receive a $25 gift card from the-Company.com (the real company name will be revealed at the end of the experiment) or receive $20 via Prolific in case you win the lottery. The terms and conditions of the gift card are described below. Please, read carefully the terms and conditions of the gift card before making a choice!" Below this text, the respondents in all groups saw the real terms and condition of an Amazon gift card, but with the name of the company replaced with theCompany. All sections of the T&C appeared with the same formatting for all groups, apart from the section "limitation of liability," which in the original T&C was the only one to appear in all-caps. Respondents in the all-caps group saw the original format; respondents in the lower case group saw the T&C with the section "limitation of liability" in lower case; the all-caps yellow group saw the section in capital letters and highlighted in yellow; and the lower case yellow group saw the section in lower case and highlighted in yellow.

Afterwards, all respondents were asked to choose between the gift card and the payment via Prolific in case they won the lottery. The advantage of this setting is that while respon-

dents are not deceived, they are not explicitly informed that the focus of our experiment is on their understanding of the T&C, and hence they are not artificially primed to read the T&C.

3.2. Understanding questions

After having made their choice, respondents in all groups were asked six understanding questions. The questions had different formats and were designed to test different aspects of reading comprehension (see Table 2). The first question asked how many sections of the terms and agreements were in capital letters or yellow highlight. Respondents were only allowed to provide a numerical answer. The question was adapted to the treatment received by the respondents. For respondents in the all-caps yellow and lower case yellow groups, the question asked the number of sections that were highlighted. For respondents in the lower case and all-caps groups, the question asked the number of sections that were in capital letters (the correct answer for the lower case group was zero). The goal of this question was testing whether respondents had noticed that one of the sections was emphasized. As discussed in Section 2.1, this is considered a necessary condition to ensure that respondents understand key terms. To analyze this question we create a binary variable that takes value 1 for each respondent who answers correctly.

Second, we asked "[w]hich of the following sections were included in the terms and conditions?" The respondents were given four options, two of which were correct ("limitation of liability" and "risk of loss") while the other two were taken from the T&C of a Walmart gift card ("updates to terms and conditions" and "applicable law"). The correct answers to this multiple-choice question were the title of the sections as they appeared in the text, and therefore this question tested answer recognition and visual memory. The goal of this question was twofold. On the one hand, it allowed us to test whether colors or all-caps increased visual recognition of the title of a section that was emphasized. On the other hand, it allowed us to test if colors or all-caps reduced visual recognition of the titles of the non-treated sections. We divide the analysis of this question in two parts. To investigate whether highlighting or using all-caps in the treated section helps visual recognition, we

create a binary variable that takes value 1 for those who select "Limitation of liability" and 0 otherwise. We also create a score for the other sections, where 1 point is assigned for each correct answer selected and each incorrect answer not selected. This score ranges from -3, for participants who select both incorrect answers and do not select the right answer, to +3, for participants who select the right answer and do not select the two wrong answers.

Further, we asked two very short answer questions (VSAQs) (Sam et al., 2018). VSAQs are open ended questions with two key characteristics (Burrows et al., 2015). First, answering correctly requires building on information that cannot be found in the question or in the possible answers, and hence respondents cannot rely on visual memory or recognition. Second, the question should be carefully devised to ensure that respondents can only provide very short answers that are easy to code. This avoids cueing respondents while minimizing subjectivity in the rating process. The first VSAQ was: "According to the terms and conditions that you just read, what remedies do you have if the gift card that you receive is non-functional?" The second was: "According to the terms and conditions that you just read, when does the gift card expire?" For each answer, respondents could use at most 100 characters. Note that one VSAQ referred to the section that was flagged as important (Limitation of Liability), whereas the other VSAQ referred to a different section. The purpose of the first VSAQ was testing whether colors or all-caps can affect understanding of the treated section. The purpose of the second VSAQ was testing if improvements in the understanding of the treated section come at the expense of comprehension of the other sections. The VSAQ were coded independently by two US students pursuing juris doctor degrees at an American law school, without interference from the researchers. The students were asked to code as "[t]rue" answers they considered correct, as "[f]alse" answers that they considered wrong, and as "[u]nreasonable" answers that did not pertain to the question. In all our data analysis we consider as right only the answers that both students listed as "True." In analyzing this question we then create a binary variable that takes value 1 for responses coded as "True" by both students and 0 otherwise.

Last, respondents were asked two multiple-choice questions that they could answer while

the T&C were on the screen. This gave respondents the possibility to search for the right answer (however, the function CTRL+F was disabled), and therefore allowed us to test whether a given formatting could facilitate information retrieval. This is a particularly important aspect given that in a real world scenario people can access online contracts at any time to check their content. The first question focused on the section Limitation of Liability and was: "According to the terms and conditions that you just read which of the following statement(s) are true? Below you can see again the terms and conditions of TheCompany's gift card. You can read them again before answering." The possible answers were: "[t]he Company makes warranties with respect to the Gift Cards to the full extent permissible by law"; "[t]he Gift Cards are covered by the warranty of merchantability, but not the warranty of fitness for a particular purpose"; "[t]he Gift Cards are covered by the warranty of fitness for a particular purpose, but not the warranty of merchantability"; and "[t]he Company makes no warranties with respect to the Gift Cards to the full extent permissible by law." The order of the answers was randomized.

The second question focused on a different section and was: "According to the terms and conditions that you just read which of the following statements are true? Below you can see again the terms and conditions of TheCompany's gift card. You can read them again before answering." The possible answers were: "[e]ligible goods and services cannot be changed by the Company after you purchase the gift card"; "[e]ligible goods and services are subject to change at the sole discretion of the Company, but any change gives you the right to ask for a full refund of the gift card"; "[e]ligible goods and services are subject to change at the sole discretion of the Company"; "[e]ligible goods and services can be changed by the Company, but only with your approval." The order of the answers was randomized. The first question allowed us to see if the treatment increased respondents´ ability to find information in the treated section. The second question allowed us to assess whether there is a trade-off between the ability to find information in the treated section and the ability to find information in other sections.

For the analysis of the last two questions we create two more binary variables that take

value 1 for each respondent who answered correctly and 0 otherwise.

3.3. Additional Questions

After the understanding questions, respondents were asked a second set of questions. First, respondents were asked why they thought the emphasized section in T&C was emphasized. The question was adapted to the treatment received by the respondents. For respondents in the all-caps yellow and lower case yellow groups, the question asked why they thought one section was highlighted in yellow, whereas respondents in the all-caps group were asked why they thought one section was written in all-caps. This question was omitted for respondents in the lower case group. Respondents could select multiple answers among: "[t]he clauses contained in the section are particularly important for customers"; "[t]he clauses contained in the section are disadvantageous for the customer"; "[t]he clauses contained in the section are unusual"; and "[n]one of the above." The order of the answer were randomized. Afterwards, before revealing that the T&C belonged to an Amazon gift card, respondents were asked if they could guess which company's name we had replaced with TheCompany.com.

Respondents were then asked if they had ever been informed, or if they had ever realized, that they were color blind. Further, respondents were shown a palette that reproduced the yellow-black combination used in the highlighted section and were asked to indicate the level of pleasure and the level of arousal that they felt when seeing the color. The questions were asked using the validated slider self-assessment scale introduced in Betella and Verschure (2016). Respondents were then asked a standard set of demographic questions and were debriefed on the goals of the experiment.

3.4. Experiment II

For experiment II we recruited $n = 1600$ U.S. residents on Prolific.co. As in experiment I, participants were paid \$1.1 and were automatically entered in a lottery. The respondents were randomly assigned to one of four different groups: high contrast green (rgb (0, 255, 0), red (rgb (255, 9, 0)), blue (rgb (0, 124, 255)) and low contrast yellow (rgb (133, 133, 0)).

Question	kind of question	What is being tested
Q1: How many sections of the terms and agreements you just read were in capital letters? (highlighted)	Open ended - only numbers allowed	Respondents notice of the section emphasized
Q2: Which of the following sections were included in the terms and conditions?	Multiple choice - multiple answers allowed	Answer recognition of emphasized and non-emphasized sections
VSAQ1: According to the terms and conditions that you just read, what remedies do you have if the gift card that you receive is non-functional?	Very short open ended question - max 100 characters	Ability to provide an answer referring to *emphasized* information without cues or distractors
VSAQ2: According to the terms and conditions that you just read, when does the gift card expire?	Very short open ended question - max 100 characters	Ability to provide an answer referring to *non-emphasized* information without cues or distractors
Q3: According to the terms and conditions that you just read which of the following statement(s) are true? Below you can see again the terms and conditions of TheCompany's gift card. You can read them again before answering	Multiple choice - multiple answers allowed	Ability to find *emphasized* information
Q4: According to the terms and conditions that you just read which of the following statement(s) are true? Below you can see again the terms and conditions of TheCompany's gift card. You can read them again before answering	Multiple choice - multiple answers allowed	Ability to find *non emphasized* information

Table 2: Understanding questions and the aspect of reading comprehension that they attempt to measure

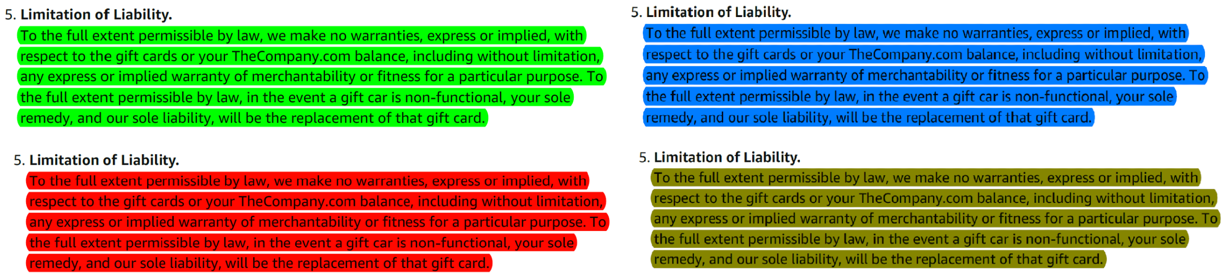

Figure 2: The colors used to highlight the section Limitation of liability in the second experiment

The structure of the experiment was identical to that of Experiment I. Figure 2 shows the colors used to highlight the section "limitation of liability", while Table 1 reports the RGB coordinates and the contrast.

We selected a "pure green" because it is one of the few colors that has a a comparable contrast to the yellow we used in Experiment I against a black text. This allowed us to study whether there is an effect that is specific to yellow, or if the results of Experiment I were driven by high contrast. We selected the other three colors because they have an almost identical contrast to one another, which is just above the threshold required by WCAG AA. This allowed us to isolate the effect of different combinations of red, green and blue while keeping contrast constant. Moreover, it allowed us to compare the performance of the high contrast yellow used in the first experiment (RGB (255,255,17)) with the low contrast yellow used in this experiment.

4. RESULTS

4.1. Summary Statistics

Tables 3–4 report the summary statistics of the two experiments

4.2. Experiment I

4.2.1. Understanding

We start by comparing all-caps, lower case yellow and all-caps yellow with lower case, in order to determine which way of making the clause conspicuous is more effective. Overall, we find that the yellow groups perform much better than the all-caps group on all questions

	(1) (All)		(2) (Lower Case)		(3) (Caps)		(4) (Highlight small)		(5) (Highlight caps)	
	mean	sd	mean	sd	mean	sd	mean	sd	mean	sd
Q1	0.58	0.49	0.30	0.46	0.26	0.44	0.86	0.34	0.85	0.36
limit liability	0.64	0.48	0.62	0.48	0.61	0.49	0.67	0.47	0.66	0.47
Q2_other	1.32	1.65	1.35	1.71	1.37	1.79	1.25	1.56	1.32	1.54
VSAQ1	0.29	0.45	0.25	0.43	0.24	0.43	0.34	0.47	0.33	0.47
VSAQ2	0.53	0.50	0.54	0.50	0.56	0.50	0.52	0.50	0.50	0.50
Q3	0.82	0.39	0.76	0.43	0.82	0.39	0.85	0.36	0.83	0.37
Q4	0.80	0.40	0.78	0.42	0.83	0.38	0.80	0.40	0.78	0.42
Time Question 1	16.17	26.20	21.46	24.33	21.64	24.97	11.64	32.56	10.66	18.83
Time Question 2	18.08	23.36	17.55	23.62	19.69	27.26	18.38	22.60	16.73	19.50
Time VSAQ1	60.00	79.40	60.52	74.35	65.18	85.23	58.59	79.40	56.03	78.04
Time VSAQ2	28.98	42.09	27.62	38.32	29.74	40.14	29.51	45.47	28.96	43.67
Time Question 3	98.00	86.11	107.65	89.05	99.76	83.49	97.29	88.87	88.16	81.92
Time Question 4	80.44	81.32	73.18	76.27	75.09	72.52	87.30	87.85	85.29	85.98
Time: full survey	593.55	391.97	572.40	359.12	614.54	399.96	601.77	375.90	584.92	426.95
Observations	3986		949		974		1034		1029	

Table 3: Mean and standard deviation for each of the groups included in the first study.

	(1) (Highlight small)		(2) (Dark yellow)		(3) (Red)		(4) (Green)		(5) (Blue)	
	mean	sd	mean	sd	mean	sd	mean	sd	mean	sd
Q1	0.86	0.34	0.83	0.38	0.90	0.30	0.90	0.30	0.83	0.38
limit liability	0.67	0.47	0.70	0.46	0.64	0.48	0.72	0.45	0.69	0.46
Q2_other	1.25	1.56	1.28	1.48	1.36	1.42	1.37	1.40	1.19	1.45
VSAQ1	0.34	0.47	0.39	0.49	0.47	0.50	0.44	0.50	0.40	0.49
VSAQ2	0.52	0.50	0.57	0.50	0.47	0.50	0.48	0.50	0.50	0.50
Q3	0.85	0.36	0.84	0.36	0.85	0.36	0.84	0.37	0.87	0.34
Q4	0.80	0.40	0.80	0.40	0.84	0.37	0.82	0.39	0.80	0.40
Time Question 1	11.64	32.56	12.94	25.44	10.35	10.60	12.42	35.24	12.59	25.05
Time Question 2	18.38	22.60	22.88	45.74	21.60	31.85	21.27	30.18	19.34	26.73
Time VSAQ1	58.59	79.40	67.25	91.97	68.64	93.55	70.69	105.35	61.83	73.21
Time VSA2	29.51	45.47	35.48	57.88	37.16	67.62	40.44	79.47	29.37	40.33
Time Question 3	97.29	88.87	106.01	87.02	103.98	89.19	103.52	90.09	104.82	108.67
Time Question 4	87.30	87.85	93.96	80.19	87.22	76.30	99.80	83.84	89.30	78.74
Time: full survey	601.77	375.90	920.24	5156.23	741.74	1410.17	691.59	594.94	613.83	390.71
Observations	1034		387		405		407		394	

Table 4: Mean and standard deviation for each of the groups included in the second study

related with the understanding of the treated section (see Table 5, full regressions tables included in the appendix).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
Yellow all caps	2.26***	0.178*	-0.142	0.421***	-0.169*	0.572***	0.0118
	(0.000)	(0.067)	(0.161)	(0.000)	(0.070)	(0.000)	(0.917)
Yellow lower case	2.29***	0.241**	-0.232**	0.453***	-0.0936	0.650***	0.150
	(0.000)	(0.014)	(0.021)	(0.000)	(0.316)	(0.000)	(0.198)
All caps	-0.6215***	-0.0618	0.00404	-0.0141	0.0931	0.376***	0.311***
	(0.000)	(0.526)	(0.971)	(0.898)	(0.329)	(0.001)	(0.010)
Observations	3810	3810	2926	3810	3810	3810	3810
Pseudo R^2	0.280	0.017	0.014	0.028	0.015	0.026	0.023
χ^2	1063.97	80.85	89.35	125.1	74.13	89.15	81.94

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Understanding of lower case yellow, all caps yellow and all caps groups versus lower case. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

With respect to the first question (1), we observe that respondents in the two yellow groups are significantly more likely to provide the correct answer ($p < 0.001$, OR= 9.54 for highlight caps, OR= 9.88 for highlight small). Respondents in the all-caps group, by contrast, are less likely to provide the correct answer ($p < 0.001$, OR= 0.54). Therefore, yellow is effective in making a section stand out, whereas all-caps backfires.

Turning to the second question, in column (2) we observe that both all-caps yellow (p = 0.067, OR=1.2) and lower case yellow (p = 0.014, OR=1.27) outperform the control, whereas all-caps has no effect. The latter result is consistent with the finding of Arbel and

Toler (2020) that all-caps does not improve visual recognition. At the same time, we find that lower case yellow worsens visual recognition of the titles of the non-treated sections ($p = 0.021$, OR=0.79).

Then, we turn to the two VSAQs. The first VSAQ (column 4) refers to the section Limitation of Liability. On this question, both yellow groups outperform lower case ($p < 0.001$, OR=1.52 for all-caps yellow, OR=1.57 for lower case yellow), whereas all-caps has no significant effect. This suggests that yellow can improve comprehension when there is no cueing, whereas all-caps is once again ineffective.

The second VSAQ (column 5) refers to a section that is not treated, and the purpose of the question is identifying whether improvements in the understanding of the treated section come at the expense of comprehension of the other sections. We see that there are no significant differences between the lower case yellow group and the lower case group. Thus, using yellow on lower case to flag one section does not seem to worsen understanding of the other sections. All-caps yellow, however, does worsen understanding of the other sections ($p = 0.07$, OR=0.84).

Last, we test whether the treatments affect the ability to find information. Once again the first question (column 6) refers to the section Limitation of Liability, whereas the other question (column 7) refers to a different section. For the question referring to limitation of liability we observe that the yellow groups and the all-caps group do better than lower case ($p < 0.001$, OR=1.77 for all-caps yellow and OR=1.92 for lower case yellow, OR=1.46 for caps), however the effect size of the two yellow groups is larger. We further observe that the respondents in the two yellow groups do not have a lower ability to find information in the non-emphasized sections. Thus, making one section conspicuous using yellow did not affect negatively the ability of respondents to find information in other sections of the terms and conditions. All-caps improved the ability to find information in sections that are not conspicuous ($p = 0.001$, OR=1.36). This is a puzzling result that we do not attempt to explain.

We then turn to compare the performance of the two yellow highlight groups with all-caps

to see the extent to which using yellow highlight improves over the status quo. As discussed in Section 2.1, the status quo tendency is for firms to use all-caps as a method for satisfying conspicuousness tests (see Table 6, full regression tables included in the appendix).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
Yellow all caps	2.852***	0.234**	-0.154	0.434***	-0.255***	0.205*	-0.298**
	(0.000)	(0.016)	(0.148)	(0.000)	(0.006)	(0.099)	(0.012)
Yellow lower case	2.902***	0.296***	-0.241**	0.467***	-0.188**	0.279**	-0.172
	(0.000)	(0.002)	(0.023)	(0.000)	(0.044)	(0.027)	(0.156)
Observations	2903	2903	2254	2903	2903	2903	2903
Pseudo R^2	0.282	0.020	0.015	0.032	0.015	0.016	0.029
χ^2	823.3	73.42	75.18	112.3	58.12	39.56	75.14

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Understanding of yellow groups versus all caps. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

The results confirm that both yellow groups outperform the all-caps group on all dimensions of understanding related with the treated clause. In fact, both yellow groups perform better on: (*i*) the first question ($p < 0.001$ both groups, OR=17.33 for all-caps yellow, OR=18.22 for lower case yellow); (*ii*) visual recognition of the title of the treated section ($p = 0.016$ and OR=1.26 for the all-caps yellow group and $p = 0.002$ and OR=1.34 for lower case yellow); (*iii*) the first VSAQ ($p < 0.001$ both groups, OR=1.54 for all-caps yellow and OR=1.59 for lower case yellow). Moreover, both yellow groups are better at finding the emphasized information ($p = 0.099$, OR=1.23 for the all-caps yellow group and $p = 0.027$, OR=1.32 for the lower case yellow). However, we also see that respondents in the yellow

groups perform worse than all-caps in the second VSAQ (p = 0.006 and OR=0.77 for the all-caps yellow group and p = 0.044 and OR=0.83 for lower case yellow) – which refers to a non-treated section. Moreover, respondents in the lower case yellow group perform worse than all-caps in visual recognition of titles of the non-treated sections (p = 0.023, OR=0.79). Last, all-caps yellow provides less accurate responses to the question testing the ability to find information in the non-emphasized section (p = 0.012, OR=0.74).

To summarize, when comparing with lower case both yellow groups are effective in improving the understanding of the treated section. The lower case yellow, however, seems marginally superior to all-caps yellow as the effect size is larger on all three questions related with the treated section. Similarly, when compared to the status quo use of all-caps, both yellow highlight groups are effective in improving the understanding of the treated section. Once again, the group lower case yellow performs slightly better, as the effect sizes are larger than for yellow all-caps. For these reasons, in the second round of the experiment we drop all-caps and test different colors always using lower case.

4.2.2. Time

Given that yellow highlight improved understanding of the emphasized term of the T&C on all dimensions of understanding that we consider, one important question is whether it has also caused respondents to spend more time reading (see Table 7).

Overall, we observe no significant differences in the time spent on the survey by respondents in the yellow groups and respondents in the small letter groups, therefore the improvement does not seem to be driven by more time being spent reading (see 7, full regressions tables included in the appendix). Respondents in the all-caps group, by contrast, spent more time on the survey. As the effect was not driven by the time spent on questions, a reasonable conjecture is that respondents in the all-caps group simply spent more time reading the T&C. However, given that there was no significant improvement in their responses, this implies that flagging the clause in all-caps imposed a cost (in terms of time) that did not produce any benefit. Importantly, we stress that this result refers to the time spent on the entire survey, and not strictly to how much time respondents spent reading the

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Time Question 1	Time Question 2	Time VSAQ1	Time VSAQ2	Time Question 3	Time Question 4	Time: full survey
Yellow all caps	-10.83***	-0.838	-6.384*	0.877	-19.46***	12.32***	9.725
	(0.000)	(0.410)	(0.057)	(0.635)	(0.000)	(0.001)	(0.576)
Yellow lower case	-10.00***	0.578	-2.979	1.743	-11.09***	13.65***	24.22
	(0.000)	(0.590)	(0.400)	(0.368)	(0.006)	(0.000)	(0.136)
All caps	0.259	2.174*	5.300	2.276	-5.656	2.570	46.76***
	(0.818)	(0.063)	(0.147)	(0.200)	(0.147)	(0.460)	(0.005)
Observations	3810	3810	3810	3810	3810	3810	3810
R^2	0.058	0.026	0.048	0.038	0.075	0.037	0.077

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: The table reports the results from OLS regressions on the time taken by participants for each understanding question and overall compared to the lower case group. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

T&C, and hence we cannot directly test this conjecture.

Turning to the single questions, two observations are worth making. Respondents in both yellow groups took significantly less time to answer the first question (about 10 seconds less, $p < 0.001$), and as noted in the previous section they were also more accurate. Moreover, we observe an interesting trade-off in terms of respondents' speed in finding information. In particular, respondents are much faster in finding information in yellow ($p < 0.001$, 19.5 seconds less for all-caps yellow, 11 seconds less for lower case yellow). Additionally, as discussed in Section 4.2.1, respondents in these groups were also more accurate in answering the question pertaining to this information. However, we also observe that respondents in the yellow groups are significantly slower at finding information that is not in the yellow clauses ($p < 0.001$, 12 seconds more for all-caps yellow, 14 seconds less for lower case yellow). Thus, in terms of speed there is a trade-off: yellow highlight does allow respondents to find highlighted information faster, but it also slows them down when looking for information that is not highlighted in yellow. One explanation is that respondents assume that the answer to our question would be in the highlighted section, and therefore they carefully check that section before looking elsewhere.

4.3. Experiment II

After having established that yellow highlights are effective in improving understanding, we test which features of color affect reading comprehension. An important caveat is that because in the RGB space there are over 16 million colors, we do not attempt to identify *the* most effective color. Instead, we investigate the role played by contrast and hue.

4.3.1. The role of hue

In order to isolate the role of hue, we carry out two different comparisons. First, we compare a high contrast green with the high contrast yellow used in the first experiment (see Table 8). Admittedly, this comparison is imperfect because yellow still has a higher contrast than green (see Table 1). Second, we compare three colors with almost identical contrast ratios but that present different combinations of red, green, and blue: a low contrast yellow, a blue and a red. Keeping the contrast constant while manipulating the hue allows us to isolate the effect of the latter.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
High-contrast green	0.358*	0.205	0.0973	0.408***	-0.220*	-0.0752	0.0951
	(0.064)	(0.134)	(0.467)	(0.001)	(0.074)	(0.662)	(0.558)
Observations	1365	1376	1087	1376	1376	1376	1376
Pseudo R^2	0.031	0.025	0.022	0.029	0.022	0.031	0.037
χ^2	32.43	39.16	56.31	51.60	38.60	34.17	39.71

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Understanding round 2: the table compares the performance of participants in the high-contrast green group versus participants in the lower case yellow group. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

With respect to the comparison between yellow and high contrast green the most significant result is that respondents assigned to the high contrast green group perform better on the VSAQ1 ($p < 0.001$, OR=1.5). Moreover, they perform better on the first question ($p = 0.064$, OR=1.43). With respect to questions targeting non-treated sections, the high contrast green group does worse on the second VSAQ ($p = 0.074$, OR=0.8).

We now turn to comparing a blue and a red with a low contrast yellow that has a similar contrast (see Table 9).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
red	0.553**	-0.366**	0.134	0.320**	-0.427***	0.0538	0.412**
	(0.020)	(0.029)	(0.462)	(0.046)	(0.008)	(0.811)	(0.046)
blue	0.0330	-0.0516	-0.135	0.0846	-0.236	0.254	0.211
	(0.879)	(0.765)	(0.449)	(0.599)	(0.134)	(0.275)	(0.295)
Observations	1115	1115	864	1115	1115	1115	1115
Pseudo R^2	0.059	0.028	0.020	0.021	0.028	0.049	0.054
χ^2	46.31	39.35	36.02	30.55	40.49	48.07	54.50

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: The table compares the performance of participants in the red and blue groups to those in the low contrast yellow group. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see

We see that there are no significant differences between respondents assigned to the blue group and respondents assigned to the low contrast yellow group. The respondents assigned to the red group, however, outperform respondents in the low contrast yellow on Q1 ($p = 0.02$, OR=1.74) and on VSAQ1 ($p = 0.046$, OR=1.38), whereas they perform worse than low contrast yellow on visual recognition of the title of the treated section ($p = 0.029$,

OR=0.69). Moreover, the red group performs less well on VSAQ2 (p = 0.008, OR=0.65). Surprisingly, we also observe that red improves performance on Q4 (p = 0.046, OR=1.51), which tests the ability to find information in a non-treated section.

Overall, the results of these two comparisons tell us that hue can have a significant effect on understanding. In fact, we observe significant differences between groups that are assigned to colors with an almost identical contrast but that have a different combination of red, green and blue.

4.3.2. The role of contrast

To investigate the role of contrast we compare the high contrast yellow from the first experiment with the low contrast yellow used in the second experiment (see Table 10).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
Low-contrast yellow	-0.184	0.141	-0.00579	0.271**	0.245*	-0.000614	-0.121
	(0.292)	(0.311)	(0.968)	(0.042)	(0.058)	(0.997)	(0.459)
Observations	1353	1353	1070	1353	1353	1353	1353
Pseudo R^2	0.029	0.026	0.017	0.030	0.019	0.031	0.038
χ^2	32.33	41.00	43.64	50.70	34.13	31.91	45.34

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: The table compares the performance of participants in the low-contrast yellow group versus those in the yellow lower case group. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

Surprisingly, we observe that respondents in the high contrast yellow group never outperform respondents in the low contrast yellow group. On the contrary, respondents in the low contrast yellow group perform better on both VSAQ1 (p = 0.042, OR=1.31) and VSAQ2

($p = 0.058$, OR=1.28). This result seems to suggest that, at least above the minimum threshold required by WCAG AA, increasing contrast does not necessarily improve understanding. As will be discussed in Section 4.5, the comparison among all colors seems to reinforce this finding.

4.4. Which colors improve over the status quo?

We now turn to analyze which colors improve over the status quo use of all-caps. At a general level, we observe that all colors selected effectively do so (see Table 11).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	limitliability	Q2_other	VSAQ1	VSAQ2	Q3	Q4
Low-contrast yellow	2.747***	0.458***	-0.252*	0.712***	0.0318	0.211	-0.245
	(0.000)	(0.001)	(0.072)	(0.000)	(0.804)	(0.220)	(0.127)
Red	3.398***	0.103	-0.122	1.012***	-0.364***	0.286	0.137
	(0.000)	(0.432)	(0.377)	(0.000)	(0.004)	(0.102)	(0.426)
Blue	2.745***	0.366***	-0.349***	0.761***	-0.233*	0.492***	-0.104
	(0.000)	(0.006)	(0.010)	(0.000)	(0.063)	(0.007)	(0.514)
High-contrast green	3.339***	0.473***	-0.137	0.870***	-0.400***	0.139	0.00678
	(0.000)	(0.000)	(0.298)	(0.000)	(0.001)	(0.410)	(0.967)
Observations	2440	2440	1877	2440	2440	2440	2440
Pseudo R^2	0.317	0.024	0.017	0.040	0.020	0.025	0.036
χ^2	746.7	75.21	65.69	120.8	65.08	55.14	70.94

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: The table compares the performance of respondents in high contrast green, red, blue and low contrast yellow with respect to those assigned to the all caps group. The table reports the results from logit regressions (columns 1,2 and 4-7) and ordered logit regressions (column 3) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors and controlling for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

All color groups outperform the all-caps group for the first question ($p < 0.001$, OR=15.59 for low contrast yellow, OR=29.92 for red, OR=15.56 for blue, OR=28.2 for green). Therefore, we can conclude that colors are a more effective way than all-caps to induce people to notice the relevant clauses.

We further note that all colors apart from red outperform all-caps for visual recognition of the title of the treated section ($p < 0.001$, OR=1.58 for low contrast yellow, OR=1.44 for blue, OR=1.61 for green). Therefore, colors seem effective at improving this aspect of understanding, on which the literature had previously focused.

Additionally, all colors outperform all-caps in the VSAQ1 ($p < 0.001$, OR=2.04 for low contrast yellow, OR=2.75 for red, OR=2.14 for blue and OR=2.39 for green), which suggests that colors can improve understanding of key terms even when there is no cueing. Among the colors used in the second round, only blue improves respondents' ability to find relevant information in the treated section ($p = 0.007$, OR=1.15).

Turning to questions targeted at the non-treated section, we see that low contrast yellow and blue worsen visual recognition of the title of the non-treated sections ($p = 0.072$, OR= 0.78 and $p = 0.01$ and OR=0.71, respectively). Further, we observe that red ($p = 0.004$, OR=0.69), blue ($p = 0.063$, OR=0.79) and green ($p = 0.001$, OR=0.67) perform worse than all-caps on the VSAQ2. Therefore, there is generally a trade-off between the performance in the VSAQ related with the treated section and the performance in the VSAQ related with the non-treated section. The only exception is low contrast yellow, as it improves on VSAQ1, without worsening performance on VSAQ2. Moreover, none of the colors included in the second round reduced respondents´ ability to find information in the non-treated section (Q4).

4.5. Which colors perform best?

As noted above, we do not attempt to identify the best possible color. However, it is interesting to compare the performance of the various colors tested to see which ones perform better on the various dimensions of understanding (see Figure 3).

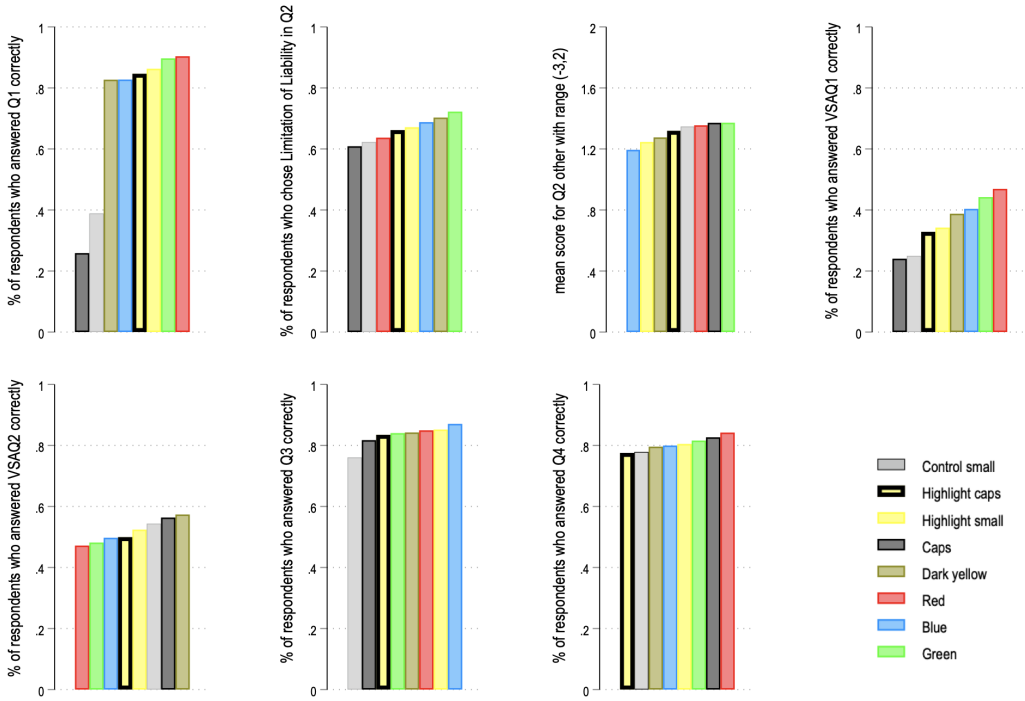

Figure 3: The figure represents the performance of the various groups in the understanding questions. The bar charts are ordered in terms of performance, from the lowest performing color to the highest performing one. For all questions except Q2_other the bar charts represent the percentage of participants who answered the question correctly. Q2_other is a score assigned to participants, who receive 1 point for each correct answer selected and each incorrect answer not chosen. They instead lose a point for each incorrect answer selected. The score for this variable ranges from -3 to +2 and we report the mean for respondents by color group.

With respect to the first question, we note that red and green are the most effective, whereas blue and low contrast yellow have the worst performance.

In terms of visual recognition, we note that green is the best performer both for the treated section and for the non-treated section. This is consistent with the fact that green is the color that the eye perceives best. We further note that red is the only colors that did not improve visual recognition over the status quo. This result is consistent with the fact that the red is the color that the human eye perceives less well.

The VSAQs reveal the existence of a very clear trade-off. In fact, the three colors that perform best on the VSAQ1 are red, green and blue. On the VSAQ2 we observe exactly the

opposite with red being the worse performer, followed by green and then blue.

We further find that blue is the best color to assist respondents to find information in the treated section, whereas red outperforms the other colors when respondents are tested about their ability to find information in the non-treated section.

4.6. Behavioral effects

We now report the effect of the various treatments on the choice of the lottery prize (Table 12). We observe that there are no significant differences among conditions when including standard demographic controls, except for participants in the green group, who are more likely to select the certain payment instead of the giftcard ($p = 0.053$).

We downplay the importance of this result for two reasons. First, if the content of the treated clause is not sufficiently significant or novel for respondents, then it stands to reason that a better understanding would not affect the choice between the gift card and the cash reward. In other words, the fact that we do not observe a behavioral effect says more about the choice to emphasize that specific clause than it does about the potential of our treatment to steer consumers towards making more informed choices. Second, our framing explicitly induced respondents to pay attention to the choice between the gift card and the cash reward. On the one hand, this reduces the external validity of the choice. On the other hand, it is likely to trigger a participant bias across all groups.

5. DISCUSSION

In this section we present our main contributions, the mechanism through which colors might have fostered understanding, and how to devise a rule based on our findings.

5.1. The measurement of understanding and the role of colors

Prior experimental research has tested contract comprehension by relying exclusively on multiple-choice questions (Ben-Shahar and Chilton, 2016, Arbel and Toler, 2020). For instance, Ben Shahar and Chilton (2016) asked respondents five multiple-choice questions, and in four of them the correct answer closely resembled – or was identical to – the wording

	(1)
	giftcard
highlight CAPS	-0.113
	(0.513)
highlight small	0.0925
	(0.575)
caps	0.189
	(0.251)
dark yellow	-0.431
	(0.100)
red	-0.00524
	(0.981)
blue	-0.00446
	(0.984)
green	-0.501*
	(0.053)
Observations	5461
Pseudo R^2	0.017
chi2	57.26

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 12: This table shows the logit coefficients from a regression investigating the likelihood of selecting the giftcard instead of the certain payment by color group. The regression is run on the pooled sample between round 1 and round 2 and controls for demographics and the level of pleasure and arousal elicited by the colors used for the highlights.

used in the legal text respondents were asked to read. This essentially equates respondents' comprehension of legal texts with visual recognition, which is misguided for reasons discussed in Section 2.2. We sought to take a broader view by testing multiple dimensions of understanding.

As discussed in Section 2.1, to satisfy "conspicuousness" tests, the UCC requires that a contract term be "so written, displayed, or presented that a reasonable person against which it is to operate ought to have noticed it". Our first question was designed to test precisely whether respondents noticed the emphasized term. Our second question was designed to test visual recognition by asking respondents to identify among a set of alternatives the title of the sections of the T&C that they had been asked to read. Our VSAQs asked respondents to answer short open-ended questions, which required them to build on information that could not be found in the question or in the possible answers, hence precluding reliance on visual memory or recognition. Further, we argue that the ability of finding information is also an important feature, given that people often have the opportunity to return to an online contract to review its terms and determine their rights, rather than having to rely on memory alone. For instance, the terms and conditions of an Amazon gift card can be accessed at any moment. For this reason, we included a question aimed at testing respondents' ability to find information in the emphasized section. Finally, we included three questions to explore whether emphasizing particular text comes with trade-offs, in terms of the readers' comprehension of, or ability to retrieve, information contained in non-emphasized sections.

Employing this broader view of understanding, we investigated whether colors could play a role in fostering reading comprehension of a legal text like the T&C of an Amazon gift card. We carried out our investigation by running two experiments that unlike previous studies on this issue did not involve deception (Ben-Shahar and Chilton, 2016) and did not artificially prime respondents to pay attention to the legal document on which respondents' understanding would be tested (Arbel and Toler, 2020).

In our first experiment, we tested the role of yellow highlight and compared it with the standard solution of using all-caps for key contractual terms. We observed that yellow is

extremely effective in fostering understanding of the treated terms. Further, we replicated the finding of the literature that all-caps does not improve visual recognition (Arbel and Toler, 2020). We also showed that all-caps does not affect other relevant dimensions of understanding. Overall, we observed that yellow greatly outperforms all-caps.

Having established that colors can be effective, we turned to analyzing the role that key features of colors can play with a focus on hue and contrast. First, we observed that hue matters, as colors with different hue but the same contrast have a different impact on understanding. Second, we found that high contrast colors do *not* systematically outperform low contrast colors. A hypothesis is that above a certain threshold increasing contrast no longer necessarily improves understanding.

More generally, we observed that all colors tested - high-contrast yellow, high-contrast green, red, blue and low-contrast yellow - outperformed all-caps on all levels of understanding in connection with the treated section. The magnitude of the improvement caused by the use of colors is extremely significant. For instance, for the VSAQ1 – arguably the most important measure of understanding of the treated section – people in the red group provided the correct answer almost 50% of the time. The people in the lower case group answered correctly barely 20% of the time (see Tables 3–4). The effect size for the first question is even larger, as respondents in the colors groups were generally more than 8 times more likely to provide the right answer than respondents in the all-caps group and respondents in the lower case group.

5.2. Possible Mechanisms

We now turn to addressing two questions: *i*) why do colors work better than all-caps?; and *ii*) why do some colors outperform others on some dimensions of understanding?

5.2.1. Why colors work better than all caps: Saliency Attentive Model and Isolation Effect

To investigate a possible mechanism through which colors could improve readers' understanding of the key section of a contract, we rely on a Saliency Attentive Model (SAM), which aims at predicting the distribution of human fixation points on a visual (Cornia et al.,

2018). In other words, this type of model aims at predicting which part of a visual will be more salient to a human, and therefore will attract most attention. The output of this type of model is often a heat-map which flags the parts of the images that are more salient for an average observer. The use of SAM models is becoming increasingly common in economics as it has been shown that the they can be applied in a variety of domains, and can offer important insights on how people behave (Bose et al., 2022, Li and Camerer, 2022).

Figure 4 reports the results of the Saliency Attentive Model we use (developed in (2018), and adopted also Li & Camerer (2022) and in Bose et al. (2022)) with respect to lower case, all-caps, and yellow highlight. The Visual Saliency Model clearly reveals that while all-caps did not produce meaningful changes, the use of yellow highlight made more visually salient the bottom part of the T&C, especially around the clause we highlight.

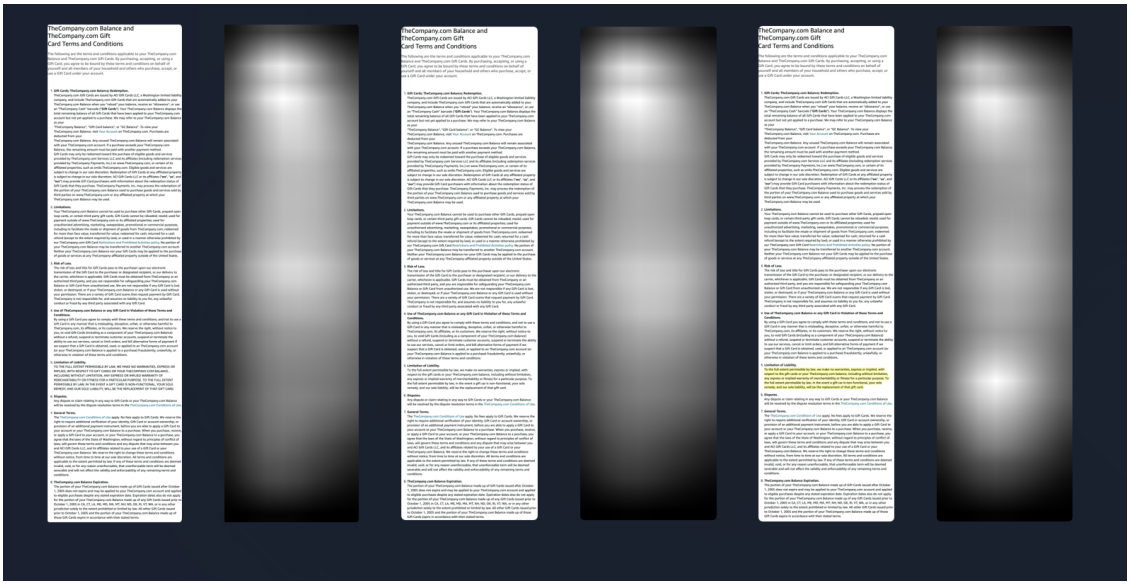

Figure 4: Output of the Saliency Attentive Model for the lower case (left panel), all caps (central panel), and lower case yellow (right panel) T&C.

Figure 5 shows that the other colors also increase the saliency of the bottom part of the text, albeit to different degrees. Thus, we can conclude that colors succeeded in making the relevant portion of the T&C more salient, whereas all-caps failed.

The psychology literature offers a powerful explanation as to why the distinctiveness and salience of the colored region would result in improved performance on the understanding

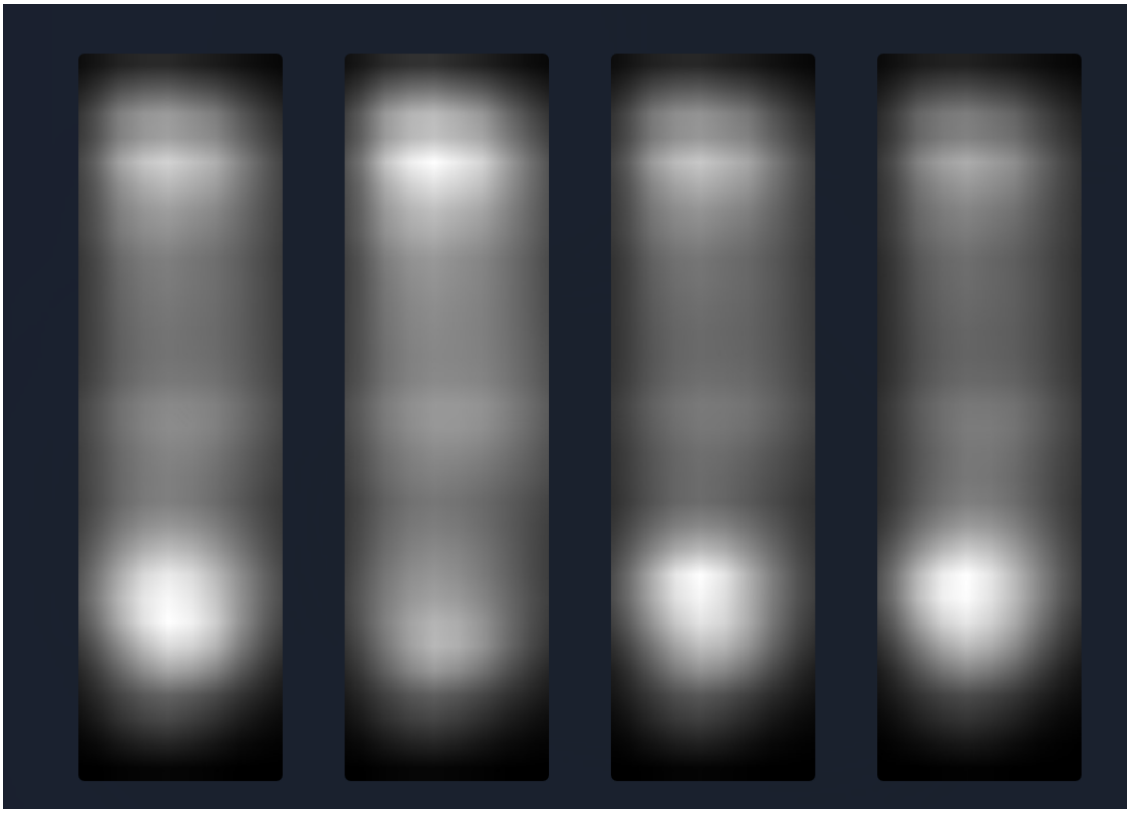

Figure 5: Output of the Saliency Attentive Model for the blue, dark yellow, high contrast green and red T&C (from left to right)

questions. Already in 1933 Von Rostroff showed that encoding of information improves when it relates to items that are distinctive with respect to the context (Von Restorff, 1933). This isolation effect has since been confirmed by many studies carried out on samples with different characteristics (Rangel-Gomez and Meeter, 2013). Following this psychology literature, we hypothesize that the increased distinctiveness of the key clause in our experiment caused by the use of color improved respondents' encoding, which ultimately resulted in a better performance on the understanding questions.

If this is indeed the mechanism at play, our findings support the American Law Institute's position (discussed in Section 2.1) that salience, rather that rote use of all caps, should be the touchstone for determining whether a key term in a consumer contract was sufficiently "conspicuous" to be enforceable.

5.2.2. Differences among colors

While the differences between colors and all-caps are extremely significant and consistent across all understanding questions, the differences among colors are much smaller and more nuanced. For this reason, the mechanisms at play are likely to be more subtle and can depend on the specific features of colors, and hence we only advance some tentative hypotheses. For example, we observe that green is particularly good in fostering visual recognition. A possible reason behind this finding is that green lies at the center of the visual spectrum of the human eye, which makes it easier to see than most colors (Jimison, 2017). Further, we have observed that the color red outperforms the others in making the key clause noticeable (Q1). This result might be driven by the fact that red is often associated with risk and danger, thus a clause in red is more likely to be noticed. A similar mechanism might be behind the finding that red leads respondents to provide better answers in the VSAQ1. Last, it is unclear why we observe that blue is the best performer when it comes to finding information. We emphasize, however, that these are only tentative hypotheses we have advanced after having observed the results.

5.3. Towards SAM based rules

If further studies confirm that the saliency of a clause measured by appropriately trained SAMs correlates with improvements in understanding, a key question is how to practically devise a SAM-based rule.

SAMs return a quantitative output that indicates the saliency of each clause. A SAM based rule would require that key terms should have a saliency above a certain threshold. A rule framed this way would have two significant advantages.

First, a SAM-based rule would minimize uncertainty, and it would be extremely easy to follow for firms and to enforce by regulators. Currently, section 1.4.3 of the Web Content Accessibility Guidelines (WCAG) 2.0 defines a specific minimum contrast ratio that text should have to be accessible to a broad range of people. Those who create content online can rely on free contrast checkers that are available online (e.g., webaim) promptly verify whether their content aligns with WCAG recommendations. In just the same way, policymakers

should define minimum saliency thresholds for key contractual terms and create a website online where everyone can calculate the saliency of the various contractual clauses. This would allow firms to test quickly and at no cost whether their contracts follow the guidelines. At the same time, it would help consumer associations and courts identify contracts that are not in line with such guidelines.

Second, such a rule would be hard to game. Assume that policymakers merely state that key contractual terms need to be highlighted to be enforceable. Firms could easily game the rule, either by highlighting most – if not all – contractual clauses or by including colorful content on the page in which the contract is displayed. However, both approaches reduce the saliency of the key clauses, and hence would not allow firms to game a SAM based rule. More generally, SAM would automatically capture any element introduced in the webpage to reduce the saliency of the term.

5.4. SAM rules and novelty

One possible objection is that colors worked in our experiment not because they are effective per se, but because of the novelty of seeing contract terms highlighted in colors. If true, the effectiveness of using colors to improve consumer understanding of contractual clauses would prove fleeting. This objection, however, proves too much, as it could be leveled against any innovative way to improve the understanding of contractual terms. Moreover, there are several reasons to believe that the impact of colors on understanding would not be short-lived. First, we are hard-wired to use colors to flag important information, for instance when studying. Second, the isolation effect does not require novelty, and therefore there is no reason to think it will no longer be triggered once people become accustomed to seeing colors used in contracts. Third, there is ample evidence across a broad range of disciplines that colors can affect cognitive task performance (Mehta and Zhu, 2009, Elliot et al., 2009) and can effectively direct people's attention (Singh, 2006). For instance, colors remain an effective tool in marketing, even if they have always been a key part of firms' communication strategies. Hence it stands to reason that also in this context colors have an effect beyond novelty. We further note that all the colors that we have tested have proven to be effective.

Thus, even if one assumes that it is novelty that drives most of the results, some degree of novelty might be maintained if the colors used to highlight key terms in consumer contracts changed over time.

Crucially, the long-term effect of colors is likely to depend on whether policymakers can identify terms that matter to consumers. If policymakers require firms to highlight terms that consumers find irrelevant, it is likely that over time consumers will stop paying attention to highlighted terms. Vice versa, if policymakers can carefully select terms that are truly important for consumers, it is likely that consumers will develop the habit of searching for and reading highlighted terms.

5.5. Welfare effects of SAM based rules

A SAM rule can be efficient only if two assumptions hold true. First, it is inefficient if consumers were to read carefully all the terms of the contracts they sign. Second, it is inefficient if consumers were to read none of the terms of the contracts they sign. Given that many jurisdictions require business to flag key contractual terms, it seems that most policymakers consider these assumptions to be true.

Furthermore, a SAM-based rule can be efficient only if the cost of implementing and enforcing it are lower than the benefits. As discussed above, we believe that the costs of implementing a SAM-based rule are trivial. On the one hand, as discussed in section 4.2.2, we observe no significant differences in the time spent on the survey by respondents in the yellow groups and respondents in the small letter groups. Therefore, it seems that using colors does not generate welfare costs in terms of inducing people to spend unnecessarily long to read contracts. On the other hand, as discussed in section 5.3, enforcing a SAM rule is inexpensive and greatly reduces uncertainty. This may also lower litigation rates, and hence administrative costs, compared to the *status quo*. The size of the benefits depends on policymakers' ability to identify the terms valued by consumers. If policymakers can identify terms that consumer value, then the rule will produce sizeable benefits.

5.6. Colors in other domains

We believe that our findings are not only relevant for take-it-or-leave consumers contracts, but may also prove relevant in other domains. For example, our findings may assist the Securities and Exchange Commission in its long-standing quest to improve retail investors' comprehension of key terms in mutual fund prospectuses, which are mostly accessed online. Our findings may also assist efforts by policymakers to reduce medication errors by healthcare providers. The medical literature has studied the case of look-alike/sound-alike (LASA) medications, which result in relatively frequent medication errors that at times can have serious consequences (Lambert et al., 2016). To reduce these errors, in 2001 the US Food & Drug Administration (FDA) implemented the so-called Tall Man lettering rule, which mandates the use of capital letters to flag differences between medicines with similar names. For example, chlorpromazine and chlorpropamide have similar names; to emphasize the differences and minimize errors, the Tall Man lettering rule requires names to be spelled as chlorproMAZINE and chlorproPAMIDE (Zhong et al., 2016). Perhaps unsurprisingly, the evidence on the effectiveness of the Tall man lettering rule is mixed at best (Lambert et al., 2016, Zhong et al., 2016). Using colors might ameliorate this problem, by making more salient the different part of the name. Further studies would be necessary, however, to corroborate this hypothesis, as the evidence we produce is limited to an online setting.

6. CONCLUSIONS

In this paper, we have made three contributions. First, we have introduced a more nuanced definition of understanding that does not rely only on visual recognition. Second, we have shown that unlike other approaches tested in the past, colors can be effective in fostering people's understanding of the key terms in a consumer contract. Third, we have proposed a possible mechanism through which colors might affect understanding. If the mechanism we propose is indeed at play, it becomes possible for policymakers to determine when colors would be effective and to offer guidance on how to frame contracts to favor understanding.

Appendix A. APPENDIX

In this section, we show the demographic composition of the samples of the two experiments (Tables A1–A2).

We observe no significant difference across groups in terms of gender, age, income, education, political orientation, employment status (whether the person is employed or a student) and race. We tested the groups' composition against the "caps" group, the current status quo to represent important clauses in contracts. We take this as a sign that randomisation worked, but to ensure the robustness of our findings we run regressions controlling for these factors. Next, we move to consider the different sets of results.

Table A1: The table reports the demographic composition of our sample in round 1 by group and overall.

	Group														
	Control small			Caps			Highlight caps			Highlight small			Total		
	No.	%	%	No.	%	%	No.	%	%	No.	%	%	No.	%	%
Gender															
Other/Prefer not to declare	31	3.3	3.3	39	4.0	4.0	36	3.5	3.5	26	2.5	2.5	132	3.3	3.3
Female	429	45.2	48.5	482	49.5	53.5	480	46.6	50.1	519	50.2	52.7	1,910	47.9	51.2
Male	489	51.5	100.0	453	46.5	100.0	513	49.9	100.0	489	47.3	100.0	1,944	48.8	100.0
Total	949	100.0		974	100.0		1,029	100.0		1,034	100.0		3,986	100.0	
Age															
18-25 years old	176	18.5	18.5	207	21.3	21.3	223	21.7	21.7	203	19.6	19.6	809	20.3	20.3
26-35 years old	308	32.5	51.0	318	32.6	53.9	316	30.7	52.4	321	31.0	50.7	1,263	31.7	52.0
36-45 years old	203	21.4	72.4	205	21.0	74.9	218	21.2	73.6	199	19.2	69.9	825	20.7	72.7
46-55 years old	110	11.6	84.0	123	12.6	87.6	149	14.5	88.0	153	14.8	84.7	535	13.4	86.1
56-65 years old	99	10.4	94.4	78	8.0	95.6	76	7.4	95.4	113	10.9	95.6	366	9.2	95.3
66-75 years old	38	4.0	98.4	35	3.6	99.2	37	3.6	99.0	40	3.9	99.5	150	3.8	99.0
>75 years old	15	1.6	100.0	8	0.8	100.0	10	1.0	100.0	5	0.5	100.0	38	1.0	100.0
Total	949	100.0		974	100.0		1,029	100.0		1,034	100.0		3,986	100.0	
Income															
$10,000 to $19,999	65	6.9	6.9	63	6.5	6.5	78	7.6	7.6	69	6.7	6.7	275	6.9	6.9
$100,000 to $149,999	131	13.8	20.7	148	15.2	21.7	150	14.6	22.2	133	12.9	19.6	562	14.1	21.0
$150,000 or more	104	11.0	31.7	83	8.5	30.3	108	10.5	32.7	93	9.0	28.6	388	9.8	30.8
$20,000 to $29,999	76	8.0	39.7	80	8.2	38.5	78	7.6	40.4	105	10.2	38.7	339	8.5	39.3
$30,000 to $39,999	98	10.3	50.1	89	9.2	47.7	98	9.6	49.9	109	10.6	49.3	394	9.9	49.2
$40,000 to $49,999	86	9.1	59.1	81	8.3	56.0	85	8.3	58.2	82	7.9	57.2	334	8.4	57.6
$50,000 to $59,999	92	9.7	68.8	91	9.4	65.4	86	8.4	66.6	106	10.3	67.5	375	9.4	67.1
$60,000 to $69,999	53	5.6	74.4	87	9.0	74.4	81	7.9	74.5	83	8.0	75.5	304	7.6	74.7
$70,000 to $79,999	69	7.3	81.7	78	8.0	82.4	86	8.4	82.8	73	7.1	82.6	306	7.7	82.4
$80,000 to $89,999	67	7.1	88.8	45	4.6	87.0	55	5.4	88.2	58	5.6	88.2	225	5.7	88.1
$90,000 to $99,999	53	5.6	94.4	54	5.6	92.6	62	6.0	94.2	73	7.1	95.3	242	6.1	94.1
Less than $10,000	53	5.6	100.0	72	7.4	100.0	59	5.8	100.0	49	4.7	100.0	233	5.9	100.0
Total	947	100.0		971	100.0		1,026	100.0		1,033	100.0		3,977	100.0	
Education															
Associate degree in college (2-year)	81	8.5	8.5	95	9.8	9.8	97	9.4	9.4	89	8.6	8.6	362	9.1	9.1
Bachelor's degree in college (4-year)	397	41.8	50.4	366	37.7	47.5	395	38.5	47.9	423	40.9	49.6	1,581	39.7	48.8
Doctoral degree	25	2.6	53.0	16	1.6	49.1	18	1.8	49.7	18	1.7	51.3	77	1.9	50.8
High school graduate	88	9.3	62.3	119	12.3	61.4	109	10.6	60.3	110	10.6	62.0	426	10.7	61.5
Less than high school degree	6	0.6	62.9	10	1.0	62.4	5	0.5	60.8	7	0.7	62.6	28	0.7	62.2
Master's degree	155	16.3	79.2	144	14.8	77.2	144	14.0	74.8	140	13.6	76.2	583	14.6	76.8
Professional degree (JD, MD)	20	2.1	81.3	20	2.1	79.3	24	2.3	77.1	21	2.0	78.2	85	2.1	78.9
Some college but no degree	177	18.7	100.0	201	20.7	100.0	235	22.9	100.0	225	21.8	100.0	838	21.1	100.0
Total	949	100.0		971	100.0		1,027	100.0		1,033	100.0		3,980	100.0	
Political Orientation															
Republican	166	17.5	17.5	171	17.6	17.6	189	18.4	18.4	180	17.4	17.4	706	17.7	17.7
Democrat	509	53.6	71.1	512	52.6	70.1	537	52.2	70.6	551	53.3	70.7	2,109	52.9	70.6
Other	274	28.9	100.0	291	29.9	100.0	303	29.4	100.0	303	29.3	100.0	1,171	29.4	100.0
Total	949	100.0		974	100.0		1,029	100.0		1,034	100.0		3,986	100.0	
In full or part time employment															
	655	69.0	100.0	634	65.1	100.0	696	67.6	100.0	711	68.8	100.0	2,696	67.6	100.0
Student															
	80	8.4	100.0	89	9.1	100.0	99	9.6	100.0	84	8.1	100.0	352	8.8	100.0
White															
	711	74.9	100.0	743	76.3	100.0	758	73.7	100.0	785	75.9	100.0	2,997	75.2	100.0

Table A2: The table reports the demographic composition of our sample in round 1 by group and overall.

	Group														
	Dark yellow			Red			Blue			¿ n3cGreen			Total		
	No.	%	%	No.	%	%	No.	%	%	No.	%	%	No.	%	%
Gender															
Other/Prefer not to declare	9	2.3	2.3	11	2.7	2.7	15	3.8	3.8	11	2.7	2.7	46	2.9	2.9
Female	215	55.4	57.7	210	51.9	54.6	207	52.5	56.3	198	48.6	51.4	830	52.1	55.0
Male	164	42.3	100.0	184	45.4	100.0	172	43.7	100.0	198	48.6	100.0	718	45.0	100.0
Total	388	100.0		405	100.0		394	100.0		407	100.0		1,594	100.0	
Age															
18-25 years old	71	18.3	18.3	88	21.7	21.7	88	22.3	22.3	98	24.1	24.1	345	21.6	21.6
26-35 years old	126	32.5	50.8	132	32.6	54.3	128	32.5	54.8	112	27.5	51.6	498	31.2	52.9
36-45 years old	80	20.6	71.4	85	21.0	75.3	88	22.3	77.2	96	23.6	75.2	349	21.9	74.8
46-55 years old	44	11.3	82.7	43	10.6	85.9	46	11.7	88.8	43	10.6	85.7	176	11.0	85.8
56-65 years old	42	10.8	93.6	36	8.9	94.8	28	7.1	95.9	39	9.6	95.3	145	9.1	94.9
66-75 years old	15	3.9	97.4	16	4.0	98.8	8	2.0	98.0	15	3.7	99.0	54	3.4	98.3
$¿$75 years old	10	2.6	100.0	5	1.2	100.0	8	2.0	100.0	4	1.0	100.0	27	1.7	100.0
Total	388	100.0		405	100.0		394	100.0		407	100.0		1,594	100.0	
Income															
$10,000 to $19,999	27	7.0	7.0	35	8.6	8.6	23	5.8	5.8	30	7.4	7.4	115	7.2	7.2
$100,000 to $149,999	52	13.4	20.4	47	11.6	20.2	44	11.2	17.0	54	13.3	20.6	197	12.4	19.6
$150,000 or more	38	9.8	30.2	41	10.1	30.4	33	8.4	25.4	37	9.1	29.7	149	9.4	28.9
$20,000 to $29,999	41	10.6	40.8	44	10.9	41.2	41	10.4	35.8	41	10.1	39.8	167	10.5	39.4
$30,000 to $39,999	31	8.0	48.8	44	10.9	52.1	42	10.7	46.4	45	11.1	50.9	162	10.2	49.6
$40,000 to $49,999	30	7.8	56.6	29	7.2	59.3	40	10.2	56.6	31	7.6	58.5	130	8.2	57.8
$50,000 to $59,999	38	9.8	66.4	40	9.9	69.1	47	11.9	68.5	47	11.5	70.0	172	10.8	68.5
$60,000 to $69,999	36	9.3	75.7	29	7.2	76.3	30	7.6	76.1	25	6.1	76.2	120	7.5	76.1
$70,000 to $79,999	27	7.0	82.7	24	5.9	82.2	33	8.4	84.5	26	6.4	82.6	110	6.9	83.0
$80,000 to $89,999	14	3.6	86.3	23	5.7	87.9	24	6.1	90.6	32	7.9	90.4	93	5.8	88.8
$90,000 to $99,999	19	4.9	91.2	24	5.9	93.8	19	4.8	95.4	23	5.7	96.1	85	5.3	94.2
Less than $10,000	34	8.8	100.0	25	6.2	100.0	18	4.6	100.0	16	3.9	100.0	93	5.8	100.0
Total	387	100.0		405	100.0		394	100.0		407	100.0		1,593	100.0	
Education															
Associate degree in college (2-year)	41	10.6	10.6	45	11.1	11.1	33	8.4	8.4	41	10.1	10.1	160	10.1	10.1
Bachelor's degree in college (4-year)	155	40.2	50.8	119	29.4	40.5	145	36.8	45.2	151	37.3	47.4	570	35.8	45.9
Doctoral degree	7	1.8	52.6	12	3.0	43.5	8	2.0	47.2	2	0.5	47.9	29	1.8	47.7
High school graduate	52	13.5	66.1	47	11.6	55.1	52	13.2	60.4	53	13.1	61.0	204	1 ¿ 2.8	60.6
Less than high school degree	6	1.6	67.6	6	1.5	56.5	4	1.0	61.4	5	1.2	62.2	21	1.3	61.9
Master's degree	50	13.0	80.6	63	15.6	72.1	52	13.2	74.6	56	13.8	76.0	221	13.9	75.8
Professional degree (JD, MD)	8	2.1	82.6	11	2.7	74.8	9	2.3	76.9	10	2.5	78.5	38	2.4	78.2
Some college but no degree	67	17.4	100.0	102	25.2	100.0	91	23.1	100.0	87	21.5	100.0	347	21.8	100.0
Total	386	100.0		405	100.0		394	100.0		405	100.0		1,590	100.0	
Political Orientation															
Republican	62	16.0	16.0	70	17.3	17.3	75	19.0	19.0	81	19.9	19.9	288	18.1	18.1
Democrat	212	54.6	70.6	212	52.3	69.6	206	52.3	71.3	219	53.8	73.7	849	53.3	71.3
Other	114	29.4	100.0	123	30.4	100.0	113	28.7	100.0	107	26.3	100.0	457	28.7	100.0
Total	388	100.0		405	100.0		394	100.0		407	100.0		1,594	100.0	
In full or part time employment															
	252	64.9	100.0	269	66.4	100.0	276	70.1	100.0	287	70.5	100.0	1,084	68.0	100.0
Student															
	27	7.0	100.0	36	8.9	100.0	31	7.9	100.0	25	6.1	100.0	119	7.5	100.0
White															
	285	73.5	100.0	296	73.1	100.0	297	75.4	100.0	302	74.2	100.0	1,180	74.0	100.0

Table A3: This table shows the logit coefficients from a regression investigating the likelihood of selecting the giftcard instead of the certain payment by color group. The regression is run on the pooled sample between round 1 and round 2. Column 1 reports the results of a regression run without controls, Column 2 reports controls for the main demographics of the sample and Column 3 controls for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)
	giftcard	giftcard	giftcard
giftcard			
highlightCAPS	0.811***	-0.108	-0.113
	(0.000)	(0.532)	(0.513)
highlightsmall	1.008***	0.109	0.0925
	(0.000)	(0.506)	(0.575)
caps	1.111***	0.194	0.169
	(0.000)	(0.239)	(0.251)
darkyellow	0.474*	-0.422	-0.431
	(0.066)	(0.107)	(0.100)
red	0.893***	0.00627	-0.00524
	(0.000)	(0.978)	(0.981)
blue	0.991***	0.0258	-0.00446
	(0.000)	(0.908)	(0.984)
green	0.421	-0.409*	-0.501*
	(0.103)	(0.059)	(0.053)
Age		-0.00881**	-0.00793*
		(0.027)	(0.075)
Less than $10,000		0	0
		(.)	(.)
$10,000 to $19,999		0.403	0.466
		(0.168)	(0.111)
$20,000 to $29,999		0.0742	0.149
		(0.800)	(0.621)
$30,000 to $39,999		0.109	0.190
		(0.705)	(0.526)
$40,000 to $49,999		0.417	0.504*
		(0.143)	(0.090)
$50,000 to $59,999		0.0823	0.162
		(0.772)	(0.590)
$60,000 to $69,999		-0.00910	0.101
		(0.976)	(0.754)
$70,000 to $79,999		0.144	0.227
		(0.631)	(0.467)
$80,000 to $89,999		0.261	0.372
		(0.403)	(0.253)
$90,000 to $99,999		0.198	0.291
		(0.528)	(0.374)
$100,000 to $149,999		0.205	0.302
		(0.450)	(0.291)
$150,000 or more		0.146	0.241
		(0.610)	(0.423)
Female		0.0320	0.0395
		(0.752)	(0.700)
Less than high school degree		0	0
		(.)	(.)
Some college but no degree		-0.166	-0.184
		(0.785)	(0.766)
Associate degree in college (2-year)		0.326	0.308
		(0.598)	(0.617)
Bachelor's degree in college (4-year)		0.361	0.324
		(0.549)	(0.590)
Master's degree		0.501	0.466
		(0.412)	(0.447)
Professional degree (JD, MD)		0.478	0.433
		(0.479)	(0.521)
Doctoral degree		0.122	0.0581
		(0.865)	(0.935)
High school graduate (high school diploma or equivalent including GED)		0.156	0.143
		(0.799)	(0.815)
White			-0.317***
			(0.005)
In full or part time employment			-0.0225
			(0.864)
Student			-0.169
			(0.476)
Republican			-0.0703
			(0.692)
Democrat			0.133
			(0.313)
Political Scale			0.0381
			(0.296)
Constant	-3.383***	-2.587***	-2.571***
	(0.000)	(0.000)	(0.000)
Observations	6915	5524	5461
Pseudo R^2	0.022	0.013	0.017
chi2	63.01	41.34	57.26

p-values in parentheses

* $p<0.10$, ** $p<0.05$, *** $p<0.01$

Table A4: [Round 1: Highlights vs Caps] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	Instillability	Instillability	Q1ord	Q2ord	Q3	Q3	Q4	Q4
highlight CAPS	2.760***	2.853***	0.229**	0.234**	-0.204**	-0.154	0.122	0.205*	-0.321***	-0.206**
	(0.000)	(0.000)	(0.014)	(0.016)	(0.048)	(0.146)	(0.301)	(0.099)	(0.004)	(0.012)
highlight small	2.899***	2.902***	0.271***	0.296***	-0.294***	-0.241**	0.253**	0.279**	-0.145	-0.172
	(0.000)	(0.000)	(0.004)	(0.002)	(0.004)	(0.023)	(0.026)	(0.027)	(0.208)	(0.156)
caps	0	0	0	0	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Age		0.00452		-0.0894***		-0.0132***		0.00192		0.0123***
		(0.283)		(0.004)		(0.000)		(0.670)		(0.005)
$10,000 to $19,999		-0.102		0.328		-0.0827		0.0884		0.239
		(0.705)		(0.136)		(0.718)		(0.977)		(0.339)
$20,000 to $29,999		0.210		0.563***		0.0390		-0.318		0.504**
		(0.433)		(0.008)		(0.857)		(0.236)		(0.040)
$30,000 to $39,999		-0.0624		0.296		-0.0669		0.118		0.167
		(0.814)		(0.149)		(0.757)		(0.669)		(0.466)
$40,000 to $49,999		0.352		0.317		0.126		0.0232		0.437*
		(0.204)		(0.136)		(0.576)		(0.935)		(0.073)
$50,000 to $59,999		0.216		0.455**		0.114		0.205		0.823***
		(0.423)		(0.021)		(0.600)		(0.465)		(0.001)
$60,000 to $69,999		0.300		0.189		0.469**		-0.156		0.599**
		(0.281)		(0.372)		(0.047)		(0.567)		(0.016)
$70,000 to $79,999		0.0714		0.318		0.237		-0.0246		0.734***
		(0.793)		(0.141)		(0.263)		(0.931)		(0.004)
$80,000 to $89,999		0.0293		0.0735		-0.0365		-0.129		0.279
		(0.919)		(0.755)		(0.884)		(0.676)		(0.291)
$90,000 to $99,999		-0.194		0.198		0.278		-0.0322		0.666**
		(0.508)		(0.382)		(0.247)		(0.914)		(0.013)
$100,000 to $149,999		0.0478		0.182		0.150		0.197		0.593***
		(0.853)		(0.352)		(0.474)		(0.459)		(0.009)
$150,000 or more		-0.200		0.310		0.0248		0.00424		0.656***
		(0.465)		(0.144)		(0.911)		(0.988)		(0.008)
Female		-0.0753		-0.0690		-0.0943		-0.0638		0.159*
		(0.452)		(0.391)		(0.247)		(0.541)		(0.100)
Some college but no degree		-0.804		-0.344		0.758		-0.0534		-0.187
		(0.107)		(0.490)		(0.322)		(0.934)		(0.756)
Associate degree in college (2-year)		-0.862*		-0.262		1.079		-0.0662		-0.548
		(0.094)		(0.607)		(0.157)		(0.919)		(0.371)
Bachelor's degree in college (4-year)		-0.635		-0.0870		1.099		0.0538		-0.485
		(0.202)		(0.861)		(0.146)		(0.932)		(0.418)
Master's degree		-0.659		-0.269		1.180		-0.133		-0.526
		(0.196)		(0.595)		(0.122)		(0.840)		(0.388)
Professional degree (JD, MD)		-0.588		-1.087*		0.558		0.195		0.108
		(0.319)		(0.073)		(0.496)		(0.793)		(0.882)
Doctoral degree		-0.608		-0.155		1.298		0.865		-0.299
		(0.304)		(0.787)		(0.115)		(0.296)		(0.675)
High school graduate (high school diploma or equivalent including GED)		-0.871*		-0.407		0.976		0.0237		-0.488
		(0.086)		(0.420)		(0.159)		(0.971)		(0.422)
White		0.157		0.129		-0.0868		0.119		0.0428
		(0.185)		(0.179)		(0.304)		(0.326)		(0.765)
In full or part time employment		0.243*		-0.0520		-0.277***		-0.256*		-0.0377
		(0.050)		(0.695)		(0.008)		(0.065)		(0.764)
Student		-0.0438		0.355*		0.166		-0.171		-0.359*
		(0.843)		(0.051)		(0.310)		(0.459)		(0.078)
Republican		-0.174		-0.0812		-0.0391		-0.129		-0.233
		(0.292)		(0.543)		(0.784)		(0.444)		(0.140)
Democrat		-0.206		0.0617		0.0382		0.0631		-0.285**
		(0.104)		(0.544)		(0.709)		(0.640)		(0.031)
Political Scale		-0.0396		-0.0437		0.0143		-0.0523		-0.0953**
		(0.247)		(0.115)		(0.600)		(0.155)		(0.007)
arousal		0.000467		0.00132		-0.000216		0.0000620		0.00475**
		(0.906)		(0.378)		(0.886)		(0.976)		(0.011)
pleasure		0.00109		-0.000313		-0.00447**		-0.00585**		-0.00643***
		(0.622)		(0.857)		(0.014)		(0.014)		(0.004)
Constant	-1.053***	-0.655	0.442***	0.764			1.498***	1.943***	1.561***	1.521**
	(0.000)	(0.243)	(0.000)	(0.152)			(0.000)	(0.006)	(0.000)	(0.020)
Observations	3037	2903	3037	2903	2349	2254	3037	2903	3037	2903
Pseudo R^2	0.272	0.282	0.002	0.020	0.002	0.015	0.002	0.016	0.003	0.029
chi2	861.2	823.3	9.824	73.42	8.153	75.18	4.393	39.56	8.239	75.14

p-values in parentheses

* $p<0.10$, ** $p<0.05$, *** $p<0.01$

Table A5: [Round 1: Highlights vs Caps] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
highlight CAPS	-10.08***	-10.25***	-2.462**	-2.544**	-11.80***	-14.14***	10.36***	9.999***
	(0.000)	(0.000)	(0.015)	(0.012)	(0.002)	(0.000)	(0.004)	(0.007)
highlight small	-9.212***	-9.423***	-0.463	-0.806	-2.833	-5.528	12.60***	11.48***
	(0.000)	(0.000)	(0.674)	(0.462)	(0.464)	(0.162)	(0.001)	(0.003)
caps	0	0	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Age		0.0971**		0.156***		1.125***		0.673***
		(0.014)		(0.000)		(0.000)		(0.000)
$10,000 to $19,999		-0.180		-3.299*		1.424		-7.975
		(0.929)		(0.062)		(0.883)		(0.464)
$20,000 to $29,999		-2.021		-0.444		-1.592		-10.28
		(0.272)		(0.831)		(0.810)		(0.342)
$30,000 to $39,999		0.380		-0.138		-7.776		-2.552
		(0.874)		(0.947)		(0.304)		(0.829)
$40,000 to $49,999		-0.820		-0.869		-0.460		-6.277
		(0.685)		(0.671)		(0.960)		(0.573)
$50,000 to $59,999		-0.875		-1.308		-2.023		-7.054
		(0.698)		(0.504)		(0.795)		(0.517)
$60,000 to $69,999		1.892		1.548		3.484		-6.764
		(0.500)		(0.549)		(0.692)		(0.507)
$70,000 to $79,999		-1.694		0.924		-4.169		-19.20*
		(0.437)		(0.723)		(0.612)		(0.060)
$80,000 to $89,999		-0.982		-2.897		-3.990		-10.82
		(0.693)		(0.196)		(0.650)		(0.326)
$90,000 to $99,999		2.012		-3.701*		-18.31**		-19.98*
		(0.679)		(0.085)		(0.023)		(0.059)
$100,000 to $149,999		-3.229		-2.464		-15.13**		-4.111
		(0.108)		(0.179)		(0.032)		(0.689)
$150,000 or more		-5.326***		-5.113***		-19.55***		-5.959
		(0.004)		(0.006)		(0.009)		(0.600)
Female		0.0553		-1.306		12.72***		3.605
		(0.954)		(0.124)		(0.000)		(0.278)
Some college but no degree		0.539		-0.455		-11.46		-72.25
		(0.815)		(0.865)		(0.686)		(0.243)
Associate degree in college		1.470		0.209		-1.153		-60.05
		(0.583)		(0.941)		(0.968)		(0.335)
Bachelor's degree in college		0.337		0.569		-17.12		-71.57
		(0.883)		(0.831)		(0.536)		(0.248)
Master's degree		1.233		-0.0975		-19.98		-73.69
		(0.706)		(0.976)		(0.475)		(0.236)
Professional degree (JD, MD)		0.802		-5.183*		-29.38		-74.73
		(0.798)		(0.095)		(0.311)		(0.232)
Doctoral degree		3.897		-3.907		-11.34		-77.37
		(0.506)		(0.199)		(0.705)		(0.223)
High school graduate		0.256		1.565		-11.46		-59.37
		(0.913)		(0.594)		(0.684)		(0.336)
White		-0.481		-1.881**		-20.58***		-13.86***
		(0.647)		(0.049)		(0.000)		(0.001)
In full or part time employment		-0.630		0.838		-13.15***		-4.524
		(0.501)		(0.400)		(0.001)		(0.335)
Student		-2.403*		0.257		-3.379		-7.520
		(0.051)		(0.858)		(0.602)		(0.205)
Republican		0.719		1.239		-2.958		-8.720
		(0.621)		(0.434)		(0.554)		(0.110)
Democrat		3.237***		1.259		0.826		4.488
		(0.005)		(0.191)		(0.829)		(0.291)
Political Scale		0.510		0.764***		2.364**		2.881**
		(0.297)		(0.005)		(0.020)		(0.024)
pleasure		0.0765*		0.0319		0.253***		0.0878
		(0.068)		(0.106)		(0.001)		(0.264)
arousal		-0.0132		0.0186		-0.0534		0.0290
		(0.664)		(0.138)		(0.362)		(0.644)
Constant	20.85***	13.06***	18.79***	10.65***	100.3***	84.99***	74.93***	126.7*
	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.003)	(0.000)	(0.051)
Observations	2967	2833	2967	2833	2967	2833	2967	2833
R^2	0.030	0.046	0.002	0.032	0.003	0.074	0.004	0.037
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: [Round 1: Highlights vs Caps] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1) VSAQ1	(2) VSAQ1	(3) VSAQ2	(4) VSAQ2
highlight CAPS	0.426***	0.422***	-0.250***	-0.249***
	(0.000)	(0.000)	(0.006)	(0.008)
highlight small	0.511***	0.480***	-0.141	-0.168*
	(0.000)	(0.000)	(0.119)	(0.075)
caps	0	0	0	0
	(.)	(.)	(.)	(.)
Age		0.00837**		0.00704**
		(0.013)		(0.028)
$10,000 to $19,999		0.230		0.289
		(0.338)		(0.174)
$20,000 to $29,999		0.0421		0.150
		(0.859)		(0.462)
$30,000 to $39,999		0.203		0.0306
		(0.369)		(0.878)
$40,000 to $49,999		0.238		0.317
		(0.319)		(0.127)
$50,000 to $59,999		0.463**		0.434**
		(0.044)		(0.033)
$60,000 to $69,999		0.421*		0.254
		(0.077)		(0.224)
$70,000 to $79,999		0.220		0.334
		(0.356)		(0.109)
$80,000 to $89,999		-0.0175		0.236
		(0.947)		(0.304)
$90,000 to $99,999		0.245		0.391*
		(0.332)		(0.078)
$100,000 to $149,999		0.0692		0.180
		(0.755)		(0.349)
$150,000 or more		0.0440		0.295
		(0.854)		(0.154)
Female		-0.390***		0.0638
		(0.000)		(0.410)
Some college but no degree		-0.731		0.516
		(0.109)		(0.268)
Associate degree in college		-0.685		0.393
		(0.144)		(0.410)
Bachelor's degree in college		-0.702		0.704
		(0.122)		(0.129)
Master's degree		-1.010**		0.530
		(0.031)		(0.263)
Professional degree (JD, MD)		-0.972*		0.336
		(0.073)		(0.527)
Doctoral degree		-0.106		0.643
		(0.844)		(0.239)
High school graduate		-0.677		0.547
		(0.144)		(0.246)
White		-0.134		0.00549
		(0.184)		(0.953)
In full or part time employment		0.205*		-0.0190
		(0.059)		(0.847)
Student		-0.215		-0.180
		(0.275)		(0.279)
Republican		0.135		0.111
		(0.346)		(0.393)
Democrat		0.215**		0.189*
		(0.045)		(0.055)
Political Scale		-0.00917		0.0114
		(0.753)		(0.673)
arousal		0.00636***		0.00381***
		(0.000)		(0.009)
pleasure		-0.00287		-0.00430**
		(0.120)		(0.012)
Constant	-1.173***	-1.059**	0.220***	-0.992**
	(0.000)	(0.034)	(0.001)	(0.049)
Observations	2967	2833	2967	2833
Pseudo R^2	0.008	0.033	0.002	0.015
chi2	28.03	114.3	7.604	55.84

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: [Round 1: Highlights vs Caps] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
highlight CAPS	-8.691**	-11.51***	-0.157	-0.686	-28.32	-35.63*
	(0.017)	(0.001)	(0.932)	(0.712)	(0.132)	(0.055)
highlight small	-6.749*	-8.534**	-0.286	-0.453	-13.41	-22.10
	(0.062)	(0.019)	(0.877)	(0.811)	(0.446)	(0.199)
caps	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)
Age		0.450***		0.245***		4.660***
		(0.000)		(0.001)		(0.000)
$10,000 to $19,999		-1.937		4.226		-15.94
		(0.749)		(0.381)		(0.643)
$20,000 to $29,999		9.148		-0.740		-18.09
		(0.211)		(0.814)		(0.590)
$30,000 to $39,999		0.554		1.096		-24.60
		(0.925)		(0.758)		(0.472)
$40,000 to $49,999		4.050		-1.831		34.43
		(0.514)		(0.600)		(0.366)
$50,000 to $59,999		3.927		1.423		-9.770
		(0.564)		(0.710)		(0.773)
$60,000 to $69,999		10.07		7.871		48.73
		(0.168)		(0.101)		(0.222)
$70,000 to $79,999		7.882		0.587		-45.81
		(0.322)		(0.867)		(0.170)
$80,000 to $89,999		-3.263		-7.453**		-72.93**
		(0.618)		(0.014)		(0.033)
$90,000 to $99,999		-3.035		-2.233		-36.72
		(0.630)		(0.592)		(0.484)
$100,000 to $149,999		-1.735		-5.157*		-65.17**
		(0.757)		(0.076)		(0.038)
$150,000 or more		-6.447		-7.236**		-103.0***
		(0.293)		(0.016)		(0.002)
Female		-2.490		-3.595**		15.19
		(0.403)		(0.022)		(0.305)
Some college but no degree		-22.96		-2.319		-126.7
		(0.109)		(0.700)		(0.148)
Associate degree in college		-13.25		-1.922		-87.24
		(0.382)		(0.762)		(0.333)
Bachelor's degree in college		-17.69		-3.458		-123.8
		(0.219)		(0.560)		(0.157)
Master's degree		-21.49		-4.729		-124.3
		(0.144)		(0.444)		(0.172)
Professional degree (JD, MD)		-38.35**		-2.337		-224.1**
		(0.013)		(0.788)		(0.019)
Doctoral degree		-28.71		-7.722		-214.3**
		(0.125)		(0.239)		(0.024)
High school graduate		-5.173		2.448		-72.14
		(0.731)		(0.698)		(0.419)
White		-21.83***		-6.691***		-88.27***
		(0.000)		(0.001)		(0.000)
In full or part time employment		-3.494		-0.512		-29.05*
		(0.343)		(0.787)		(0.077)
Student		-5.041		-3.317		-68.24***
		(0.370)		(0.237)		(0.006)
Republican		-1.386		1.261		-26.46
		(0.792)		(0.648)		(0.291)
Democrat		3.184		3.452*		4.253
		(0.393)		(0.070)		(0.833)
Political Scale		2.843***		1.184**		15.22***
		(0.007)		(0.029)		(0.004)
pleasure		0.243***		0.118***		1.432***
		(0.001)		(0.001)		(0.000)
arousal		0.117**		0.00397		0.440*
		(0.012)		(0.866)		(0.090)
Constant	63.61***	60.46***	28.54***	20.35***	611.8***	554.9***
	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)
Observations	2967	2833	2967	2833	2967	2833
R^2	0.002	0.051	0.000	0.034	0.001	0.069
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: [Round 1: Highlights and Caps vs Lowercase] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	limitliability	limitliability	Q2_qpill	Q2_qpill	Q3	Q3	Q4	Q4
main										
highlightCAPS	2.159***	2.255***	0.170*	0.178*	-0.120	-0.142	0.463***	0.572***	-0.0185	0.0118
	(0.000)	(0.000)	(0.070)	(0.067)	(0.218)	(0.161)	(0.000)	(0.000)	(0.864)	(0.917)
highlightsmall	2.290***	2.290***	0.212**	0.241**	-0.208**	-0.232**	0.594***	0.650***	0.157	0.150
	(0.000)	(0.000)	(0.024)	(0.014)	(0.033)	(0.021)	(0.000)	(0.000)	(0.155)	(0.198)
caps	-0.690***	-0.622***	-0.0589	-0.0618	0.0799	0.00404	0.341***	0.376***	0.303***	0.311***
	(0.000)	(0.000)	(0.530)	(0.526)	(0.469)	(0.971)	(0.002)	(0.001)	(0.009)	(0.010)
Age		0.00829**		-0.0124***		-0.0146***		-0.00235		0.00920**
		(0.013)		(0.000)		(0.000)		(0.515)		(0.013)
$10,000 to $19,999		-0.261		0.278		-0.0824		-0.153		0.201
		(0.247)		(0.149)		(0.673)		(0.511)		(0.354)
$20,000 to $29,999		0.120		0.447**		0.0700		-0.208		0.384*
		(0.590)		(0.016)		(0.707)		(0.349)		(0.070)
$30,000 to $39,999		-0.112		0.255		0.00446		0.192		0.121
		(0.610)		(0.156)		(0.981)		(0.394)		(0.544)
$40,000 to $49,999		0.195		0.191		0.125		0.0930		0.277
		(0.385)		(0.300)		(0.521)		(0.689)		(0.184)
$50,000 to $59,999		0.103		0.366**		0.201		0.296		0.714***
		(0.642)		(0.046)		(0.285)		(0.203)		(0.001)
$60,000 to $69,999		0.257		0.261		0.446**		-0.178		0.474**
		(0.271)		(0.172)		(0.031)		(0.435)		(0.030)
$70,000 to $79,999		-0.107		0.225		0.315		0.113		0.643***
		(0.633)		(0.235)		(0.102)		(0.636)		(0.004)
$80,000 to $89,999		-0.100		0.135		0.103		0.0122		0.370
		(0.671)		(0.505)		(0.617)		(0.962)		(0.111)
$90,000 to $99,999		-0.161		0.164		0.341		-0.00247		0.364
		(0.515)		(0.411)		(0.103)		(0.992)		(0.111)
$100,000 to $149,999		0.0268		0.103		0.139		0.276		0.619***
		(0.900)		(0.550)		(0.445)		(0.206)		(0.002)
$150,000 or more		-0.183		0.110		-0.0622		0.234		0.541**
		(0.418)		(0.550)		(0.749)		(0.326)		(0.012)
Female		-0.0726		-0.0390		-0.0672		-0.0193		0.125
		(0.374)		(0.578)		(0.354)		(0.826)		(0.132)
Some college but no degree		-0.971**		-0.163		0.325		0.0350		0.0168
		(0.025)		(0.699)		(0.600)		(0.945)		(0.974)
Associate degree in college (2-year)		-1.119**		-0.102		0.589		-0.130		-0.213
		(0.012)		(0.811)		(0.346)		(0.800)		(0.679)
Bachelor's degree in college (4-year)		-0.831*		0.119		0.646		0.122		-0.175
		(0.054)		(0.776)		(0.295)		(0.808)		(0.727)
Master's degree		-0.916**		-0.0315		0.715		-0.00593		-0.236
		(0.038)		(0.941)		(0.252)		(0.991)		(0.644)
Professional degree (JD, MD)		-0.570		-0.596		0.404		0.422		0.292
		(0.263)		(0.209)		(0.551)		(0.484)		(0.630)
Doctoral degree		-0.691		-0.0529		0.925		1.188*		-0.0171
		(0.173)		(0.912)		(0.177)		(0.081)		(0.977)
High school graduate (high school diploma or equivalent including GED)		-1.052**		-0.207		0.536		-0.0742		-0.337
		(0.017)		(0.626)		(0.389)		(0.884)		(0.508)
White		0.212**		0.113		0.0265		0.0602		0.0177
		(0.027)		(0.170)		(0.765)		(0.558)		(0.856)
In full or part time employment		0.218**		-0.0928		-0.202**		-0.108		-0.0549
		(0.035)		(0.294)		(0.029)		(0.339)		(0.613)
Student		-0.0720		0.245		0.209		-0.152		-0.224
		(0.694)		(0.122)		(0.146)		(0.427)		(0.207)
Republican		-0.0813		-0.0269		-0.0243		0.0739		-0.238*
		(0.546)		(0.816)		(0.839)		(0.660)		(0.078)
Democrat		-0.139		0.0477		-0.0130		0.0782		-0.271**
		(0.174)		(0.589)		(0.887)		(0.478)		(0.015)
Political Scale		-0.0427		-0.0307		-0.0140		-0.0710**		-0.0782***
		(0.124)		(0.201)		(0.562)		(0.019)		(0.010)
arousal		0.00154		0.000743		-0.00108		0.000370		0.00433***
		(0.320)		(0.565)		(0.407)		(0.829)		(0.006)
pleasure		-0.00362**		-0.00116		-0.00407**		-0.00687***		-0.00696***
		(0.043)		(0.441)		(0.011)		(0.001)		(0.001)
Constant	-0.452***	0.157	0.501***	0.959*			1.157***	1.564***	1.258***	1.115**
	(0.000)	(0.747)	(0.000)	(0.059)			(0.000)	(0.005)	(0.000)	(0.040)
Observations	3986	3810	3986	3810	3052	2926	3986	3810	3986	3810
Pseudo R^2	0.238	0.250	0.002	0.017	0.002	0.014	0.008	0.026	0.003	0.023
chi2	1020.4	971.5	11.76	80.85	9.816	89.35	30.37	89.15	10.43	81.94

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9: [Round 1: Highlights and Caps vs Lowercase] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
highlight CAPS	-10.36***	-10.32***	-0.956	-0.943	-19.03***	-19.05***	12.56***	12.81***
	(0.000)	(0.000)	(0.314)	(0.338)	(0.000)	(0.000)	(0.001)	(0.001)
highlight small	-9.483***	-9.594***	1.042	0.834	-10.06**	-10.83***	14.80***	14.28***
	(0.000)	(0.000)	(0.317)	(0.437)	(0.013)	(0.008)	(0.000)	(0.000)
caps	-0.271	-0.186	1.506	1.566	-7.225*	-4.772	2.201	2.938
	(0.797)	(0.862)	(0.188)	(0.172)	(0.070)	(0.228)	(0.525)	(0.407)
Age		0.141***		0.140***		1.264***		0.746***
		(0.000)		(0.000)		(0.000)		(0.000)
$10,000 to $19,999		-1.707		-3.212**		-0.264		-8.987
		(0.329)		(0.030)		(0.975)		(0.317)
$20,000 to $29,999		-1.492		-0.0632		0.523		-10.02
		(0.411)		(0.973)		(0.944)		(0.244)
$30,000 to $39,999		0.337		-0.470		-6.432		-3.020
		(0.878)		(0.784)		(0.348)		(0.753)
$40,000 to $49,999		-0.0572		-0.195		2.476		0.576
		(0.975)		(0.909)		(0.763)		(0.952)
$50,000 to $59,999		-1.032		-0.823		-0.165		-7.343
		(0.599)		(0.626)		(0.981)		(0.403)
$60,000 to $69,999		2.061		2.614		5.340		-5.111
		(0.399)		(0.243)		(0.520)		(0.542)
$70,000 to $79,999		-2.254		1.848		-1.566		-13.17
		(0.226)		(0.426)		(0.832)		(0.119)
$80,000 to $89,999		-0.801		-0.937		-4.185		-6.005
		(0.710)		(0.656)		(0.585)		(0.503)
$90,000 to $99,999		0.975		-2.983*		-11.88		-18.38**
		(0.805)		(0.099)		(0.133)		(0.032)
$100,000 to $149,999		-3.640**		-2.222		-12.23*		-3.232
		(0.038)		(0.149)		(0.059)		(0.695)
$150,000 or more		-5.213***		-3.936**		-15.93**		-7.890
		(0.002)		(0.018)		(0.020)		(0.376)
Female		-0.353		-1.439*		13.38***		2.683
		(0.675)		(0.057)		(0.000)		(0.349)
Some college but no degree		-11.40		-0.560		-27.52		-59.96
		(0.294)		(0.814)		(0.265)		(0.218)
Associate degree in college		-10.92		0.854		-23.88		-54.80
		(0.319)		(0.749)		(0.344)		(0.262)
Bachelor's degree in college		-11.89		0.238		-30.54		-61.45
		(0.274)		(0.921)		(0.215)		(0.207)
Master's degree		-11.75		-0.442		-37.67		-64.21
		(0.285)		(0.861)		(0.128)		(0.189)
Professional degree (JD, MD)		-10.04		-4.655*		-45.13*		-60.07
		(0.362)		(0.094)		(0.077)		(0.223)
Doctoral degree		-10.02		-4.422*		-34.42		-71.03
		(0.382)		(0.090)		(0.184)		(0.153)
High school graduate		-11.55		2.053		-25.09		-48.69
		(0.291)		(0.434)		(0.314)		(0.315)
White		-1.586*		-1.888**		-21.03***		-13.58***
		(0.089)		(0.027)		(0.000)		(0.000)
In full or part time employment		-1.010		0.550		-9.371***		-3.246
		(0.271)		(0.551)		(0.008)		(0.398)
Student		-2.789**		-0.492		-1.653		-6.845
		(0.021)		(0.696)		(0.764)		(0.164)
Republican		0.409		0.885		-1.227		-6.345
		(0.742)		(0.509)		(0.782)		(0.167)
Democrat		2.388**		1.247		1.264		1.975
		(0.014)		(0.151)		(0.705)		(0.593)
Political Scale		0.446		0.778***		2.171**		2.533**
		(0.242)		(0.001)		(0.016)		(0.017)
pleasure		0.0616*		0.0286*		0.243***		0.0686
		(0.084)		(0.098)		(0.000)		(0.300)
arousal		-0.0149		0.00346		0.00187		0.0574
		(0.550)		(0.774)		(0.971)		(0.279)
Constant	21.12***	26.60**	17.19***	10.48***	107.5***	93.27***	72.73***	110.3**
	(0.000)	(0.017)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.032)
Observations	3890	3714	3890	3714	3890	3714	3890	3714
R^2	0.037	0.056	0.002	0.028	0.006	0.076	0.006	0.038
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10: [Round 1: Highlights and Caps vs Lowercase] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)
	VSAQ1	VSAQ1	VSAQ2	VSAQ2
highlight CAPS	0.379***	0.415***	-0.201**	-0.197**
	(0.000)	(0.000)	(0.027)	(0.037)
highlight small	0.464***	0.472***	-0.0927	-0.108
	(0.000)	(0.000)	(0.310)	(0.253)
caps	-0.0469	-0.00700	0.0487	0.0579
	(0.665)	(0.950)	(0.600)	(0.549)
Age		0.00851***		0.00510*
		(0.004)		(0.064)
$10,000 to $19,999		0.121		0.267
		(0.572)		(0.154)
$20,000 to $29,999		0.0328		0.0455
		(0.876)		(0.801)
$30,000 to $39,999		0.219		-0.00956
		(0.274)		(0.956)
$40,000 to $49,999		0.205		0.338*
		(0.328)		(0.062)
$50,000 to $59,999		0.477**		0.420**
		(0.018)		(0.019)
$60,000 to $69,999		0.398*		0.285
		(0.062)		(0.126)
$70,000 to $79,999		0.0960		0.283
		(0.653)		(0.124)
$80,000 to $89,999		0.0113		0.260
		(0.961)		(0.190)
$90,000 to $99,999		0.214		0.424**
		(0.342)		(0.032)
$100,000 to $149,999		0.0475		0.189
		(0.810)		(0.262)
$150,000 or more		0.0436		0.225
		(0.837)		(0.211)
Female		-0.361***		0.124*
		(0.000)		(0.067)
Some college but no degree		-0.545		0.546
		(0.186)		(0.191)
Associate degree in college		-0.572		0.402
		(0.177)		(0.346)
Bachelor's degree in college		-0.506		0.652
		(0.217)		(0.117)
Master's degree		-0.771*		0.529
		(0.067)		(0.212)
Professional degree (JD, MD)		-0.600		0.476
		(0.213)		(0.315)
Doctoral degree		-0.117		0.818*
		(0.807)		(0.090)
High school graduate		-0.548		0.479
		(0.191)		(0.257)
White		-0.145*		0.0112
		(0.099)		(0.890)
In full or part time employment		0.154		0.0986
		(0.111)		(0.253)
Student		-0.218		-0.166
		(0.216)		(0.259)
Republican		0.164		0.237**
		(0.191)		(0.035)
Democrat		0.244**		0.193**
		(0.010)		(0.025)
Political Scale		0.00197		-0.00951
		(0.939)		(0.684)
arousal		0.00449***		0.00315**
		(0.001)		(0.013)
pleasure		-0.00196		-0.00270*
		(0.226)		(0.068)
Constant	-1.126***	-1.180***	0.172***	-1.062**
	(0.000)	(0.010)	(0.009)	(0.019)
Observations	3890	3714	3890	3714
Pseudo R^2	0.009	0.029	0.002	0.015
chi2	39.46	127.3	8.863	73.20

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: [Round 1: Highlights and Caps vs Lowercase] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
highlight CAPS	-4.523	-6.346*	1.625	1.177	14.41	11.76
	(0.186)	(0.058)	(0.375)	(0.522)	(0.420)	(0.504)
highlight small	-2.580	-3.642	1.497	1.308	29.33*	24.23
	(0.447)	(0.296)	(0.411)	(0.484)	(0.077)	(0.139)
caps	4.168	4.992	1.782	1.877	42.73**	47.89***
	(0.252)	(0.174)	(0.307)	(0.275)	(0.015)	(0.005)
Age		0.532***		0.307***		5.302***
		(0.000)		(0.000)		(0.000)
$10,000 to $19,999		-3.771		3.375		-25.50
		(0.485)		(0.372)		(0.395)
$20,000 to $29,999		9.270		1.629		-5.408
		(0.152)		(0.537)		(0.859)
$30,000 to $39,999		-1.717		1.938		-25.61
		(0.749)		(0.515)		(0.397)
$40,000 to $49,999		7.267		1.001		34.60
		(0.217)		(0.734)		(0.302)
$50,000 to $59,999		6.584		3.965		-7.685
		(0.300)		(0.212)		(0.797)
$60,000 to $69,999		12.89*		8.692**		48.01
		(0.062)		(0.031)		(0.177)
$70,000 to $79,999		6.199		1.451		-36.68
		(0.375)		(0.620)		(0.217)
$80,000 to $89,999		-0.524		-5.637**		-52.23*
		(0.933)		(0.021)		(0.091)
$90,000 to $99,999		-2.902		-1.214		-30.23
		(0.620)		(0.719)		(0.498)
$100,000 to $149,999		-3.182		-3.590		-73.73***
		(0.538)		(0.134)		(0.008)
$150,000 or more		-6.010		-3.415		-99.07***
		(0.288)		(0.257)		(0.001)
Female		-2.396		-2.868**		14.60
		(0.348)		(0.038)		(0.246)
Some college but no degree		-14.56		-10.01		-143.6*
		(0.216)		(0.334)		(0.054)
Associate degree in college		-8.993		-7.652		-103.2
		(0.469)		(0.471)		(0.180)
Bachelor's degree in college		-11.77		-11.04		-142.1*
		(0.320)		(0.285)		(0.056)
Master's degree		-14.35		-12.87		-159.7**
		(0.236)		(0.215)		(0.038)
Professional degree (JD, MD)		-31.23**		-10.82		-216.7***
		(0.014)		(0.346)		(0.008)
Doctoral degree		-27.52*		-18.54*		-251.0***
		(0.058)		(0.078)		(0.001)
High school graduate		2.485		-6.323		-99.83
		(0.841)		(0.547)		(0.189)
White		-21.89***		-7.557***		-95.41***
		(0.000)		(0.000)		(0.000)
In full or part time employment		-0.813		-0.515		-20.31
		(0.797)		(0.757)		(0.156)
Student		-3.898		-2.891		-57.43***
		(0.423)		(0.223)		(0.007)
Republican		0.265		1.859		-5.411
		(0.953)		(0.438)		(0.800)
Democrat		3.584		2.680*		2.019
		(0.255)		(0.085)		(0.904)
Political Scale		2.425***		1.104**		11.82***
		(0.006)		(0.013)		(0.007)
pleasure		0.174***		0.118***		1.332***
		(0.004)		(0.000)		(0.000)
arousal		0.107**		0.00105		0.414*
		(0.011)		(0.960)		(0.063)
Constant	59.44***	47.49***	26.76***	23.18**	569.1***	513.1***
	(0.000)	(0.000)	(0.000)	(0.033)	(0.000)	(0.000)
Observations	3890	3714	3890	3714	3890	3714
R^2	0.002	0.047	0.000	0.038	0.002	0.078
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: [Round 2: Dark Yellow vs Highlight Small] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	limitliability	limitliability	Q2_other	Q2_other	Q3	Q3	Q4	Q4
dark yellow	-0.299*	-0.181	0	0.164	0.00722	-0.00850	-0.0834	0.0163	-0.0744	-0.122
	(0.065)	(0.303)	(.)	(0.242)	(0.955)	(0.953)	(0.612)	(0.928)	(0.617)	(0.457)
Age		0.00540		-0.00378		-0.0122**		-0.0111*		0.00888
		(0.395)		(0.426)		(0.012)		(0.083)		(0.130)
$10,000 to $19,999		-0.0313		0.769**		-0.192		0.963**		0.441
		(0.940)		(0.030)		(0.560)		(0.028)		(0.255)
$20,000 to $29,999		0.213		0.452		-0.0150		0.434		0.576
		(0.583)		(0.151)		(0.963)		(0.236)		(0.103)
$30,000 to $39,999		-0.276		0.0826		-0.0987		0.759**		0.383
		(0.466)		(0.793)		(0.772)		(0.047)		(0.263)
$40,000 to $49,999		0.0449		0.516		0.293		0.489		0.329
		(0.914)		(0.124)		(0.382)		(0.218)		(0.362)
$50,000 to $59,999		0.425		0.521		0.0000195		0.850**		0.999***
		(0.300)		(0.109)		(1.000)		(0.032)		(0.006)
$60,000 to $69,999		0.453		0.226		0.239		0.670*		0.805**
		(0.311)		(0.498)		(0.479)		(0.089)		(0.034)
$70,000 to $79,999		0.440		0.313		-0.00459		0.789*		0.613
		(0.331)		(0.361)		(0.989)		(0.064)		(0.111)
$80,000 to $89,999		0.987		-0.0951		-0.183		0.306		0.553
		(0.105)		(0.792)		(0.629)		(0.473)		(0.172)
$90,000 to $99,999		-0.434		-0.0429		0.215		0.927**		0.781**
		(0.292)		(0.900)		(0.526)		(0.041)		(0.044)
$100,000 to $149,999		-0.165		0.136		0.158		0.782**		0.959***
		(0.667)		(0.661)		(0.621)		(0.045)		(0.007)
$150,000 or more		-0.317		0.463		0.262		0.731*		1.010***
		(0.431)		(0.179)		(0.433)		(0.082)		(0.010)
Female		0.149		0.00473		-0.0628		-0.106		-0.0376
		(0.360)		(0.969)		(0.627)		(0.507)		(0.793)
Some college but no degree		-0.837		-0.821		-0.696		0.109		-0.948
		(0.438)		(0.329)		(0.294)		(0.885)		(0.376)
Associate degree in college		-0.972		-0.818		-0.106		-0.384		-1.415
		(0.376)		(0.340)		(0.877)		(0.617)		(0.190)
Bachelor's degree in college		-0.975		-0.684		-0.403		0.151		-1.358
		(0.365)		(0.416)		(0.546)		(0.840)		(0.203)
Master's degree		-0.558		-0.593		0.0541		-0.127		-1.448
		(0.613)		(0.488)		(0.937)		(0.870)		(0.181)
Professional degree (JD, MD)		-0.435		-1.121		-1.117		0.693		-0.846
		(0.729)		(0.229)		(0.144)		(0.515)		(0.488)
Doctoral degree		-0.178		-0.400		-0.0597		1.449		-1.249
		(0.891)		(0.683)		(0.943)		(0.243)		(0.303)
High school graduate		-1.172		-0.869		-0.394		-0.177		-1.149
		(0.281)		(0.306)		(0.553)		(0.814)		(0.287)
White		0.136		0.0740		-0.00649		0.320*		-0.140
		(0.459)		(0.616)		(0.968)		(0.091)		(0.426)
In full or part time employment		0.301		-0.122		-0.251*		-0.0269		-0.154
		(0.116)		(0.415)		(0.096)		(0.890)		(0.386)
Student		0.179		0.637**		0.139		0.528		-0.326
		(0.589)		(0.032)		(0.588)		(0.219)		(0.317)
Republican		0.0717		0.166		-0.305		-0.314		-0.151
		(0.809)		(0.431)		(0.198)		(0.262)		(0.526)
Democrat		-0.293		-0.152		-0.147		0.0417		-0.547***
		(0.137)		(0.316)		(0.327)		(0.840)		(0.007)
Political Scale		-0.0382		-0.112***		0.0551		-0.000388		-0.148***
		(0.483)		(0.007)		(0.183)		(0.994)		(0.006)
arousal		0.00382		0.00486**		0.000333		0.00148		0.00232
		(0.218)		(0.042)		(0.880)		(0.659)		(0.414)
pleasure		-0.00368		-0.00588**		-0.00263		-0.00572		-0.00889***
		(0.318)		(0.034)		(0.344)		(0.128)		(0.009)
Constant	1.848***	2.295**	0.586***	1.669*			1.743***	1.530*	1.422***	2.969***
	(0.000)	(0.047)	(0.000)	(0.057)			(0.000)	(0.062)	(0.000)	(0.009)
Observations	1402	1333	2967	1333	1100	1051	1402	1333	1402	1333
Pseudo R^2	0.003	0.031	0.000	0.026	0.000	0.017	0.000	0.031	0.000	0.036
chi2	3.414	32.59	.	40.84	0.00315	41.58	0.257	31.38	0.251	42.54

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A13: [Round 2: Dark Yellow vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
dark yellow	1.269	1.868	4.588*	5.203**	8.336	8.573*	6.200	5.393
	(0.442)	(0.311)	(0.058)	(0.032)	(0.111)	(0.099)	(0.209)	(0.357)
Age		0.0000865		0.188***		1.371***		0.506**
		(0.999)		(0.002)		(0.000)		(0.010)
$10,000 to $19,999		0.684		-1.154		6.774		-28.02
		(0.678)		(0.688)		(0.640)		(0.113)
$20,000 to $29,999		2.921		4.712		0.357		-14.76
		(0.118)		(0.159)		(0.975)		(0.372)
$30,000 to $39,999		2.536		-0.00786		-5.446		-16.94
		(0.380)		(0.998)		(0.632)		(0.324)
$40,000 to $49,999		1.203		2.104		3.102		-8.985
		(0.475)		(0.553)		(0.825)		(0.598)
$50,000 to $59,999		-0.494		1.106		-5.024		-17.79
		(0.811)		(0.732)		(0.654)		(0.269)
$60,000 to $69,999		-1.160		0.661		4.356		-2.801
		(0.598)		(0.851)		(0.736)		(0.872)
$70,000 to $79,999		-0.131		2.241		-3.610		-27.51
		(0.950)		(0.604)		(0.777)		(0.105)
$80,000 to $89,999		1.534		0.375		3.273		-12.79
		(0.627)		(0.924)		(0.806)		(0.462)
$90,000 to $99,999		8.459		-5.868**		-25.26**		-33.82*
		(0.375)		(0.039)		(0.018)		(0.051)
$100,000 to $149,999		1.331		4.116		-13.18		-19.85
		(0.664)		(0.345)		(0.241)		(0.231)
$150,000 or more		0.297		-3.503		-17.15		-18.67
		(0.914)		(0.447)		(0.155)		(0.238)
Female		1.713		-2.336		-4.555		5.989
		(0.326)		(0.248)		(0.348)		(0.269)
Some college but no degree		0.654		-6.007		19.67		-104.6
		(0.785)		(0.496)		(0.396)		(0.305)
Associate degree in college		1.894		-1.928		33.93		-94.50
		(0.659)		(0.833)		(0.178)		(0.358)
Bachelor's degree in college		-1.164		-4.071		19.00		-105.3
		(0.666)		(0.648)		(0.419)		(0.305)
Master's degree		3.541		-5.256		9.487		-109.5
		(0.584)		(0.568)		(0.695)		(0.290)
Professional degree (JD, MD)		-0.747		11.81		-3.221		-111.3
		(0.851)		(0.651)		(0.900)		(0.280)
Doctoral degree		0.924		-9.880		10.32		-101.9
		(0.800)		(0.282)		(0.694)		(0.330)
High school graduate		1.865		-4.973		28.74		-89.67
		(0.537)		(0.572)		(0.229)		(0.378)
White		0.554		-3.372*		-16.06***		-28.98***
		(0.739)		(0.080)		(0.008)		(0.000)
In full or part time employment		1.026		2.168		-17.15***		8.721
		(0.402)		(0.208)		(0.006)		(0.249)
Student		0.104		4.105		-8.393		-0.875
		(0.970)		(0.244)		(0.339)		(0.924)
Republican		-1.017		2.601		-3.798		-4.862
		(0.673)		(0.318)		(0.643)		(0.558)
Democrat		2.610		2.064		2.009		1.910
		(0.157)		(0.325)		(0.726)		(0.740)
Political Scale		0.842		0.668		3.144**		3.015*
		(0.347)		(0.144)		(0.032)		(0.073)
pleasure		0.118		0.0466		0.204*		0.167
		(0.204)		(0.306)		(0.081)		(0.168)
arousal		-0.0353		0.00139		-0.0827		-0.0602
		(0.578)		(0.961)		(0.339)		(0.531)
Constant	11.64***	1.224	18.24***	11.21	97.42***	44.22*	87.53***	188.9*
	(0.000)	(0.758)	(0.000)	(0.206)	(0.000)	(0.063)	(0.000)	(0.079)
Observations	1402	1333	1402	1333	1402	1333	1402	1333
R^2	0.000	0.017	0.004	0.035	0.002	0.085	0.001	0.054
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A14: [Round 2: Dark Yellow vs Highlight Small] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)
	VSAQ1	VSAQ1	VSAQ2	VSAQ2
dark yellow	0.201	0.277**	0.212*	0.269**
	(0.105)	(0.039)	(0.079)	(0.038)
Age		0.00673		0.0102**
		(0.146)		(0.024)
$10,000 to $19,999		0.278		0.126
		(0.404)		(0.690)
$20,000 to $29,999		-0.0102		0.172
		(0.975)		(0.557)
$30,000 to $39,999		0.0886		-0.0273
		(0.781)		(0.926)
$40,000 to $49,999		-0.137		-0.00526
		(0.693)		(0.987)
$50,000 to $59,999		0.300		0.385
		(0.351)		(0.198)
$60,000 to $69,999		0.0921		0.364
		(0.788)		(0.249)
$70,000 to $79,999		-0.195		0.162
		(0.578)		(0.609)
$80,000 to $89,999		-0.397		0.292
		(0.300)		(0.394)
$90,000 to $99,999		0.207		0.231
		(0.561)		(0.485)
$100,000 to $149,999		-0.170		0.0999
		(0.597)		(0.732)
$150,000 or more		0.0931		0.596*
		(0.782)		(0.060)
Female		-0.408***		0.0490
		(0.001)		(0.669)
Some college but no degree		-0.482		0.273
		(0.421)		(0.660)
Associate degree in college		-0.237		0.210
		(0.702)		(0.742)
Bachelor's degree in college		-0.259		0.415
		(0.666)		(0.502)
Master's degree		-0.447		0.275
		(0.471)		(0.665)
Professional degree (JD, MD)		-0.643		-0.105
		(0.383)		(0.885)
Doctoral degree		0.203		0.689
		(0.784)		(0.364)
High school graduate		-0.248		0.228
		(0.683)		(0.716)
White		0.106		0.000880
		(0.459)		(0.995)
In full or part time employment		0.234		0.122
		(0.116)		(0.386)
Student		0.00166		0.370
		(0.995)		(0.146)
Republican		0.294		-0.117
		(0.154)		(0.555)
Democrat		0.353**		0.0300
		(0.020)		(0.834)
Political Scale		-0.0410		0.0140
		(0.299)		(0.718)
arousal		0.00662***		0.00626***
		(0.004)		(0.004)
pleasure		-0.00479*		-0.00600**
		(0.077)		(0.019)
Constant	-0.662***	-0.921	0.0789	-1.041
	(0.000)	(0.154)	(0.209)	(0.118)
Observations	1402	1333	1402	1333
Pseudo R^2	0.001	0.031	0.002	0.019
chi2	2.635	51.80	3.095	34.47

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A15: [Round 2: Dark Yellow vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
dark yellow	10.23*	14.76***	7.145**	7.603**	319.7	299.2
	(0.051)	(0.009)	(0.027)	(0.032)	(0.222)	(0.177)
Age		0.390**		0.398***		0.423
		(0.016)		(0.002)		(0.924)
$10,000 to $19,999		-2.321		6.562		-1291.1
		(0.860)		(0.435)		(0.309)
$20,000 to $29,999		-0.319		-4.025		-1324.9
		(0.981)		(0.523)		(0.308)
$30,000 to $39,999		-7.058		-3.305		-1251.0
		(0.574)		(0.641)		(0.303)
$40,000 to $49,999		1.484		-3.928		-1199.8
		(0.915)		(0.576)		(0.327)
$50,000 to $59,999		4.089		1.611		-1286.5
		(0.781)		(0.849)		(0.299)
$60,000 to $69,999		1.924		-2.979		-1147.7
		(0.887)		(0.662)		(0.316)
$70,000 to $79,999		-1.798		-3.353		-1307.6
		(0.904)		(0.652)		(0.300)
$80,000 to $89,999		11.16		-7.782		-1098.7
		(0.441)		(0.219)		(0.314)
$90,000 to $99,999		-6.633		-7.128		-1230.6
		(0.611)		(0.295)		(0.255)
$100,000 to $149,999		-4.293		-5.709		-1179.7
		(0.731)		(0.380)		(0.294)
$150,000 or more		-5.299		-7.190		-1278.5
		(0.722)		(0.351)		(0.284)
Female		-7.576		-6.714**		-203.0
		(0.104)		(0.019)		(0.276)
Some college but no degree		5.695		-4.054		480.0
		(0.731)		(0.780)		(0.470)
Associate degree in college		19.92		-3.114		584.6
		(0.267)		(0.834)		(0.412)
Bachelor's degree in college		9.575		-6.021		491.8
		(0.571)		(0.679)		(0.481)
Master's degree		3.269		-7.152		512.2
		(0.852)		(0.634)		(0.494)
Professional degree (JD, MD)		-15.97		-16.01		346.5
		(0.379)		(0.284)		(0.627)
Doctoral degree		-1.798		-12.92		480.4
		(0.928)		(0.390)		(0.524)
High school graduate		24.33		3.203		1062.6
		(0.194)		(0.832)		(0.368)
White		-27.12***		-12.52***		-426.6
		(0.000)		(0.000)		(0.138)
In full or part time employment		3.536		0.884		-230.9
		(0.535)		(0.784)		(0.327)
Student		-3.004		-1.227		-541.0
		(0.753)		(0.835)		(0.241)
Republican		-7.418		2.297		-260.5
		(0.392)		(0.668)		(0.224)
Democrat		0.730		4.534		-94.98
		(0.903)		(0.156)		(0.361)
Political Scale		4.467***		2.626***		60.99
		(0.007)		(0.005)		(0.140)
pleasure		0.468***		0.120*		-0.821
		(0.000)		(0.077)		(0.779)
arousal		0.0301		-0.0521		1.927
		(0.678)		(0.179)		(0.267)
Constant	56.86***	24.07	28.25***	21.43	598.4***	1708.8
	(0.000)	(0.249)	(0.000)	(0.160)	(0.000)	(0.133)
Observations	1402	1333	1402	1333	1402	1333
R^2	0.003	0.075	0.004	0.057	0.003	0.030
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A16: [Round 2: Green vs Highlight Small] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	limitliability	limitliability	Q2_other	Q2_other	Q3	Q3	Q4	Q4
green	0.314*	0.351*	0	0.225	0.117	0.0962	-0.0827	-0.0681	0.0652	0.0903
	(0.093)	(0.071)	(.)	(0.101)	(0.341)	(0.472)	(0.609)	(0.693)	(0.665)	(0.579)
Age		0.00829		-0.00328		-0.0106**		-0.00136		0.0183***
		(0.220)		(0.496)		(0.029)		(0.836)		(0.004)
$10,000 to $19,999		0.386		0.633*		-0.285		0.645		0.427
		(0.387)		(0.077)		(0.457)		(0.159)		(0.278)
$20,000 to $29,999		0.607		0.295		-0.160		0.167		0.472
		(0.150)		(0.363)		(0.674)		(0.672)		(0.198)
$30,000 to $39,999		0.208		0.217		-0.314		0.272		0.257
		(0.606)		(0.504)		(0.394)		(0.483)		(0.461)
$40,000 to $49,999		0.257		0.710**		0.174		0.387		0.207
		(0.552)		(0.046)		(0.651)		(0.370)		(0.579)
$50,000 to $59,999		0.712*		0.683**		0.125		0.809*		0.950**
		(0.097)		(0.043)		(0.731)		(0.057)		(0.012)
$60,000 to $69,999		0.995**		0.417		-0.0192		0.394		0.779**
		(0.047)		(0.239)		(0.961)		(0.356)		(0.048)
$70,000 to $79,999		0.919*		0.581		-0.202		0.723		0.643
		(0.064)		(0.106)		(0.598)		(0.116)		(0.113)
$80,000 to $89,999		0.844		0.0423		-0.325		0.133		0.584
		(0.101)		(0.906)		(0.431)		(0.760)		(0.145)
$90,000 to $99,999		0.0419		0.294		0.111		0.615		0.686*
		(0.923)		(0.406)		(0.768)		(0.182)		(0.086)
$100,000 to $149,999		0.251		0.492		0.0944		0.544		0.701*
		(0.539)		(0.132)		(0.796)		(0.186)		(0.052)
$150,000 or more		0.433		0.648*		0.106		0.430		0.988**
		(0.335)		(0.071)		(0.787)		(0.327)		(0.015)
Female		0.214		0.00658		-0.127		0.143		0.0182
		(0.210)		(0.957)		(0.321)		(0.356)		(0.898)
Some college but no degree		0.390		-0.790		-0.449		0.194		-1.002
		(0.183)		(0.349)		(0.458)		(0.801)		(0.409)
Associate degree in college		0.192		-0.951		-0.0258		-0.371		-1.380
		(0.602)		(0.269)		(0.967)		(0.637)		(0.260)
Bachelor's degree in college		0.0740		-0.557		-0.0243		0.276		-1.228
		(0.787)		(0.510)		(0.968)		(0.719)		(0.309)
Master's degree		0.536		-0.794		0.380		-0.0905		-1.337
		(0.139)		(0.355)		(0.543)		(0.909)		(0.275)
Professional degree (JD, MD)		-0.384		-1.563*		-1.140*		0.854		-0.792
		(0.483)		(0.094)		(0.092)		(0.432)		(0.559)
Doctoral degree		0.421		-0.414		-0.611		0.459		-1.348
		(0.588)		(0.679)		(0.508)		(0.670)		(0.326)
High school graduate		0		-0.787		-0.141		-0.325		-1.263
		(.)		(0.355)		(0.818)		(0.672)		(0.297)
White		-0.0240		0.0317		-0.137		-0.00269		-0.414**
		(0.905)		(0.830)		(0.409)		(0.989)		(0.023)
In full or part time employment		0.346*		-0.153		-0.302*		0.139		0.0174
		(0.086)		(0.309)		(0.051)		(0.485)		(0.924)
Student		0.266		0.415		-0.0220		0.0514		-0.200
		(0.448)		(0.149)		(0.928)		(0.888)		(0.526)
Republican		0.0442		0.193		-0.336		0.116		-0.0350
		(0.885)		(0.342)		(0.130)		(0.656)		(0.882)
Democrat		-0.135		-0.115		-0.0511		0.0307		-0.466**
		(0.503)		(0.440)		(0.735)		(0.875)		(0.018)
Political Scale		-0.0207		-0.104***		0.0466		-0.103**		-0.143***
		(0.718)		(0.009)		(0.266)		(0.046)		(0.006)
arousal		0.00477		0.00348		0.00255		0.00317		0.00443*
		(0.113)		(0.125)		(0.231)		(0.306)		(0.092)
pleasure		-0.00194		-0.00474*		-0.00407		-0.00610*		-0.00408
		(0.608)		(0.077)		(0.132)		(0.090)		(0.210)
Constant	1.848***	0.495	0.550***	1.522*			1.743***	1.509*	1.422***	2.314*
	(0.000)	(0.386)	(0.000)	(0.087)			(0.000)	(0.096)	(0.000)	(0.075)
Observations	1421	1345	1962	1356	1118	1068	1421	1356	1421	1356
Psendo R^2	0.003	0.030	0.000	0.025	0.000	0.021	0.000	0.032	0.000	0.036
chi2	2.822	31.25	.	38.49	0.905	54.27	0.262	34.34	0.188	38.17

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A17: [Round 2: Green vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
green	0.775	1.092	3.034*	3.332*	6.092	5.509	12.27**	9.113*
	(0.702)	(0.579)	(0.067)	(0.056)	(0.248)	(0.300)	(0.014)	(0.071)
Age		0.0354		0.174***		1.064***		0.538***
		(0.607)		(0.001)		(0.000)		(0.006)
$10,000 to $19,999		1.479		-0.605		5.890		-15.34
		(0.381)		(0.856)		(0.666)		(0.477)
$20,000 to $29,999		0.229		0.746		10.74		-11.71
		(0.872)		(0.827)		(0.344)		(0.580)
$30,000 to $39,999		7.048		-1.095		5.901		-4.976
		(0.168)		(0.723)		(0.610)		(0.821)
$40,000 to $49,999		1.464		5.938		2.380		-6.841
		(0.393)		(0.235)		(0.861)		(0.744)
$50,000 to $59,999		-0.480		0.609		-2.053		-12.26
		(0.809)		(0.865)		(0.845)		(0.541)
$60,000 to $69,999		-0.0183		0.648		3.073		-7.788
		(0.994)		(0.867)		(0.820)		(0.700)
$70,000 to $79,999		-0.295		0.307		-4.154		-30.27
		(0.890)		(0.943)		(0.708)		(0.124)
$80,000 to $89,999		1.641		-1.295		9.020		-11.42
		(0.548)		(0.737)		(0.483)		(0.587)
$90,000 to $99,999		7.974		-5.256		-18.69*		-28.97
		(0.371)		(0.105)		(0.077)		(0.163)
$100,000 to $149,999		-0.110		-2.178		-5.030		-15.66
		(0.955)		(0.520)		(0.651)		(0.429)
$150,000 or more		-1.846		-4.780		-12.01		-22.65
		(0.339)		(0.142)		(0.285)		(0.241)
Female		-0.161		-2.359*		0.503		6.809
		(0.926)		(0.079)		(0.918)		(0.171)
Some college but no degree		-0.671		-2.488		-12.63		-183.6
		(0.940)		(0.306)		(0.620)		(0.119)
Associate degree in college		-6.686		-2.912		-3.890		-167.9
		(0.430)		(0.318)		(0.885)		(0.156)
Bachelor's degree in college		-3.152		1.611		-15.36		-183.3
		(0.709)		(0.510)		(0.548)		(0.121)
Master's degree		-0.0394		-2.149		-19.40		-188.9
		(0.997)		(0.433)		(0.458)		(0.111)
Professional degree (JD, MD)		-1.769		-5.537*		-32.72		-182.2
		(0.844)		(0.071)		(0.236)		(0.123)
Doctoral degree		-1.630		-5.419*		-34.15		-174.4
		(0.857)		(0.075)		(0.218)		(0.147)
High school graduate		-1.837		0.841		-9.009		-173.1
		(0.830)		(0.767)		(0.733)		(0.140)
White		-2.563		-4.465**		-20.33***		-27.61***
		(0.270)		(0.028)		(0.001)		(0.000)
In full or part time employment		1.947		2.413*		-16.00**		-2.491
		(0.187)		(0.082)		(0.010)		(0.737)
Student		-1.554		1.377		-21.70**		-14.81
		(0.429)		(0.574)		(0.014)		(0.119)
Republican		0.155		2.840		-4.843		-2.552
		(0.938)		(0.312)		(0.551)		(0.738)
Democrat		3.613		-0.204		-0.123		0.375
		(0.125)		(0.901)		(0.982)		(0.947)
Political Scale		0.785		0.314		4.067***		2.654
		(0.395)		(0.486)		(0.005)		(0.126)
pleasure		0.102		-0.0137		0.271**		0.135
		(0.261)		(0.697)		(0.019)		(0.249)
arousal		-0.0658		0.0122		-0.0234		0.0768
		(0.269)		(0.589)		(0.778)		(0.406)
Constant	11.64***	7.083	18.24***	14.25***	97.42***	79.38***	87.53***	265.7**
	(0.000)	(0.441)	(0.000)	(0.003)	(0.000)	(0.005)	(0.000)	(0.038)
Observations	1421	1356	1421	1356	1421	1356	1421	1356
R^2	0.000	0.019	0.003	0.043	0.001	0.073	0.004	0.082
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A18: [Round 2: Green vs Highlight Small] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)
	VSAQ1	VSAQ1	VSAQ2	VSAQ2
green	0.430***	0.416***	-0.153	-0.204*
	(0.000)	(0.001)	(0.194)	(0.099)
Age		0.0108**		0.0113**
		(0.017)		(0.011)
$10,000 to $19,999		0.223		0.0614
		(0.535)		(0.855)
$20,000 to $29,999		-0.0812		-0.0534
		(0.811)		(0.864)
$30,000 to $39,999		0.0447		-0.191
		(0.894)		(0.537)
$40,000 to $49,999		-0.0285		0.0504
		(0.937)		(0.879)
$50,000 to $59,999		0.262		0.349
		(0.442)		(0.268)
$60,000 to $69,999		0.196		0.209
		(0.592)		(0.535)
$70,000 to $79,999		-0.233		-0.104
		(0.532)		(0.756)
$80,000 to $89,999		-0.263		0.134
		(0.483)		(0.698)
$90,000 to $99,999		0.317		0.102
		(0.388)		(0.763)
$100,000 to $149,999		-0.0931		0.0897
		(0.783)		(0.771)
$150,000 or more		0.0699		0.474
		(0.844)		(0.155)
Female		-0.389***		0.0340
		(0.001)		(0.764)
Some college but no degree		-0.0765		0.688
		(0.908)		(0.326)
Associate degree in college		-0.263		0.755
		(0.701)		(0.293)
Bachelor's degree in college		-0.110		0.902
		(0.869)		(0.197)
Master's degree		-0.189		0.696
		(0.781)		(0.329)
Professional degree (JD, MD)		0.0350		0.620
		(0.964)		(0.432)
Doctoral degree		0.500		0.823
		(0.544)		(0.325)
High school graduate		-0.0841		0.659
		(0.901)		(0.353)
White		-0.147		-0.132
		(0.294)		(0.327)
In full or part time employment		0.333**		0.0709
		(0.026)		(0.616)
Student		-0.0735		0.0716
		(0.795)		(0.778)
Republican		0.305		0.182
		(0.119)		(0.336)
Democrat		0.216		0.0435
		(0.139)		(0.756)
Political Scale		-0.0372		0.0173
		(0.331)		(0.646)
arousal		0.00303		0.00534**
		(0.161)		(0.011)
pleasure		-0.00168		-0.00430*
		(0.506)		(0.081)
Constant	-0.662***	-1.083	0.0789	-1.361*
	(0.000)	(0.140)	(0.209)	(0.080)
Observations	1421	1356	1421	1356
Pseudo R^2	0.007	0.031	0.001	0.021
chi2	12.89	53.70	1.689	37.21

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A19: [Round 2: Green vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
green	13.84**	12.17**	12.18***	11.36**	93.17***	79.11***
	(0.016)	(0.050)	(0.003)	(0.011)	(0.003)	(0.008)
Age		0.449***		0.202		4.365***
		(0.008)		(0.167)		(0.000)
$10,000 to $19,999		12.45		7.931		24.47
		(0.210)		(0.268)		(0.685)
$20,000 to $29,999		6.793		4.987		2.617
		(0.460)		(0.467)		(0.962)
$30,000 to $39,999		9.682		2.008		77.57
		(0.319)		(0.748)		(0.330)
$40,000 to $49,999		24.32**		12.65		86.52
		(0.035)		(0.134)		(0.207)
$50,000 to $59,999		37.26**		3.413		2.805
		(0.038)		(0.607)		(0.961)
$60,000 to $69,999		8.530		5.569		31.83
		(0.417)		(0.408)		(0.612)
$70,000 to $79,999		8.345		1.191		-49.66
		(0.479)		(0.858)		(0.394)
$80,000 to $89,999		12.88		-3.334		-7.688
		(0.239)		(0.545)		(0.893)
$90,000 to $99,999		2.714		-4.661		-116.9**
		(0.785)		(0.364)		(0.030)
$100,000 to $149,999		6.148		5.973		-58.05
		(0.524)		(0.479)		(0.295)
$150,000 or more		-1.066		-6.538		-55.93
		(0.917)		(0.226)		(0.356)
Female		-11.27**		-6.292**		-6.668
		(0.012)		(0.041)		(0.788)
Some college but no degree		-18.60		-0.368		-732.9
		(0.410)		(0.963)		(0.218)
Associate degree in college		-22.83		6.730		-725.6
		(0.323)		(0.575)		(0.225)
Bachelor's degree in college		-16.07		1.894		-733.6
		(0.476)		(0.800)		(0.218)
Master's degree		-22.08		-1.222		-779.1
		(0.335)		(0.879)		(0.191)
Professional degree (JD, MD)		-32.81		-5.705		-688.8
		(0.160)		(0.506)		(0.268)
Doctoral degree		-34.14		-0.611		-838.3
		(0.161)		(0.948)		(0.156)
High school graduate		-11.36		13.43		-667.0
		(0.620)		(0.177)		(0.268)
White		-31.01***		-12.84***		-146.2***
		(0.000)		(0.004)		(0.000)
In full or part time employment		0.726		-4.354		-18.68
		(0.888)		(0.234)		(0.487)
Student		6.436		-11.39**		-117.5***
		(0.703)		(0.042)		(0.008)
Republican		1.673		4.672		-31.85
		(0.823)		(0.403)		(0.442)
Democrat		-4.506		2.583		-32.11
		(0.562)		(0.417)		(0.311)
Political Scale		1.241		1.466		14.67*
		(0.555)		(0.161)		(0.070)
pleasure		0.458***		0.00697		1.788***
		(0.000)		(0.923)		(0.001)
arousal		0.0338		-0.0878		-0.0251
		(0.610)		(0.160)		(0.956)
Constant	56.86***	53.04**	28.25***	30.39**	598.4***	1212.7**
	(0.000)	(0.036)	(0.000)	(0.018)	(0.000)	(0.035)
Observations	1421	1356	1421	1356	1421	1356
R^2	0.005	0.079	0.010	0.048	0.009	0.105
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A20: [Round 2: Red and Blue vs Dark Yellow] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	limitliability	limitliability	Q2_other	Q2_other	Q3	Q3	Q4	Q4
red	0.690***	0.553**	0	-0.366**	0.0946	0.134	0.0700	0.0538	0.325*	0.412**
	(0.001)	(0.020)	(.)	(0.029)	(0.558)	(0.462)	(0.721)	(0.811)	(0.080)	(0.046)
blue	0.0186	0.0330	0	-0.0516	-0.140	-0.135	0.246	0.254	0.0351	0.211
	(0.922)	(0.879)	(.)	(0.765)	(0.386)	(0.449)	(0.228)	(0.275)	(0.844)	(0.295)
Age		0.00632		-0.00245		-0.000787		-0.00856		0.00665
		(0.406)		(0.654)		(0.893)		(0.256)		(0.352)
$10,000 to $19,999		0.0527		0.847**		-0.257		1.026**		0.292
		(0.907)		(0.021)		(0.486)		(0.017)		(0.528)
$20,000 to $29,999		0.602		0.507		0.290		1.074***		0.222
		(0.172)		(0.117)		(0.395)		(0.008)		(0.587)
$30,000 to $39,999		0.191		0.390		-0.0674		1.477***		-0.208
		(0.675)		(0.241)		(0.862)		(0.001)		(0.607)
$40,000 to $49,999		0.453		0.452		0.318		0.787*		0.200
		(0.342)		(0.189)		(0.369)		(0.051)		(0.661)
$50,000 to $59,999		0.0463		0.204		-0.486		0.826**		-0.0793
		(0.912)		(0.526)		(0.153)		(0.032)		(0.847)
$60,000 to $69,999		0.0255		0.682*		-0.110		1.377***		0.0318
		(0.954)		(0.059)		(0.769)		(0.002)		(0.944)
$70,000 to $79,999		0.139		0.0829		-0.167		1.057**		0.258
		(0.768)		(0.818)		(0.648)		(0.021)		(0.577)
$80,000 to $89,999		1.033		0.537		-0.193		0.896*		-0.00939
		(0.104)		(0.174)		(0.615)		(0.059)		(0.985)
$90,000 to $99,999		0.262		0.513		-0.0754		1.623***		0.102
		(0.638)		(0.199)		(0.855)		(0.003)		(0.835)
$100,000 to $149,999		0.0889		0.572*		0.0524		1.335***		0.575
		(0.838)		(0.084)		(0.874)		(0.001)		(0.181)
$150,000 or more		-0.262		0.298		0.0680		1.450***		0.274
		(0.546)		(0.386)		(0.850)		(0.001)		(0.528)
Female		0.243		0.131		-0.145		-0.343*		0.175
		(0.191)		(0.339)		(0.320)		(0.069)		(0.283)
Some college but no degree		-0.00290		0.354		0.536		-1.414		0.244
		(0.997)		(0.534)		(0.665)		(0.177)		(0.743)
Associate degree in college		-0.469		-0.0717		0.570		-1.026		-0.0493
		(0.609)		(0.904)		(0.650)		(0.343)		(0.948)
Bachelor's degree in college		-0.120		0.114		0.887		-1.138		-0.0639
		(0.894)		(0.840)		(0.477)		(0.279)		(0.931)
Master's degree		0.115		0.295		0.716		-1.075		0.113
		(0.902)		(0.618)		(0.569)		(0.321)		(0.883)
Professional degree (JD, MD)		1.534		0.291		0.629		-0.836		0.171
		(0.271)		(0.671)		(0.630)		(0.489)		(0.850)
Doctoral degree		0.529		0.320		1.324		-1.080		0.181
		(0.649)		(0.660)		(0.314)		(0.382)		(0.845)
High school graduate		-0.258		0.431		1.333		-1.033		0.118
		(0.777)		(0.457)		(0.282)		(0.330)		(0.876)
White		0.437**		-0.159		-0.120		0.653***		0.631***
		(0.024)		(0.315)		(0.472)		(0.002)		(0.000)
In full or part time employment		0.0169		0.312*		0.0284		-0.116		-0.291
		(0.942)		(0.057)		(0.878)		(0.588)		(0.176)
Student		-0.251		0.534*		0.411		-0.0418		-0.309
		(0.505)		(0.067)		(0.209)		(0.919)		(0.377)
Republican		0.123		0.228		0.0422		-0.760**		-0.0935
		(0.704)		(0.308)		(0.863)		(0.010)		(0.714)
Democrat		-0.446*		0.0312		0.155		-0.168		-0.0113
		(0.057)		(0.851)		(0.386)		(0.482)		(0.956)
Political Scale		-0.115*		-0.0697		0.00907		-0.000131		-0.151***
		(0.063)		(0.121)		(0.844)		(0.998)		(0.006)
arousal		0.00734**		0.00237		0.000326		0.00351		0.000956
		(0.047)		(0.361)		(0.897)		(0.332)		(0.761)
pleasure		-0.0108**		-0.00672**		-0.00352		-0.00822**		-0.00809**
		(0.013)		(0.026)		(0.263)		(0.040)		(0.025)
Constant	1.549***	1.551	0.586***	0.451			1.660***	2.390**	1.348***	1.290
	(0.000)	(0.112)	(0.000)	(0.474)			(0.000)	(0.037)	(0.000)	(0.121)
Observations	1187	1115	2967	1115	918	864	1187	1115	1187	1115
Pseudo R^2	0.014	0.059	0.000	0.028	0.001	0.020	0.002	0.049	0.003	0.054
chi2	12.44	46.31	.	39.35	2.200	36.02	1.514	48.07	3.609	54.50

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A21: [Round 2: Red and Blue vs Dark Yellow] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
red	-2.555*	-3.812**	-1.226	-1.366	-1.784	1.363	-6.517	-10.29*
	(0.067)	(0.040)	(0.663)	(0.637)	(0.776)	(0.831)	(0.242)	(0.076)
blue	-0.317	-1.478	-3.482	-5.117**	-0.936	-0.384	-4.432	-6.205
	(0.861)	(0.499)	(0.195)	(0.044)	(0.894)	(0.951)	(0.436)	(0.325)
Age		0.0523		0.247***		1.822***		0.574***
		(0.282)		(0.001)		(0.000)		(0.002)
$10,000 to $19,999		2.273		6.897**		-12.12		-9.814
		(0.523)		(0.020)		(0.444)		(0.490)
$20,000 to $29,999		-1.002		9.495***		-23.21		-15.33
		(0.645)		(0.004)		(0.128)		(0.261)
$30,000 to $39,999		-4.939***		4.539*		-27.58*		-21.17
		(0.006)		(0.091)		(0.073)		(0.140)
$40,000 to $49,999		-4.361**		4.698*		-22.46		-18.68
		(0.014)		(0.097)		(0.155)		(0.167)
$50,000 to $59,999		-3.280*		7.391**		-29.65**		-17.07
		(0.066)		(0.019)		(0.048)		(0.219)
$60,000 to $69,999		-0.743		8.021*		-37.22**		-11.51
		(0.804)		(0.094)		(0.010)		(0.445)
$70,000 to $79,999		1.173		4.222		-19.87		-5.809
		(0.774)		(0.209)		(0.249)		(0.736)
$80,000 to $89,999		-2.251		6.472		-23.54		-10.04
		(0.391)		(0.141)		(0.166)		(0.560)
$90,000 to $99,999		-1.976		3.869		-34.59**		-21.26
		(0.469)		(0.294)		(0.046)		(0.161)
$100,000 to $149,999		-1.282		11.53*		-36.16**		-13.09
		(0.713)		(0.062)		(0.013)		(0.368)
$150,000 or more		-1.764		1.925		-44.45***		-29.23**
		(0.602)		(0.671)		(0.006)		(0.043)
Female		-0.588		-3.258		0.641		-1.401
		(0.697)		(0.194)		(0.908)		(0.785)
Some college but no degree		-0.0381		-5.990		-34.05		10.65
		(0.990)		(0.470)		(0.370)		(0.575)
Associate degree in college		2.627		-1.812		-29.69		20.41
		(0.529)		(0.834)		(0.443)		(0.319)
Bachelor's degree in college		0.0856		-4.688		-29.25		12.42
		(0.973)		(0.581)		(0.439)		(0.511)
Master's degree		0.120		-2.414		-39.15		9.577
		(0.970)		(0.792)		(0.306)		(0.637)
Professional degree (JD, MD)		-2.060		15.93		-42.80		-16.49
		(0.518)		(0.520)		(0.320)		(0.426)
Doctoral degree		0.535		-8.282		-47.05		-4.044
		(0.873)		(0.360)		(0.234)		(0.843)
High school graduate		-0.170		-0.640		-33.66		12.36
		(0.944)		(0.939)		(0.374)		(0.518)
White		-3.060*		-4.201		-11.74**		-19.10***
		(0.069)		(0.102)		(0.048)		(0.003)
In full or part time employment		1.348		1.051		-22.97***		-2.884
		(0.170)		(0.612)		(0.001)		(0.618)
Student		1.684		4.262		-5.525		7.359
		(0.544)		(0.294)		(0.695)		(0.519)
Republican		0.716		-1.682		-1.463		-7.860
		(0.755)		(0.568)		(0.872)		(0.383)
Democrat		0.322		2.122		-6.866		-8.176
		(0.780)		(0.439)		(0.281)		(0.182)
Political Scale		0.334		0.924*		2.372		2.978*
		(0.337)		(0.091)		(0.157)		(0.057)
pleasure		0.0694**		0.0626		0.0248		0.0400
		(0.026)		(0.232)		(0.815)		(0.714)
arousal		0.0266		-0.00947		-0.0179		0.0431
		(0.185)		(0.797)		(0.842)		(0.594)
Constant	12.91***	9.387***	22.82***	9.685	105.8***	117.6***	93.73***	88.71***
	(0.000)	(0.005)	(0.000)	(0.247)	(0.000)	(0.003)	(0.000)	(0.000)
Observations	1187	1115	1187	1115	1187	1115	1187	1115
R^2	0.003	0.030	0.002	0.038	0.000	0.123	0.001	0.045
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A22: [Round 2: Red and Blue vs Dark Yellow] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)
	VSAQ1	VSAQ1	VSAQ2	VSAQ2
red	0.338**	0.320**	-0.404***	-0.427***
	(0.019)	(0.046)	(0.005)	(0.008)
blue	0.0710	0.0846	-0.301**	-0.236
	(0.628)	(0.599)	(0.037)	(0.134)
Age		0.00960*		0.00484
		(0.062)		(0.348)
$10,000 to $19,999		0.0880		0.168
		(0.794)		(0.616)
$20,000 to $29,999		0.0625		0.456
		(0.843)		(0.145)
$30,000 to $39,999		0.322		0.0277
		(0.313)		(0.930)
$40,000 to $49,999		-0.172		0.0777
		(0.612)		(0.816)
$50,000 to $59,999		0.297		0.128
		(0.351)		(0.682)
$60,000 to $69,999		-0.125		0.532
		(0.720)		(0.123)
$70,000 to $79,999		-0.0697		-0.0462
		(0.848)		(0.896)
$80,000 to $89,999		0.255		0.356
		(0.503)		(0.358)
$90,000 to $99,999		0.283		0.418
		(0.460)		(0.273)
$100,000 to $149,999		-0.0555		0.255
		(0.863)		(0.420)
$150,000 or more		0.266		0.472
		(0.431)		(0.157)
Female		-0.0501		0.307**
		(0.702)		(0.017)
Some college but no degree		-0.470		-0.0868
		(0.389)		(0.872)
Associate degree in college		-0.496		-0.107
		(0.384)		(0.849)
Bachelor's degree in college		-0.114		0.158
		(0.835)		(0.770)
Master's degree		-0.151		0.108
		(0.791)		(0.847)
Professional degree (JD, MD)		-0.593		-0.234
		(0.383)		(0.721)
Doctoral degree		-0.195		-0.396
		(0.769)		(0.542)
High school graduate		-0.184		-0.0913
		(0.741)		(0.868)
White		0.223		0.133
		(0.136)		(0.359)
In full or part time employment		-0.0431		0.120
		(0.784)		(0.445)
Student		-0.230		0.150
		(0.409)		(0.578)
Republican		-0.0653		-0.0482
		(0.756)		(0.818)
Democrat		-0.0480		0.0700
		(0.755)		(0.645)
Political Scale		-0.0485		0.0172
		(0.236)		(0.678)
arousal		0.00240		0.00542**
		(0.329)		(0.028)
pleasure		-0.00117		-0.00647**
		(0.670)		(0.021)
Constant	-0.462***	-0.638	0.291***	-0.538
	(0.000)	(0.293)	(0.005)	(0.378)
Observations	1187	1115	1187	1115
Pseudo R^2	0.004	0.021	0.005	0.028
chi2	6.204	30.55	8.555	40.49

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A23: [Round 2: Red and Blue vs Dark Yellow] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
red	1.556	-4.098	1.763	0.103	-176.4	-206.6
	(0.813)	(0.563)	(0.693)	(0.981)	(0.515)	(0.511)
blue	-5.255	-13.68**	-6.030*	-9.083**	-304.3	-249.0
	(0.377)	(0.047)	(0.091)	(0.021)	(0.246)	(0.240)
Age		0.512**		0.541***		-2.071
		(0.023)		(0.002)		(0.760)
$10,000 to $19,999		-2.795		6.820		-1093.1
		(0.859)		(0.454)		(0.431)
$20,000 to $29,999		2.198		-2.890		-1462.2
		(0.887)		(0.672)		(0.285)
$30,000 to $39,999		-13.48		-5.733		-1399.5
		(0.378)		(0.406)		(0.308)
$40,000 to $49,999		-6.643		-4.810		-1382.8
		(0.664)		(0.482)		(0.277)
$50,000 to $59,999		-14.27		-0.0246		-1401.3
		(0.316)		(0.997)		(0.274)
$60,000 to $69,999		-6.123		3.932		-1342.2
		(0.687)		(0.744)		(0.273)
$70,000 to $79,999		-5.444		-8.432		-1382.8
		(0.738)		(0.237)		(0.285)
$80,000 to $89,999		4.821		3.590		-1268.5
		(0.780)		(0.701)		(0.292)
$90,000 to $99,999		9.064		3.694		-1240.7
		(0.650)		(0.700)		(0.293)
$100,000 to $149,999		-8.663		-6.593		-1331.6
		(0.568)		(0.329)		(0.277)
$150,000 or more		-9.094		-4.707		-1449.6
		(0.598)		(0.612)		(0.248)
Female		-5.667		-3.305		-163.9
		(0.290)		(0.325)		(0.262)
Some college but no degree		-15.31		-14.92		348.6
		(0.470)		(0.234)		(0.488)
Associate degree in college		-6.176		-14.96		424.3
		(0.777)		(0.247)		(0.431)
Bachelor's degree in college		-14.11		-12.36		422.6
		(0.499)		(0.328)		(0.432)
Master's degree		-13.81		-9.475		433.9
		(0.543)		(0.518)		(0.465)
Professional degree (JD, MD)		-52.83**		-32.33**		261.9
		(0.013)		(0.013)		(0.612)
Doctoral degree		-23.63		-24.96*		445.2
		(0.300)		(0.066)		(0.513)
High school graduate		-2.346		-5.671		904.8
		(0.914)		(0.667)		(0.385)
White		-25.47***		-13.93***		-567.8
		(0.000)		(0.003)		(0.100)
In full or part time employment		3.719		7.872**		-264.5
		(0.554)		(0.034)		(0.385)
Student		0.800		9.656		-596.9
		(0.944)		(0.182)		(0.317)
Republican		-3.072		-4.622		-246.2
		(0.732)		(0.475)		(0.225)
Democrat		0.228		-0.633		-197.7
		(0.970)		(0.887)		(0.219)
Political Scale		4.186**		3.121**		64.79
		(0.014)		(0.014)		(0.117)
pleasure		0.408***		0.213**		-3.065
		(0.001)		(0.020)		(0.422)
arousal		0.0322		0.00912		2.997
		(0.667)		(0.872)		(0.432)
Constant	67.09***	60.83**	35.40***	21.29	918.1***	2499.1
	(0.000)	(0.014)	(0.000)	(0.146)	(0.000)	(0.152)
Observations	1187	1115	1187	1115	1187	1115
R^2	0.001	0.067	0.003	0.062	0.002	0.031
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A24: [Round 2: Red and Blue vs Highlight Small] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q1	limitliability	limitliability	Q2_other	Q2_other	Q3	Q3	Q4	Q4
red	0.391**	0.377*	0	-0.146	0.0979	0.186	-0.0134	0.0705	0.251	0.267
	(0.041)	(0.061)	(.)	(0.266)	(0.450)	(0.182)	(0.935)	(0.692)	(0.112)	(0.115)
blue	-0.281*	-0.191	0	0.102	-0.126	-0.107	0.163	0.230	-0.0393	0.0446
	(0.083)	(0.266)	(.)	(0.451)	(0.328)	(0.436)	(0.350)	(0.217)	(0.792)	(0.779)
Age		0.00940		0.00330		-0.00838*		-0.00166		0.0180***
		(0.145)		(0.447)		(0.064)		(0.785)		(0.002)
$10,000 to $19,999		-0.179		0.721**		-0.179		0.399		0.467
		(0.667)		(0.016)		(0.594)		(0.318)		(0.207)
$20,000 to $29,999		0.177		0.664**		-0.0144		-0.00661		0.422
		(0.657)		(0.015)		(0.962)		(0.985)		(0.203)
$30,000 to $39,999		-0.244		0.539**		-0.199		0.286		0.00438
		(0.529)		(0.048)		(0.522)		(0.420)		(0.989)
$40,000 to $49,999		-0.0295		0.790***		0.352		0.353		0.107
		(0.942)		(0.007)		(0.264)		(0.348)		(0.749)
$50,000 to $59,999		-0.00411		0.567**		0.0456		0.274		0.515
		(0.992)		(0.040)		(0.879)		(0.449)		(0.115)
$60,000 to $69,999		0.148		0.457		-0.0759		0.587		0.413
		(0.731)		(0.119)		(0.819)		(0.143)		(0.239)
$70,000 to $79,999		0.000142		0.440		-0.0357		0.369		0.566
		(1.000)		(0.142)		(0.912)		(0.364)		(0.132)
$80,000 to $89,999		0.769		0.400		-0.364		0.00701		0.262
		(0.150)		(0.201)		(0.293)		(0.986)		(0.467)
$90,000 to $99,999		-0.457		0.446		0.0512		0.674		0.716*
		(0.278)		(0.144)		(0.875)		(0.127)		(0.060)
$100,000 to $149,999		-0.329		0.485*		0.123		0.370		0.633*
		(0.397)		(0.075)		(0.687)		(0.317)		(0.053)
$150,000 or more		-0.244		0.654**		0.212		0.623		0.697*
		(0.550)		(0.025)		(0.506)		(0.125)		(0.051)
Female		0.113		0.0230		-0.144		-0.282**		0.0521
		(0.441)		(0.829)		(0.200)		(0.045)		(0.686)
Some college but no degree		-0.614		0.382		0.496		-1.047		-0.0648
		(0.561)		(0.473)		(0.696)		(0.322)		(0.931)
Associate degree in college		-0.932		0.0469		0.938		-1.352		-0.559
		(0.387)		(0.932)		(0.465)		(0.207)		(0.460)
Bachelor's degree in college		-0.855		0.459		0.969		-0.801		-0.332
		(0.419)		(0.388)		(0.446)		(0.451)		(0.653)
Master's degree		-0.671		0.354		1.135		-1.077		-0.414
		(0.533)		(0.518)		(0.374)		(0.318)		(0.585)
Professional degree (JD, MD)		-0.438		0.0474		0.389		-0.395		-0.290
		(0.716)		(0.939)		(0.765)		(0.745)		(0.742)
Doctoral degree		-0.546		0.676		0.951		-0.706		-0.390
		(0.643)		(0.301)		(0.474)		(0.554)		(0.653)
High school graduate		-1.010		0.313		1.011		-1.035		-0.229
		(0.344)		(0.563)		(0.428)		(0.331)		(0.761)
White		0.152		0.00378		-0.0510		0.223		0.0855
		(0.364)		(0.976)		(0.716)		(0.188)		(0.561)
In full or part time employment		0.0653		0.0732		-0.262*		0.0994		-0.125
		(0.724)		(0.573)		(0.063)		(0.570)		(0.449)
Student		-0.0661		0.592**		0.242		0.138		-0.249
		(0.826)		(0.013)		(0.299)		(0.671)		(0.367)
Republican		0.0464		0.238		-0.383*		-0.188		-0.199
		(0.857)		(0.182)		(0.055)		(0.426)		(0.339)
Democrat		-0.0837		0.00842		0.0157		0.125		-0.302*
		(0.640)		(0.948)		(0.910)		(0.477)		(0.069)
Political Scale		-0.0534		-0.108***		0.0672*		-0.0523		-0.150***
		(0.297)		(0.002)		(0.064)		(0.256)		(0.001)
arousal		0.00537*		0.00208		0.000271		0.00212		0.00225
		(0.060)		(0.298)		(0.891)		(0.457)		(0.350)
pleasure		-0.00322		-0.00416*		-0.00122		-0.00507		-0.00455
		(0.355)		(0.079)		(0.617)		(0.131)		(0.129)
Constant	1.848***	2.188*	0.586***	-0.0938			1.743***	2.609**	1.422***	1.374*
	(0.000)	(0.050)	(0.000)	(0.875)			(0.000)	(0.024)	(0.000)	(0.099)
Observations	1813	1716	2967	1716	1408	1337	1813	1716	1813	1716
Psendo R^2	0.007	0.027	0.000	0.018	0.001	0.018	0.001	0.025	0.002	0.034
chi2	9.796	39.75	.	39.35	2.198	50.22	0.995	35.52	3.039	52.69

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A25: [Round 2: Red and Blue vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
red	-1.286	-1.048	3.362*	4.292**	6.552	8.168	-0.317	-3.560
	(0.267)	(0.272)	(0.052)	(0.018)	(0.211)	(0.121)	(0.946)	(0.477)
blue	0.953	0.565	1.107	0.203	7.400	4.467	1.768	1.385
	(0.559)	(0.785)	(0.466)	(0.877)	(0.229)	(0.408)	(0.715)	(0.797)
Age		0.0416		0.209***		1.384***		0.535***
		(0.468)		(0.000)		(0.000)		(0.001)
$10,000 to $19,999		0.981		1.360		-1.136		-22.09
		(0.697)		(0.617)		(0.931)		(0.264)
$20,000 to $29,999		-1.743		1.988		-2.619		-27.26
		(0.202)		(0.478)		(0.821)		(0.157)
$30,000 to $39,999		-0.337		-0.0220		-17.69		-22.98
		(0.880)		(0.993)		(0.124)		(0.211)
$40,000 to $49,999		-1.299		3.002		-15.54		-21.67
		(0.384)		(0.315)		(0.222)		(0.220)
$50,000 to $59,999		-2.088		1.420		-14.12		-23.36
		(0.216)		(0.590)		(0.210)		(0.189)
$60,000 to $69,999		0.00198		3.195		-21.69*		-25.39
		(0.999)		(0.409)		(0.074)		(0.155)
$70,000 to $79,999		1.443		1.385		-16.11		-31.45*
		(0.639)		(0.674)		(0.175)		(0.082)
$80,000 to $89,999		-0.201		3.033		-7.976		-17.55
		(0.941)		(0.416)		(0.539)		(0.364)
$90,000 to $99,999		6.283		-3.002		-32.94***		-34.20*
		(0.442)		(0.283)		(0.006)		(0.062)
$100,000 to $149,999		-4.043**		-2.378		-24.38**		-24.81
		(0.011)		(0.363)		(0.033)		(0.156)
$150,000 or more		-4.212**		-4.477*		-36.43***		-35.44**
		(0.016)		(0.083)		(0.002)		(0.043)
Female		0.229		-1.822		-0.503		3.332
		(0.861)		(0.116)		(0.906)		(0.446)
Some college but no degree		1.893		0.474		-11.88		-90.36
		(0.430)		(0.907)		(0.736)		(0.295)
Associate degree in college		-0.752		1.328		-9.135		-81.64
		(0.750)		(0.756)		(0.798)		(0.347)
Bachelor's degree in college		1.857		3.884		-11.44		-89.13
		(0.445)		(0.348)		(0.745)		(0.304)
Master's degree		5.121		3.904		-13.08		-88.94
		(0.300)		(0.390)		(0.712)		(0.309)
Professional degree (JD, MD)		3.519		-0.315		-22.72		-95.38
		(0.278)		(0.948)		(0.554)		(0.275)
Doctoral degree		2.044		-0.683		-35.12		-89.81
		(0.476)		(0.886)		(0.332)		(0.306)
High school graduate		1.197		3.187		-16.93		-86.67
		(0.637)		(0.451)		(0.633)		(0.315)
White		-1.751		-3.954**		-17.43***		-27.05***
		(0.252)		(0.011)		(0.001)		(0.000)
In full or part time employment		0.713		2.194*		-23.46***		-4.820
		(0.467)		(0.082)		(0.000)		(0.454)
Student		-1.050		1.591		-9.357		-6.038
		(0.448)		(0.379)		(0.350)		(0.499)
Republican		1.048		-2.475		-5.729		-11.53*
		(0.610)		(0.217)		(0.419)		(0.075)
Democrat		2.054		-0.937		-6.191		-0.251
		(0.170)		(0.537)		(0.222)		(0.961)
Political Scale		0.537		0.626		3.105**		4.017***
		(0.444)		(0.113)		(0.021)		(0.005)
pleasure		0.0670		0.0406		0.213**		0.0490
		(0.334)		(0.159)		(0.030)		(0.633)
arousal		-0.0316		0.00301		-0.0309		0.0205
		(0.519)		(0.873)		(0.672)		(0.792)
Constant	11.64***	5.855*	18.24***	6.938	97.42***	93.08**	87.53***	191.1**
	(0.000)	(0.053)	(0.000)	(0.191)	(0.000)	(0.012)	(0.000)	(0.045)
Observations	1813	1716	1813	1716	1813	1716	1813	1716
R^2	0.001	0.017	0.003	0.038	0.001	0.091	0.000	0.048
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A26: [Round 2: Red and Blue vs Highlight Small] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)
	VSAQ1	VSAQ1	VSAQ2	VSAQ2
red	0.539***	0.543***	-0.193	-0.185
	(0.000)	(0.000)	(0.102)	(0.143)
blue	0.272**	0.332**	-0.0891	-0.00710
	(0.026)	(0.011)	(0.453)	(0.955)
Age		0.00992**		0.00850**
		(0.016)		(0.038)
$10,000 to $19,999		-0.0139		0.272
		(0.963)		(0.347)
$20,000 to $29,999		-0.148		0.284
		(0.599)		(0.289)
$30,000 to $39,999		0.107		-0.214
		(0.697)		(0.424)
$40,000 to $49,999		-0.0763		0.249
		(0.796)		(0.375)
$50,000 to $59,999		0.379		0.340
		(0.174)		(0.208)
$60,000 to $69,999		0.0988		0.295
		(0.745)		(0.311)
$70,000 to $79,999		-0.188		0.0328
		(0.545)		(0.910)
$80,000 to $89,999		0.0717		0.316
		(0.820)		(0.303)
$90,000 to $99,999		0.311		0.447
		(0.313)		(0.137)
$100,000 to $149,999		-0.0864		0.162
		(0.758)		(0.543)
$150,000 or more		0.217		0.489*
		(0.461)		(0.086)
Female		-0.256**		0.165
		(0.013)		(0.102)
Some college but no degree		-0.207		0.260
		(0.701)		(0.635)
Associate degree in college		-0.170		0.231
		(0.760)		(0.683)
Bachelor's degree in college		-0.0604		0.460
		(0.911)		(0.402)
Master's degree		-0.0302		0.386
		(0.956)		(0.493)
Professional degree (JD, MD)		-0.307		0.0263
		(0.632)		(0.967)
Doctoral degree		0.476		0.186
		(0.456)		(0.770)
High school graduate		0.00698		0.202
		(0.990)		(0.718)
White		-0.00720		-0.0250
		(0.953)		(0.832)
In full or part time employment		0.119		0.0727
		(0.360)		(0.561)
Student		-0.208		-0.0104
		(0.380)		(0.962)
Republican		0.104		-0.0435
		(0.552)		(0.797)
Democrat		0.0301		0.102
		(0.812)		(0.409)
Political Scale		-0.0710**		0.0223
		(0.037)		(0.506)
arousal		0.00324		0.00508***
		(0.102)		(0.008)
pleasure		-0.00209		-0.00517**
		(0.359)		(0.020)
Constant	-0.662***	-0.870	0.0789	-1.038*
	(0.000)	(0.153)	(0.209)	(0.090)
Observations	1813	1716	1813	1716
Pseudo R^2	0.009	0.028	0.001	0.020
chi2	21.09	62.96	2.766	45.93

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A27: [Round 2: Red and Blue vs Highlight Small] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
red	11.78**	10.68**	8.908**	9.313**	143.3**	157.5*
	(0.024)	(0.039)	(0.014)	(0.010)	(0.044)	(0.055)
blue	4.973	-0.303	1.115	0.709	15.40	10.14
	(0.257)	(0.947)	(0.648)	(0.780)	(0.502)	(0.697)
Age		0.440***		0.403***		4.351***
		(0.005)		(0.000)		(0.000)
$10,000 to $19,999		-1.340		12.84*		191.9
		(0.877)		(0.077)		(0.397)
$20,000 to $29,999		4.836		1.801		-60.02
		(0.597)		(0.688)		(0.226)
$30,000 to $39,999		-2.775		2.917		-16.64
		(0.741)		(0.570)		(0.799)
$40,000 to $49,999		11.95		2.484		-22.03
		(0.243)		(0.605)		(0.687)
$50,000 to $59,999		7.828		1.645		-73.50
		(0.432)		(0.748)		(0.140)
$60,000 to $69,999		0.414		8.781		-64.71
		(0.964)		(0.272)		(0.271)
$70,000 to $79,999		11.69		3.127		-83.87
		(0.285)		(0.560)		(0.141)
$80,000 to $89,999		14.39		3.560		-27.42
		(0.182)		(0.548)		(0.628)
$90,000 to $99,999		6.601		0.337		-96.69
		(0.547)		(0.945)		(0.102)
$100,000 to $149,999		2.526		-5.700		-139.9***
		(0.786)		(0.171)		(0.008)
$150,000 or more		-9.364		-6.035		-194.5***
		(0.307)		(0.223)		(0.001)
Female		-5.045		-3.967*		-23.00
		(0.182)		(0.097)		(0.483)
Some college but no degree		-17.29		-0.615		-110.0
		(0.323)		(0.933)		(0.504)
Associate degree in college		-13.03		-2.529		-119.6
		(0.475)		(0.730)		(0.483)
Bachelor's degree in college		-13.63		0.320		-57.34
		(0.437)		(0.964)		(0.772)
Master's degree		-11.28		5.510		-98.29
		(0.540)		(0.521)		(0.588)
Professional degree (JD, MD)		-37.31**		-10.33		-164.1
		(0.040)		(0.176)		(0.372)
Doctoral degree		-26.30		-10.35		-211.9
		(0.166)		(0.185)		(0.225)
High school graduate		-4.995		6.275		-104.7
		(0.782)		(0.449)		(0.529)
White		-26.39***		-12.00***		-222.3***
		(0.000)		(0.001)		(0.002)
In full or part time employment		-2.655		2.275		14.75
		(0.594)		(0.397)		(0.666)
Student		-10.48		-0.112		-43.93
		(0.147)		(0.978)		(0.270)
Republican		-4.629		-3.830		-49.60
		(0.498)		(0.409)		(0.234)
Democrat		-5.308		-0.107		-75.24
		(0.275)		(0.973)		(0.172)
Political Scale		2.567**		2.178**		19.27**
		(0.048)		(0.015)		(0.018)
pleasure		0.415***		0.117*		0.974
		(0.000)		(0.062)		(0.271)
arousal		0.0548		0.0119		-0.547
		(0.364)		(0.761)		(0.567)
Constant	56.86***	52.56***	28.25***	9.692	598.4***	738.5***
	(0.000)	(0.009)	(0.000)	(0.334)	(0.000)	(0.000)
Observations	1813	1716	1813	1716	1813	1716
R^2	0.004	0.071	0.005	0.052	0.006	0.044
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A28: [Round 2: All Colors vs Caps] The table reports the results from logit regressions (columns 1-4 and 7-10) and ordered logit regressions (column 5-6) to study the likelihood of participants answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5, 7, 9 contain no controls. Columns 2, 4, 6, 8, 10 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1) Q1	(2) Q1	(3) limitliability	(4) limitliability	(5) Q2_other	(6) Q2_other	(7) Q3	(8) Q3	(9) Q4	(10) Q4
caps	-2.845***	-2.902***	-0.273***	-0.285***	0.212**	0.165	-0.181*	-0.226**	0.213**	0.199*
	(0.000)	(0.000)	(0.001)	(0.001)	(0.034)	(0.106)	(0.082)	(0.038)	(0.035)	(0.059)
dark yellow	-0.237	-0.159	0.177	0.210*	-0.0303	-0.0324	-0.0134	0.00666	0.0262	-0.00775
	(0.110)	(0.307)	(0.142)	(0.097)	(0.791)	(0.787)	(0.929)	(0.967)	(0.848)	(0.958)
red	0.454**	0.459**	-0.113	-0.124	0.0549	0.113	0.0566	0.0791	0.351**	0.326**
	(0.012)	(0.015)	(0.320)	(0.301)	(0.625)	(0.343)	(0.709)	(0.626)	(0.017)	(0.037)
blue	-0.218	-0.198	0.115	0.103	-0.154	-0.119	0.233	0.268	0.0612	0.104
	(0.140)	(0.202)	(0.334)	(0.404)	(0.160)	(0.300)	(0.151)	(0.116)	(0.655)	(0.468)
green	0.377**	0.399**	0.281**	0.240*	0.0732	0.0873	-0.0128	-0.0602	0.166	0.190
	(0.031)	(0.028)	(0.020)	(0.052)	(0.490)	(0.429)	(0.931)	(0.698)	(0.233)	(0.197)
Age		0.00433		-0.00747***		-0.00964***		-0.000462		0.0120***
		(0.222)		(0.005)		(0.000)		(0.901)		(0.001)
$10,000 to $19,999		0.0542		0.530***		-0.144		0.320		0.176
		(0.812)		(0.003)		(0.442)		(0.161)		(0.393)
$20,000 to $29,999		0.403*		0.437***		0.0692		0.154		0.362*
		(0.071)		(0.010)		(0.704)		(0.464)		(0.066)
$30,000 to $39,999		0.153		0.317*		-0.106		0.439**		0.0373
		(0.493)		(0.058)		(0.567)		(0.040)		(0.844)
$40,000 to $49,999		0.431*		0.399**		0.135		0.286		0.386*
		(0.068)		(0.022)		(0.475)		(0.196)		(0.060)
$50,000 to $59,999		0.288		0.427**		-0.0601		0.432**		0.532***
		(0.202)		(0.012)		(0.738)		(0.046)		(0.008)
$60,000 to $69,999		0.350		0.417**		0.250		0.229		0.440**
		(0.143)		(0.018)		(0.199)		(0.292)		(0.035)
$70,000 to $79,999		0.260		0.328*		0.0726		0.390*		0.563***
		(0.264)		(0.066)		(0.697)		(0.088)		(0.009)
$80,000 to $89,999		0.317		0.220		-0.0964		0.208		0.210
		(0.195)		(0.248)		(0.633)		(0.385)		(0.338)
$90,000 to $99,999		0.0895		0.357*		0.167		0.447*		0.411*
		(0.721)		(0.058)		(0.404)		(0.067)		(0.065)
$100,000 to $149,999		0.216		0.372**		0.0908		0.557***		0.518***
		(0.325)		(0.022)		(0.603)		(0.008)		(0.007)
$150,000 or more		-0.103		0.323*		0.00530		0.401*		0.488**
		(0.653)		(0.063)		(0.978)		(0.073)		(0.018)
Female		0.0494		0.00657		-0.106		-0.0673		0.188**
		(0.563)		(0.921)		(0.125)		(0.435)		(0.017)
Some college but no degree		-0.627		-0.140		0.476		-0.392		-0.0674
		(0.150)		(0.688)		(0.371)		(0.413)		(0.878)
Associate degree in college		-0.785*		-0.258		0.675		-0.298		-0.372
		(0.080)		(0.472)		(0.211)		(0.544)		(0.406)
Bachelor's degree in college		-0.571		-0.0207		0.849		-0.234		-0.320
		(0.189)		(0.953)		(0.111)		(0.624)		(0.464)
Master's degree		-0.519		-0.155		0.868		-0.375		-0.289
		(0.245)		(0.663)		(0.108)		(0.443)		(0.519)
Professional degree (JD, MD)		-0.447		-0.650		0.328		-0.0631		0.102
		(0.385)		(0.107)		(0.575)		(0.911)		(0.849)
Doctoral degree		-0.302		-0.0656		0.954		0.154		-0.0941
		(0.564)		(0.877)		(0.113)		(0.799)		(0.861)
High school graduate		-0.754*		-0.129		0.887*		-0.321		-0.341
		(0.088)		(0.716)		(0.098)		(0.506)		(0.440)
White		0.219**		0.0284		-0.0891		0.180*		0.182**
		(0.027)		(0.716)		(0.282)		(0.072)		(0.044)
In full or part time employment		0.202*		0.0511		-0.200**		-0.158		-0.101
		(0.056)		(0.532)		(0.022)		(0.156)		(0.326)
Student		-0.0688		0.363**		0.170		-0.185		-0.332**
		(0.708)		(0.014)		(0.224)		(0.324)		(0.045)
Republican		-0.0556		0.0217		0.0314		-0.218		-0.137
		(0.697)		(0.841)		(0.788)		(0.115)		(0.284)
Democrat		-0.275**		0.0277		0.0797		-0.0338		-0.204*
		(0.011)		(0.737)		(0.348)		(0.763)		(0.052)
Political Scale		-0.0573*		-0.0533**		0.00333		-0.0629**		-0.113***
		(0.051)		(0.017)		(0.882)		(0.033)		(0.000)
arousal		0.00216		0.00190		0.000751		0.00207		0.00372**
		(0.180)		(0.122)		(0.539)		(0.217)		(0.014)
pleasure		-0.00177		-0.00243*		-0.00442***		-0.00661***		-0.00546***
		(0.356)		(0.091)		(0.003)		(0.001)		(0.002)
Constant	1.785***	2.007***	0.675***	0.785**			1.673***	2.141***	1.322***	1.180**
	(0.000)	(0.000)	(0.000)	(0.041)			(0.000)	(0.000)	(0.000)	(0.016)
Observations	4561	4337	4561	4337	3526	3360	4561	4337	4561	4337
Pseudo R^2	0.244	0.257	0.005	0.016	0.001	0.012	0.002	0.016	0.002	0.027
chi2	1060.3	1009.7	27.64	92.32	8.682	82.32	6.914	62.46	9.156	103.2

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A29: [Round 2: All Colors vs Caps] The table reports the results from OLS regressions to study the time participants take in answering each understanding question correctly. Regressions are run with robust standard errors. Columns 1, 3, 5 and 7 contain no controls. Columns 2, 4, 6 and 8 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Time Question 1	Time Question 1	Time Question 2	Time Question 2	Time Question 3	Time Question 3	Time Question 4	Time Question 4
caps	9.646**	9.929***	1.458	1.729*	7.298**	9.544***	-11.48***	-10.59***
	(0.000)	(0.000)	(0.129)	(0.069)	(0.029)	(0.004)	(0.000)	(0.001)
dark yellow	1.704	2.288	5.583**	6.189**	12.80***	12.17**	7.317	8.526*
	(0.231)	(0.143)	(0.018)	(0.012)	(0.008)	(0.011)	(0.105)	(0.080)
red	-0.852	-0.905	4.357***	4.855***	11.02**	11.91**	0.799	-2.024
	(0.285)	(0.231)	(0.008)	(0.005)	(0.022)	(0.014)	(0.851)	(0.648)
blue	1.387	0.989	2.101	1.161	11.87**	7.878*	2.884	2.181
	(0.321)	(0.526)	(0.139)	(0.304)	(0.041)	(0.099)	(0.514)	(0.639)
green	1.210	1.205	4.029***	4.028**	10.56**	11.32**	13.39***	11.31**
	(0.512)	(0.526)	(0.010)	(0.014)	(0.030)	(0.019)	(0.004)	(0.013)
Age		0.0857***		0.179***		1.259***		0.638***
		(0.003)		(0.000)		(0.000)		(0.000)
$10,000 to $19,999		1.092		0.0519		-6.147		-4.949
		(0.513)		(0.972)		(0.424)		(0.553)
$20,000 to $29,999		-1.569		2.456		-9.733		-8.577
		(0.255)		(0.146)		(0.167)		(0.298)
$30,000 to $39,999		0.436		1.055		-12.57*		-2.713
		(0.841)		(0.501)		(0.063)		(0.762)
$40,000 to $49,999		-1.793		1.691		-8.460		-7.576
		(0.214)		(0.360)		(0.261)		(0.355)
$50,000 to $59,999		-1.520		1.557		-12.04*		-6.938
		(0.326)		(0.347)		(0.070)		(0.389)
$60,000 to $69,999		1.211		3.325		-10.01		-6.002
		(0.553)		(0.123)		(0.172)		(0.453)
$70,000 to $79,999		-1.072		1.626		-10.77		-13.27
		(0.545)		(0.412)		(0.136)		(0.100)
$80,000 to $89,999		-1.060		-0.507		-11.81		-8.034
		(0.547)		(0.787)		(0.122)		(0.350)
$90,000 to $99,999		0.900		-1.340		-24.24***		-17.90**
		(0.796)		(0.446)		(0.001)		(0.027)
$100,000 to $149,999		-2.165		1.242		-21.39***		-4.367
		(0.182)		(0.509)		(0.001)		(0.580)
$150,000 or more		-3.861**		-3.031*		-27.08***		-11.45
		(0.013)		(0.092)		(0.000)		(0.174)
Female		-0.804		-2.004**		10.49***		1.803
		(0.307)		(0.016)		(0.000)		(0.498)
Some college but no degree		-1.167		-2.748		-29.73		-51.38
		(0.666)		(0.416)		(0.147)		(0.152)
Associate degree in college		-0.809		-1.558		-21.60		-37.65
		(0.781)		(0.658)		(0.305)		(0.298)
Bachelor's degree in college		-1.711		-1.199		-33.23		-50.31
		(0.508)		(0.727)		(0.105)		(0.162)
Master's degree		-1.438		-1.931		-38.34*		-53.93
		(0.638)		(0.592)		(0.064)		(0.137)
Professional degree (JD, MD)		-2.151		-0.00120		-46.38**		-61.66*
		(0.464)		(1.000)		(0.034)		(0.091)
Doctoral degree		0.350		-5.829		-35.49		-61.08*
		(0.935)		(0.114)		(0.106)		(0.097)
High school graduate		-1.860		0.732		-28.96		-42.01
		(0.473)		(0.834)		(0.163)		(0.240)
White		-2.104**		-3.163***		-18.14***		-15.12***
		(0.035)		(0.003)		(0.000)		(0.000)
In full or part time employment		0.458		1.339		-15.12***		-5.327
		(0.523)		(0.131)		(0.000)		(0.132)
Student		-1.225		1.690		-7.394		-5.500
		(0.271)		(0.251)		(0.206)		(0.273)
Republican		0.621		1.330		-2.521		-6.966
		(0.573)		(0.356)		(0.554)		(0.116)
Democrat		2.565***		1.343		-1.666		0.129
		(0.006)		(0.150)		(0.595)		(0.969)
Political Scale		0.514		0.733***		2.601***		2.671***
		(0.121)		(0.002)		(0.002)		(0.005)
pleasure		0.0758***		0.0258		0.203***		0.0823
		(0.010)		(0.168)		(0.001)		(0.169)
arousal		-0.00859		0.0166		-0.0352		0.0612
		(0.678)		(0.190)		(0.444)		(0.191)
Constant	11.21***	6.609**	17.24***	8.715**	92.96***	97.71***	86.42***	121.4***
	(0.000)	(0.033)	(0.000)	(0.019)	(0.000)	(0.000)	(0.000)	(0.002)
Observations	4561	4337	4561	4337	4561	4337	4561	4337
R^2	0.022	0.034	0.005	0.028	0.003	0.079	0.007	0.039
chi2								

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A30: [Round 2: All Colors vs Caps] The table reports the results from logit regressions to study the likelihood of participants answering each short question correctly. Regressions are run with robust standard errors. Columns 1 and 3 contain no controls. Columns 2 and 4 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1) VSAQ1	(2) VSAQ1	(3) VSAQ2	(4) VSAQ2
caps	-0.469***	-0.450***	0.196**	0.209**
	(0.000)	(0.000)	(0.013)	(0.011)
dark yellow	0.243**	0.291**	0.266**	0.279**
	(0.034)	(0.016)	(0.017)	(0.018)
red	0.581***	0.565***	-0.138	-0.127
	(0.000)	(0.000)	(0.204)	(0.269)
blue	0.314***	0.350***	-0.0349	0.0196
	(0.006)	(0.003)	(0.751)	(0.864)
green	0.472***	0.427***	-0.0985	-0.154
	(0.000)	(0.000)	(0.365)	(0.170)
Age		0.00937***		0.00693***
		(0.000)		(0.007)
$10,000 to $19,999		0.165		0.213
		(0.374)		(0.213)
$20,000 to $29,999		0.0333		0.213
		(0.852)		(0.191)
$30,000 to $39,999		0.199		0.0325
		(0.255)		(0.840)
$40,000 to $49,999		0.0942		0.235
		(0.611)		(0.163)
$50,000 to $59,999		0.354**		0.338**
		(0.045)		(0.039)
$60,000 to $69,999		0.213		0.339**
		(0.257)		(0.049)
$70,000 to $79,999		0.0698		0.167
		(0.713)		(0.330)
$80,000 to $89,999		-0.00710		0.245
		(0.972)		(0.190)
$90,000 to $99,999		0.211		0.324*
		(0.287)		(0.077)
$100,000 to $149,999		-0.00266		0.208
		(0.988)		(0.185)
$150,000 or more		0.0623		0.347**
		(0.734)		(0.040)
Female		-0.268***		0.116*
		(0.000)		(0.064)
Some college but no degree		-0.523		0.316
		(0.115)		(0.346)
Associate degree in college		-0.612*		0.274
		(0.075)		(0.426)
Bachelor's degree in college		-0.428		0.552*
		(0.196)		(0.099)
Master's degree		-0.626*		0.384
		(0.067)		(0.263)
Professional degree (JD, MD)		-0.653		0.221
		(0.100)		(0.572)
Doctoral degree		-0.0961		0.266
		(0.813)		(0.507)
High school graduate		-0.463		0.341
		(0.170)		(0.315)
White		-0.0532		0.0125
		(0.500)		(0.866)
In full or part time employment		0.147*		0.0178
		(0.078)		(0.822)
Student		-0.218		-0.0959
		(0.152)		(0.478)
Republican		0.0936		0.138
		(0.398)		(0.186)
Democrat		0.120		0.147*
		(0.145)		(0.061)
Political Scale		-0.0207		0.0118
		(0.350)		(0.578)
arousal		0.00391***		0.00416***
		(0.002)		(0.000)
pleasure		-0.00175		-0.00470***
		(0.222)		(0.001)
Constant	-0.704***	-0.734**	0.0248	-1.060***
	(0.000)	(0.047)	(0.578)	(0.004)
Observations	4561	4337	4561	4337
Pseudo R^2	0.018	0.032	0.003	0.016
chi2	102.7	174.5	17.03	91.02

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A31: [Round 2: All Colors vs Caps] The table reports the results from OLS regressions to study the time participants take in answering each short question correctly (Columns 1-4) and the overall time it took participants to complete the survey (Columns 5-6). Columns 1, 3 and 5 contain no controls. Columns 2, 4 and 6 control for participants' age, earnings, gender, education, race, employment status, political orientation and the stated level of pleasure and arousal for the color palette they see.

	(1)	(2)	(3)	(4)	(5)	(6)
	time_SQ1	time_SQ1	time_SQ2	time_SQ2	Time: full survey	Time: full survey
caps	7.716**	10.47***	0.222	0.683	20.83	20.23
	(0.016)	(0.001)	(0.888)	(0.671)	(0.188)	(0.296)
dark yellow	11.20**	15.82***	7.081**	8.162**	327.1	341.1
	(0.024)	(0.002)	(0.022)	(0.012)	(0.211)	(0.194)
red	12.75***	11.79**	8.844**	9.543***	150.7**	144.1*
	(0.010)	(0.016)	(0.011)	(0.007)	(0.033)	(0.070)
blue	5.940	2.613	1.051	0.400	22.83	19.65
	(0.143)	(0.505)	(0.640)	(0.864)	(0.291)	(0.406)
green	14.80***	13.79**	12.12***	11.18***	100.6***	86.09***
	(0.007)	(0.016)	(0.003)	(0.008)	(0.001)	(0.008)
Age		0.481***		0.299***		2.734
		(0.000)		(0.000)		(0.121)
$10,000 to $19,999		1.867		4.963		-311.9
		(0.756)		(0.222)		(0.430)
$20,000 to $29,999		7.577		0.392		-419.1
		(0.243)		(0.905)		(0.284)
$30,000 to $39,999		-0.704		-0.594		-359.2
		(0.905)		(0.847)		(0.338)
$40,000 to $49,999		4.515		1.148		-354.2
		(0.458)		(0.741)		(0.323)
$50,000 to $59,999		6.399		1.663		-395.4
		(0.396)		(0.626)		(0.282)
$60,000 to $69,999		6.219		7.349		-332.9
		(0.344)		(0.105)		(0.341)
$70,000 to $79,999		4.001		-1.442		-407.9
		(0.565)		(0.631)		(0.255)
$80,000 to $89,999		-1.164		-4.066		-398.2
		(0.854)		(0.208)		(0.241)
$90,000 to $99,999		0.424		-0.474		-370.5
		(0.949)		(0.898)		(0.265)
$100,000 to $149,999		-2.672		-2.064		-401.9
		(0.639)		(0.534)		(0.237)
$150,000 or more		-5.547		-5.295		-439.5
		(0.380)		(0.103)		(0.199)
Female		-5.954**		-4.101***		-47.07
		(0.018)		(0.007)		(0.361)
Some college but no degree		-24.25**		-7.690		-176.7
		(0.041)		(0.184)		(0.398)
Associate degree in college		-18.47		-5.169		-131.2
		(0.134)		(0.429)		(0.540)
Bachelor's degree in college		-21.01*		-6.903		-150.4
		(0.076)		(0.237)		(0.487)
Master's degree		-24.91**		-8.413		-158.6
		(0.041)		(0.178)		(0.480)
Professional degree (JD, MD)		-46.73***		-12.65*		-219.0
		(0.000)		(0.077)		(0.317)
Doctoral degree		-33.42**		-13.81**		-259.4
		(0.020)		(0.032)		(0.236)
High school graduate		-11.05		1.132		37.49
		(0.369)		(0.857)		(0.911)
White		-25.12***		-9.910***		-217.9**
		(0.000)		(0.000)		(0.013)
In full or part time employment		-0.486		1.337		-91.62
		(0.871)		(0.460)		(0.260)
Student		1.276		-0.927		-212.8
		(0.844)		(0.750)		(0.175)
Republican		0.438		0.635		-96.66
		(0.918)		(0.816)		(0.165)
Democrat		1.954		2.420		-62.84
		(0.576)		(0.178)		(0.218)
Political Scale		2.711***		1.619***		26.42**
		(0.006)		(0.002)		(0.012)
pleasure		0.306***		0.122***		0.341
		(0.000)		(0.001)		(0.722)
arousal		0.0865**		-0.0129		0.852
		(0.019)		(0.634)		(0.323)
Constant	55.89***	53.75***	28.32***	21.94***	591.0***	1180.8**
	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.012)
Observations	4561	4337	4561	4337	4561	4337
R^2	0.004	0.052	0.007	0.036	0.003	0.017
chi2						

p-values in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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