January 2026

Jargon in Consumer Information: The Case of Mutual Fund Fees

ALYCIA CHIN, Senior Financial Economist, Office of the Investor Advocate, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549, readlinga@sec.gov, ORCID ID: 0000-0002-9570-0549

BRIAN SCHOLL, Chief Economist, Office of the Investor Advocate, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549, schollb@sec.gov

ERIC VANEPPS[†], Owen Graduate School of Management, Vanderbilt University, 401 21st Ave. S., Nashville, TN 37203, eric.m.vanepps@vanderbilt.edu

ABSTRACT

Complicated language impedes decision-making in many contexts. We examine jargon in a highly technical setting: the $25 trillion mutual fund industry used by millions of consumers. Regulations require mutual funds to disclose information about fees as part of their marketing materials and correspondence with investors, yet consumers may find this information difficult to understand. We demonstrate difficulties with current fee terminology (e.g., "12b-1 fees") and identify plain language that increases comprehension, decreases subjective difficulty of investment decision-making tasks, leads to greater investment intentions, and improves the quality of choices between funds. In Study 1 (N = 1,575), we test plain language terms and find consumers understand them better than existing jargon. In Study 2 (N = 500), plain language shifts choices between funds, increasing participants' tendency to choose the less costly mutual fund in several investment scenarios. In Study 3 (N = 493), plain language terms reduce perceived difficulty and improve comprehension in a financial decision-making task, ultimately leading to increased intentions to invest. Our results suggest that modified language could improve investment comprehension, choices, and participation, yielding meaningful benefits for potential and existing investors.

ACKNOWLEDGEMENTS

We thank NORC's BEAD team for help conducting this research, particularly Angela Fontes, Mark Lush, Steven Nash, Seth Cohen, and Meimeizi Zhu. We also thank Nettie Silvernale for research assistance, and Adam Craig, John Foley, and members of the SEC staff for comments on this research.

DISCLAIMER: This report is provided in the authors' official capacity as staff of the Office of the Investor Advocate at the Securities and Exchange Commission (SEC) but does not necessarily reflect the views of the Commission, the Commissioners, or other members of the staff.

† Eric VanEpps is both a faculty member at Vanderbilt University and a former Intergovernmental Personnel Act Fellow at the U.S. Securities and Exchange Commission.

This paper has been accepted for publication at the Journal of Public Policy and Marketing. The version of record is available at the journal's website: https://doi.org/10.1177/07439156251350585

Consumers live in a complicated world. As consumer products proliferate, companies offer an increased number of differentiating product features and specialized language to describe those features. Buying a new computer, for instance, could involve choosing an integrated or discrete graphics processor, a solid state drive, and an Intel i5, i7, or i9 processor. Selecting a health insurance plan requires trading off between varying deductibles, co-pays, and networks of providers. Even common grocery purchases can involve weighing the relative benefits of a constellation of vitamins, minerals, saturated and unsaturated fats, antioxidants, and other nutrients.

Traditional policymaking efforts rely on the assumption that, once companies provide information to consumers, those consumers are informed enough to make product decisions (see Durkin & Elliehausen, 2011). Thus, regulations like the "truth in securities" and "truth in advertising" laws help ensure that disclosed information is complete and accurate. Even if companies disclose product terms, however, consumers may not understand these disclosures or use them to make well-informed decisions. Consumers are commonly confused about product features as varied as calories (Berry, Burton, Howlett, & Newman, 2019; Bleich et al., 2017; Breck, Mijanovich, Weitzman, & Elbel, 2017), privacy protections (Brough, Norton, Sciarappa, & John, 2022; McDonald, Reeder, Kelley, & Cranor, 2009; Norberg, Horne, & Horne, 2007), credit card annual percentage rates (Chin & Bruine de Bruin, 2019), and mortgage terms (Lacko & Pappalardo, 2010; Perry & Blumenthal, 2012). As such, although informational documents may provide complete and accurate information, they may fall short at providing *meaning* to consumers.

In this research, we study one barrier that might weaken the link between product information and understanding: the use of jargon. Jargon is "language used by a particular group

of people, especially in their work, and which most other people do not understand" (Cambridge Business English Dictionary, 2020). Jargon takes the place of more easily accessible, substitutable language (Brown, Anicich, & Galinsky, 2020). In other words, although technical language may sometimes be required to precisely communicate a given piece of information, jargon refers uniquely to terms that are more difficult for laypeople to understand than is strictly necessary. In addition to causing confusion, jargon may also inhibit consumers' ability to match products to their preferences and create a barrier to action.

We concentrate on jargon in the $25 trillion mutual fund industry, a consequential context given that investments support consumers' well-being for a host of important life outcomes, including retirement, education, and financial emergencies (Investment Company Institute, 2024). When choosing investments, investors should consider fees and expenses, which are akin to the sales price of a typical consumer product and act as important drivers of costs (Roussanov, Ruan, & Wei, 2018). Even seemingly small differences in fees can be important; for instance, over 20 years with a modest return of 4%, an initial investment of $100,000 can accrue over $30,000 more if it is invested in a fund that has expenses of .25% rather than 1.00%. To help would-be investors compare information across mutual funds, the regulations regarding mutual funds generally require fund companies to disclose detailed information about performance, fees, and expense components in a standardized format using consistent language (see Form N-1A, the registration form for mutual funds). Additionally, the SEC has long pursued "plain English" initiatives that are designed to enhance the readability of investment-related information through principles such as "No legal jargon or highly technical business terms" (17 CFR § 230.421(1)(v)). SEC staff have also released a guidebook for industry to follow when writing disclosures (OIEA, 1998). Unfortunately, financial document disclosures remain

confusing for many everyday investors; for instance, research has shown the disclaimer "past performance does not guarantee future results" can be ineffective at improving consumer decisions (Johnson, Tellis, & VanBergen, 2021), and standard fee disclosures do not always help consumers choose cost-effective mutual funds (Scholl, Craig, & Chin, 2023). Furthermore, even after plain English guidelines were enacted, mutual funds' documents were found to be too long, and have sentences that were too long, to efficiently communicate decision-relevant information to investors (Loughran & McDonald, 2014).

While our research builds conceptually on literature about difficulty reading documents, we focus on a more nuanced view of the barriers potentially created by jargon, which is a specific linguistic feature distinct from readability. Jargon-laden terms can be short and used in simple sentences – and thus "readable," – but still create enormous barriers for consumers. For example, fee jargon can include terms like "load" and "12b-1" fee that may not clearly communicate the context or timing of how fees are applied. As a potential solution, we identify plain language for mutual fund fees and demonstrate that this language can (1) promote consumer comprehension, (2) reduce the subjective difficulty of using mutual fund disclosures, (3) improve choice quality, and (4) increase intentions to invest in a mutual fund.

Jargon in Financial Documents

Although jargon could be studied in a variety of retail contexts where technical language is used—including mortgage loans (Perry & Blumenthal, 2012), health insurance enrollment (McCormack et al., 2009), and privacy notices for online transactions (Martin, 2015; Milne, Culnan, & Greene, 2006)—in the present work, we concentrate on mutual fund fee jargon. Jargon may be a particular problem for mutual funds because investor-facing documents are

typically written by experts with significant domain knowledge but are intended for use by individual consumers who may have significantly less knowledge. Indeed, Tucker and Xia (2023) write that SEC regulations are supposed to focus "disclosures on the 'average' investor above other audiences" (p. 74). Despite this focus, policymakers (who themselves may have significant expertise) may lean toward technically precise language without recognizing how consumers could be misled or confused by such terminology (Garrison et al., 2012). Past research has shown a "curse of knowledge" (e.g., Birch et al., 2017; Camerer, Loewenstein, & Weber, 1989; Warren, Farmer, Gu, & Warren, 2021) whereby those with knowledge are unable to imagine the perspective of others without such knowledge. When communicating fees or other important elements of funds to non-expert investors, experts may mistakenly generalize their own feelings of comfort with jargon to assume that the language is more accessible and easily understood than it actually is. As such, they may fail to realize that the terms presented are indeed jargon, and fail to fully appreciate the difficulty created by this jargon.

Furthermore, the existence of jargon may be exploited by firms—at consumers' expense. Readers of corporate reports question whether linguistic complexity (i.e., jargon) is necessary for conveying technical information, or whether it is used by firms to intentionally obscure information (Bushee, Gow, & Taylor, 2018), including information that would be relevant for investment decisions. Funds that have less readable disclosures have lower performance and higher risk (Taylor & Xia, 2023). Although more experienced investors and experts may be able to use jargon-laden disclosures to select the best mutual funds, the disclosures may be poorly designed for helping laypeople and individual retail investors, despite the fact that individual investors are estimated to own 88% of the assets in the U.S. mutual fund market (ICI, 2024). Because of these potential issues with existing language, we aim to take a more "consumer-

centric" (Garrison et al., 2012) approach to disclosures by recruiting everyday consumers to evaluate mutual fund terminology, and by examining downstream consequences on these individuals.

What Are the Possible Consequences of Jargon?

Limited Comprehension

When presented with difficult language, consumers without specialized expertise may struggle to understand disclosed information. For instance, medical jargon may lead patients to misunderstand the severity of a test result: Many patients who hear about a "nodule" or "spot" on a lung scan assume they have cancer, even though the true risk is less than 5% and medical providers do not see the presence of a nodule as noteworthy (Wiener, Gould, Woloshin, Schwartz, & Clark, 2013).

Misunderstanding jargon may also hinder consumers' ability to apply disclosed information in real-world situations. For example, Chin et al. (2022) find that consumers viewing overdraft disclosures have trouble understanding how the costs and benefits of overdraft services vary depending on how a consumer behaves (e.g., the amount of money a consumer typically holds in a checking account). Similarly, credit card users may struggle with certain credit card disclosures because they do not realize such disclosures make assumptions about future consumer spending (Soll, Keeney, & Larrick, 2013). In the investment domain, because mutual fund jargon may obscure meaning, consumers may not be able to comprehend jargon-filled disclosures and understand how they apply to different investment scenarios. For instance, investors may not recognize that a mutual fund fee may have different implications for those who buy and sell frequently versus those who "buy and hold."

H1: Individuals will exhibit higher comprehension of mutual fund fees when reading plain language terms versus jargon.

Negative Subjective Experience

Jargon could engender negative affect and reduced consumer confidence. To the extent that technical language is overly complex and creates disfluency, readers faced with jargon may experience discomfort and judge the decision context as more difficult. They could negatively evaluate the source of the disclosed information (Oppenheimer, 2006) or even the investment opportunity itself (Alter & Oppenheimer, 2006). By contrast, language that is easier to read can bolster consumer expectations (e.g., in evaluations of car insurance policies; Van Boom, Desmet, & Van Dam, 2016), thereby potentially making a product or product category more attractive. As such, we expect that by using more comprehensible language, consumers' subjective experiences of interacting with mutual fund disclosures may improve.

H2: Using mutual fund fee information will be perceived as less difficult when such information is presented with plain language terms (vs. jargon).

Reduced Choice Quality

Because different mutual fund fees can apply at the time of purchase, at the time of sale, or on a recurring basis, it is possible that jargon could affect purchase and post-purchase considerations, with different financial consequences. To explore these potential effects, we examine scenarios in which jargon could potentially impede consumers' ability to (1) choose which mutual fund to invest in, based on fee structure; (2) understand how a mutual fund fee structure affects an investor's net investment balance; (3) from a set of mutual funds, identify which option to liquidate in order to maximize the amount received; and (4) choose which fund to sell to guarantee a certain amount is returned to the consumer, after fees are paid. In all cases,

we examine whether mutual fund fee jargon impedes consumers' ability to choose the less expensive mutual fund, a critical measure of choice quality.

H3: Plain language terms will increase consumers' aggregate ability to choose less costly mutual funds, based on fee structure, in purchase and post-purchase scenarios (including investment choice and withdrawals).

Limited Intentions to Invest

A considerable literature in economics and finance has grappled with the "stock market participation puzzle," which describes how many households do not participate in financial markets despite the financial benefits that are likely to result (Haliassos & Bertaut, 1995). For example, Favilukis (2013) documents that from 1983 to 2007, the fraction of U.S. households with positive wealth who held stocks was between 20% and 30%, or between 30% and 44% if retirement accounts are included. Furthermore, using nationally representative 2016 and 2019 surveys, both Choi & Roberston (2020) and Merkoulova & Veld (2022) show that more than 40% of individuals do not invest. Participation is correlated with risk preferences, education, and income, among other factors (Haliassos & Bertaut, 1995; Mankiw & Zeldes, 1991; Merkoulova & Veld, 2022). Surprisingly, however, even some wealthy households do not invest in mutual funds and other securities; 10% of households with $100,000 in financial assets hold no stocks (Choi & Roberston, 2020).

To help explain the stock market participation puzzle, researchers have turned to a host of psychological and behavioral mechanisms that might drive (non)participation in financial markets, including overly pessimistic expectations for future stock market performance, (lack of) trust in the stock market or financial professionals, (low) confidence in one's knowledge, and simply "not liking" to think about one's finances (e.g., Chin, VanEpps, Scholl, & Nash, 2025;

Choi & Robertson, 2020; Guiso, Sapienza, & Zingales, 2008). In the present work, we introduce the possibility that exposure to jargon—as would occur when considering a mutual fund's fee disclosures—may reduce individuals' willingness to invest through the negative subjective experience posited in H2. Correcting these deleterious effects of jargon with improved language may therefore increase future stock market participation.

H4: Plain language terms (vs. jargon) will lead to greater likelihood to consider mutual funds as investments.

Research Overview

In Study 1, we develop and test plain language mutual fund fee terminology to determine whether this terminology is easier to comprehend than language that is currently used in the market (testing H1). In Study 2, we assess whether presenting fees in plain language raises choice quality (testing H3) and improves subjective experience (testing H2). In Study 3, we conceptually replicate effects on comprehension, using a different measure (testing H1); investigate whether consumers experience plain language terms as less difficult to process (testing H2); and determine whether plain language raises intentions to invest in mutual funds (testing H4). Across all studies, we predict that existing fee jargon will yield relatively poor outcomes—these terms will diminish comprehension, lead to a more negative subjective experience, lower choice quality, and reduce investment intentions—relative to plain language. Overall, our research contributes to both academic literature and policy efforts by demonstrating the consequences of jargon on subjective and objective experiences of consumers making mutual

fund decisions, beyond comprehension effects emphasized in prior literature. As such, we believe the study of jargon is relevant for ongoing policy debates[1] and for consumer well-being.

Pretest to Study 1

Method

Sample and Screening

To identify plain language terminology, we recruited a sample of 1,606 participants from Dynata, a market research firm that maintains a panel of millions of respondents (www.dynata.com). Specifically, we used a quota sampling approach targeting roughly equal numbers of participants in each of three groups. We designed these groups to have different levels of investment experience, with the goal of exploring potential heterogeneous effects across them. The "non-investors" group included those who had no investments as well as those who did not have decision-making control about their investments (as in the case of most traditional pension plans). The second group, "retirement-only investors," included those who had a retirement account and no other accounts. The last group included those who had a non-retirement investment account such as a brokerage or advisory account ("independent investors"). All participants stated that, in their household, they would have primary or shared decision-making about financial products used for investing.

Identification of Plain Language Terminology

We asked the participants to rate existing and potential alternative terminology for six common mutual fund fees using a best–worst scaling approach. Ultimately, this approach yielded

[1] See, for example, Tailored Shareholder Reports proposed rule at https://www.sec.gov/files/rules/proposed/2020/33-10814.pdf, and corresponding comment letter by the Investment Company Institute at https://www.sec.gov/comments/s7-09-20/s70920-8186011-227164.pdf.

alternative, plain language terminology for five of the fees: (1) “fund’s marketing fee” in place of “12b-1 fee,” (2) “upfront sales charge” in place of “front-end load,” (3) “short-term fee” in place of “redemption fee,” (4) “fee for selling this fund” in place of “back-end load,” and (5) “transfer fee” in place of “exchange fee.” A sixth term, “management fee,” did not have an empirically preferred alternative. For more detail, see Web Appendix A.

There was a tendency for independent investors to perceive existing jargon as better fitting the definitions, as indicated by generally higher ratings relative to participants from other groups. Despite these differences across respondent groups, however, best-worst scores were consistently higher for the plain language terms than the existing terms. That is, the improvements when moving from existing jargon to new terminology suggest that all types of consumers, including independent investors, would prefer new (plain language) terminology for many fund fees.

Study 1

In Study 1, we examine H1 by comparing participants’ ability to identify fee definitions when viewing existing jargon versus plain language terminology identified in the Pretest. The study captures the kind of comprehension that consumers are expected to have to make informed decisions using mutual fund disclosures. We predict that plain language terms will lead to higher comprehension than current jargon.

Method

Sample and Screening

We recruited 1,575 U.S. respondents online from Dynata using the same procedure described in the Pretest to Study 1. The overall sample contained 50.1% men, 49.8% women, and .1% preferred not to say. The group included 93.40% non-Hispanic White participants, with a

median household income between $50,000 and $100,000 annually (see Table B1 in Web Appendix B for additional sample characteristics).[2]

Comprehension of Fund Terminology

Study 1 was a within-subjects experiment where we asked all participants 11 multiple choice questions. For each of these questions, we asked participants to choose the correct meaning of a given mutual fund fee ("Which of the following definitions best fits this term?" [12b-1 fee]). Response options were a set of five mutual fund definitions (shown in Table 1), "none of these definitions fit," or "I don't know."

The primary focus was on 10 of the trials, five of which showed mutual fund fees using existing jargon and five that that showed plain language identified in the pretest. We also included an 11th term ("custodial fee") to reduce respondents' ability to define a mutual fund fee solely using a "process of elimination" strategy.

Table 1: Existing Terms, Plain Language Versions, and Definitions (Study 1).

Existing term	**Plain language version**	**Definition**
12b-1 fee	Fund's marketing fee	When you have money invested in a mutual fund, this fee is the amount that you will pay each year for commissions to brokers and other salespersons, advertising, and other costs of promoting the mutual fund.
Front-end load	Upfront sales charge	This fee is a cost for buying mutual fund shares. It is deducted up front, so your initial investment will be lowered.
Redemption fee	Short-term fee	This fee is a cost for selling mutual fund shares. These fees are often waived after you own a mutual fund for a short time, such as 30 days.

[2] Although the sample was drawn using a third-party panel using quota and screening procedures designed to include individuals of different investment experience, we recognize that the racial/ethnic demographics of this Study 1 sample are non-representative of the U.S. population. We aim to address this limitation in subsequent studies by recruiting participants using a more representative sampling approach.

Back-end load	Fee for selling this fund	This fee is a cost for selling mutual fund shares. It will reduce your overall profits.
Exchange fee	Transfer fee	This fee is charged by an investment company if you transfer shares to another fund within the same mutual fund company.

Note. The presentation of these five definitions was counterbalanced, such that half of respondents in Study 1 received them in a reverse order.

Additional Items

After completing the comprehension task, participants reported demographics (marital status, whether the participant lives with a significant other, English language use, age, gender, household income, educational attainment, and race/ethnicity), measures of subjective mutual fund knowledge (Scholl & Fontes, 2019), objective mutual fund knowledge (Scholl & Fontes, 2022), financial literacy (Lusardi & Mitchell, 2011), and information on investment behavior (based on FINRA, 2022; see Table B1 in Web Appendix B). We used these measures to validate the distinctions we drew when recruiting the three investor types (non-investors, retirement-only investors, and independent investors), as we wanted to know whether comprehension of mutual fund fees varied according to knowledge, experience, or other identifiable investor differences (see "Interactions with Investor Experience" section). Analyses of subgroup differences on the relevant scales are reported in B1 and Table B4 in Web Appendix B.

We asked participants whether they looked up any answers to questions in this study (with response options of "yes, many"; "yes, a few"; or "no"), finding that only 3.24% of participants gave either "yes" answer. We retain all participants, regardless of their answer to this question, in our analyses. To the extent that participants could look up answers for existing jargon (but not the new, plain language terms), we would expect fewer correct answers for new

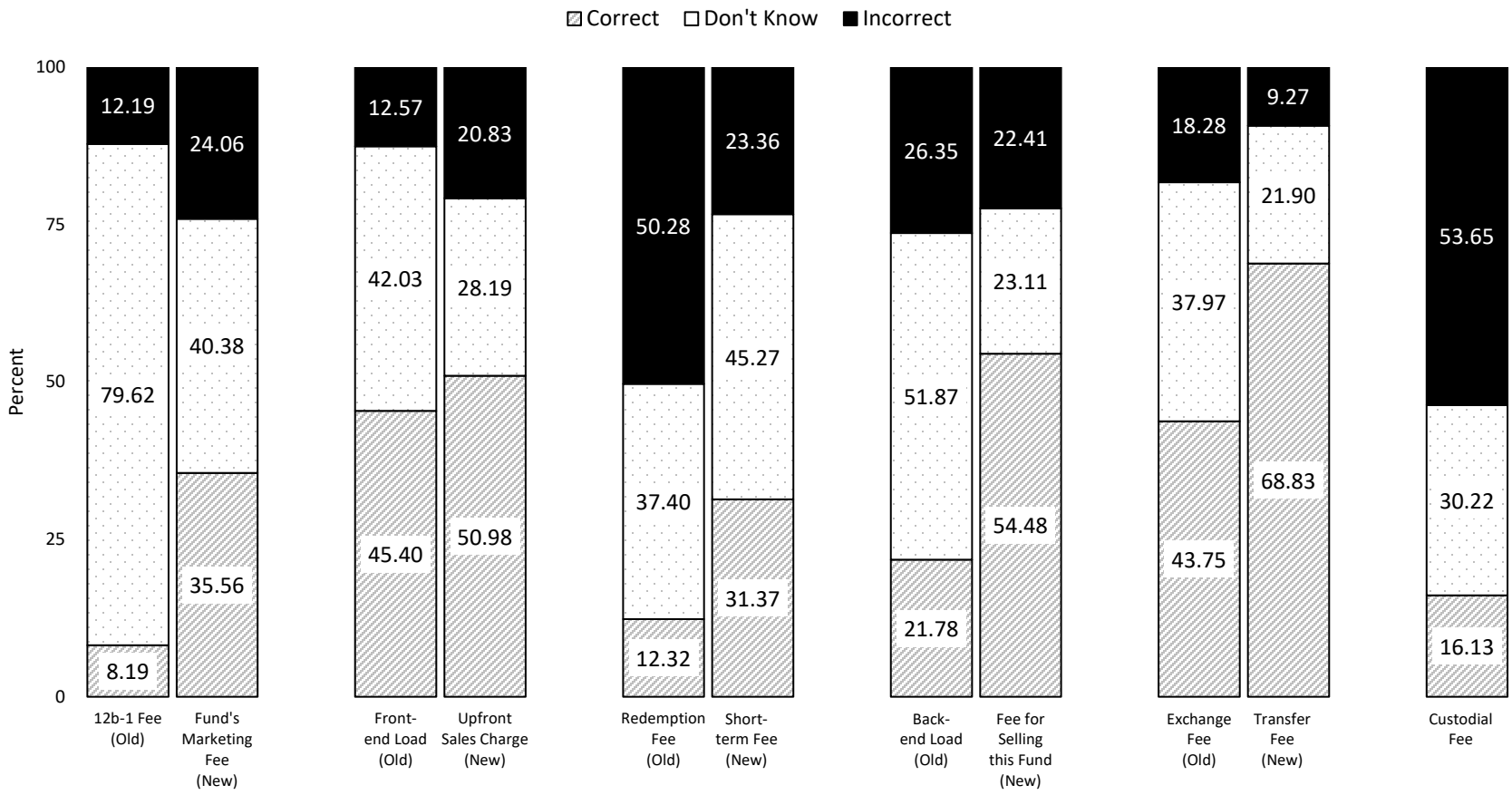
terms, making inclusion of participants who looked up answers a more conservative test of improved comprehension.

Results

We calculated the proportion of respondents selecting the correct and incorrect definitions for the existing jargon and plain language terminology, as well as the proportion who explicitly chose "I don't know" (Figure 1). Consistent with H1, across all five pairs of mutual fund fees, plain language increased the proportion of respondents who selected the correct response; paired *t* tests showed that each increase was significant (*t*'s ranging from 4.27 to 22.74, *p*s < .001; see Table B3 in Web Appendix B for exact values). Across the five pairs, the magnitude of the difference varied, with "back-end load" experiencing the largest improvement (32.7 percentage points; Cohen's $d = .71$), and "front-end load" experiencing the smallest (though still significant) improvement (5.6 percentage points; Cohen's $d = .11$).

When calculating individual participants' performance on the task, average rates of correct identification also increased. Under the existing jargon, respondents answered 1.31 questions out of five correctly on average ($SD = 1.28$), whereas under the plain language terms, they answered 2.41 questions correctly ($SD = 1.61$; $t = 32.79$, $p < .001$, Cohen's $d = .76$).

Figure 1: Distribution of Comprehension Scores for Mutual Fund Fee Terms (Study 1).



Discussion

This study confirmed that consumers with varying levels of investment experience could comprehend plain language mutual fund fee terminology more easily. Consumers correctly identified mutual fund fees more frequently when shown plain language, as compared to existing jargon, supporting H1. These changes suggest meaningful improvements in comprehension of mutual fund costs with plain language and suggest that the current jargon used in fund disclosures leaves many consumers confused and uninformed.

Study 2

A question remaining from Study 1 is whether plain language improves consumers' understanding beyond matching terms and definitions. In Study 2, we examine whether plain language improves the quality of consumers' choices between specific mutual funds (H3). To examine general benefits of plain language, we use a variety of hypothetical scenarios featuring investors who are making choices at purchase and post-purchase stages, including about initial investment decisions and liquidations (see Web Appendix C for full survey instrument). Given the benefits of plain language terminology across all investor subgroups examined in Study 1 and the Pretest to Study 1, we use a simpler recruitment method that yields a more representative sample. We use this sample to test for potential differential effects of plain language across investors and non-investors.

Method

Sample

This study was pre-registered at https://aspredicted.org/TVS_7BW. We recruited a sample of 500 participants from the United States using Prolific's "Representative Sampling" feature. This group comprised 49.8% male, 48.2% female, 1.2% nonbinary, and .8% participants who preferred not to disclose their gender, with an average age of 46. The sample included 72.4% White participants, 16% Black participants, 9.8% Asian participants, and 14.4% individuals identifying with other racial and ethnic backgrounds (total sums to more than 100% because participants could select more than one option). Regarding investment experience, 20.8% of participants reported having none, 42.4% reported having a little, 26.8% reported having some, and 10% reported having a lot.[3]

Procedure and Choice Quality

This study was a two-cell, between-subjects design in which we randomly assigned participants to existing jargon (n = 250) or plain language (n = 250) terminology. In both conditions, participants viewed five choice scenarios in which they identified which of two mutual funds was preferable given a particular investor's situation. We counterbalanced the order of the funds in each of the scenarios and informed participants that they would receive bonus payments of $0.10 for each correct response. Additionally, an on-screen calculator was available to participants throughout the study.

An example of one of the scenarios is as follows (Table 2 shows the options corresponding to this scenario; Web Appendix C shows all scenarios as part of the survey instrument):

[3] Because we recruited using Prolific Academic's "Representative Sampling" option, we did not recruit participants directly based on their investment experience, and thus we do not attempt to compare investor types.

"Steve received $10,000 in a tax refund this year. He wants to invest the money to help it grow. He has decided to pick one of the two mutual funds listed below. Imagine he invests his entire $10,000. On the first day he invests, before the fund has changed in price, which of the two options below would have a higher starting balance?"

Table 2: Example of Mutual Fund Choice Scenario Used in Study 2.

	Ficus Fund (Mutual fund with an aggressive allocation)	**Spruce Fund** (Mutual fund with an aggressive allocation)
Shareholder fees and annual operating expenses		
[Front-end load / Upfront sales charge]	0.25%	0.00%
[Back-end load / Fee for selling this fund]	0.00%	0.20%
[12b-1 fee / Fund's marketing fee]	0.05%	0.20%

Note. Plain language is shown after the slash (/) in brackets.

In each of the scenarios, one of the two funds was the correct choice; here, neither the back-end load nor the 12b-1 fee are relevant given the scenario (the back-end load applies to sales, whereas the 12b-1 is applied as an ongoing fee while holding the fund), but the front-end load would apply due to the purchase of the fund. Therefore, the correct answer regarding which fund has a higher starting balance on the first day of investment is the Spruce Fund (the fund with the lower front-end load; see Table 2). We took the number of scenarios correctly answered (out of five) as the overall choice quality score.

Subjective Difficulty

We asked two questions regarding fee table understandability (1 = very easy to 10 = very hard) and clarity (1 = very confusing to 10 = very clear). After reverse coding the second item,

these two measures were correlated, $r = .573$, $p < .001$, and we averaged them for our final analysis.

Demographics and Individual Differences

We asked participants to report how much experience they have with investments (0 = none to 3 = a lot), their current investment ownership status (401(k), IRA, stocks, bonds, etc.), how often they look at fee-related information (0 = never to 3 = more than once a year), income (11 categories from 1 = less than $5,000 to 11 = $200,000 or more), age, race/ethnicity, and gender. We created an "investor" category (1/0) if the participant reported holding any investments. Finally, we asked participants to report whether they used outside sources to look up any of the mutual fund fee terms while taking the survey.

Results

Effects of Terminology on Choice Quality

Participants correctly answered 3.25 ($SD = .94$) of the five scenarios in the jargon condition, compared to 3.46 ($SD = 1.05$) in the plain language condition, indicating a significant average improvement ($t(498) = -2.42$; $p = .02$).

Although the aggregate score improved with plain language terms, there was variation across the scenarios. For scenarios 1, 4, and 5, we noted a significant improvement in choice quality with plain language (see Table 3). For Scenario 3, however, individuals in the jargon group scored significantly higher than the plain language condition.

Table 3: Rates of Correct Identification Across Five Scenarios (Study 2).

	% Correct	Difference	*P*-Value

	Jargon	Plain Language		*T*-Statistic	
Scenario 1	.792 (.026)	.880 (.021)	.088 (.033)	2.671	.008
Scenario 2	.720 (.028)	.680 (.030)	-.040 (.041)	-0.975	.330
Scenario 3	.856 (.022)	.728 (.028)	-.128 (.036)	-3.563	.000
Scenario 4	.284 (.029)	.504 (.032)	.220 (.043)	5.156	.000
Scenario 5	.596 (.031)	.672 (.030)	.076 (.043)	1.766	.078

Note. Standard errors in parentheses.

Additionally, the effect of plain language was moderated by investor category, $F(3, 496) = 5.44$, $p = .02$. For investors, choice quality did not significantly differ between jargon and plain language ($M = 3.32$, $SD = .96$ vs. $M = 3.42$, $SD = 1.07$; $t(382) = .97$, $p = .332$, Cohen's $d = .10$). For non-investors, there was a significant improvement from plain language ($M = 3.05$, $SD = .87$ vs. $M = 3.64$, $SD = .98$; $t(114) = 3.45$, $p = .001$, Cohen's $d = .64$).

Effects of Terminology on Subjective Difficulty

Participants in the jargon group ($M = 5.48$, $SD = 2.24$) reported that fee information was less clear and harder to understand than those seeing plain language ($M = 4.47$, $SD = 2.15$; $t(498) = 5.14$; $p < .001$). This effect was also moderated by investor category, $F(3, 496) = 7.45$, $p = .007$, though the reduction in subjective difficulty was still significant for both investors and non-investors. Specifically, for investors, fee information was significantly less difficult to understand when presented in plain language ($M = 4.50$, $SD = 2.08$) relative to jargon ($M = 5.20$, $SD = 2.20$; $t(382) = 3.19$, $p = .002$, Cohen's $d = .33$). This effect was even larger for non-

investors, where plain language (M = 4.36, SD = 2.42) was seen as much less difficult to understand than jargon (M = 6.32, SD = 2.15; $t(114) = 4.61$, $p < .0001$, Cohen's d =.86).

Discussion

We use a variety of investment scenarios to show that plain language can improve choice quality, especially for non-investors who may be less familiar with existing mutual fund terminology (supporting H3). We note that there is one scenario (Scenario 3) in which participants exposed to existing jargon outperformed those who saw plain language. Such a finding suggests that additional testing may be needed to improve consumers' understanding of the central fee featured in this scenario ("redemption fee"/"short-term fee") and how it applies to frequent traders, as perhaps the proposed plain language phrase is still insufficiently precise or clear. Even so, aggregate performance across the five scenarios tested showed a significant net benefit of plain language, demonstrating the potential cost of jargon during the purchase and post-purchase phases of the consumer journey. This study also confirms that participants perceive jargon as more difficult to process.

Study 3

A question remaining from Studies 1 and 2 is whether jargon affects the willingness to invest in mutual funds in the future (H4). Effects of disclosure terminology on investment intentions would be noteworthy, as such findings would point to jargon as an important barrier to market participation, providing an additional explanation for the "stock market participation puzzle" (Campbell, 2006; Choi & Robertson, 2020; Guiso et al., 2008; Haliassos & Bertaut, 1995). We also seek to replicate the effects of jargon on comprehension (H1) and the subjective experience of interacting with mutual fund fee information (H2) identified in Studies 1 and 2.

Method

Sample

We recruited 499 participants from Prolific who were paid $1.20 to participate in the 6-minute study. After omitting those with incomplete data across all dependent measures, we had a sample of 493.[4] We recruited the sample from the United States using Prolific's "Representative Sampling" option, and included 48.1% men, 51.3% women, and .6% participants who preferred not to state one of these genders, with an average age of 45. The sample included 76.7% White participants, 12.8% Black participants, 6.1% Asian participants, and 4.4% reporting other racial and ethnic backgrounds. Regarding investment experience, 16.8% of participants reported having none, 42% reported having a little, 29.2% reported having some, and 12% reported having a lot.

Procedure and Comprehension Measure

This study was a two-cell, between-subjects design in which participants were randomly assigned to existing jargon (n = 245) or plain language (n = 248) terminology in the following investment scenario:

> "At her college graduation, Jennifer receives a $10,000 check from her grandparents. She is thinking about the future, and wonders how much money she will have in three years if she takes that money and opens a new investment account. Imagine that she picks a mutual fund and her investment grows to $13,000 after three years. Then, she withdraws

[4] Robustness tests conducted for any dependent variables with more than 493 observations, including non-respondents on other measures, generated the same patterns and significance levels for all primary analyses.

all of the money. Which fees could apply to this investment, over the course of the three years and including the sale of the investment?"

Participants then saw a list of five fees, which were described with existing jargon (e.g., "back-end load") or plain language terms (e.g., "fee for selling this fund"), and indicated whether each of the five fees could apply or not. We calculated how many of the five fees participants correctly identified as the measure of comprehension.

Relative Performance

To help ensure participants engaged with the task, and after asking about difficulty, we displayed performance feedback and asked them to rate how they believed their performance compared to the performance of other participants (1 = much lower than average to 5 = much higher than average).

Subjective Difficulty of Experience

Participants indicated the difficulty of the fee task (1 = very easy to 10 = very hard) as a measure of negative subjective experience.

Investment Intentions

Participants indicated their interest in mutual fund investments (1 = definitely NOT interested in investing in mutual funds in the future to 9 = definitely INTERESTED in investing in mutual funds in the future).

Additional Exploratory Items

We also included exploratory items in domains that we thought might be affected by jargon: self-reported understanding of mutual funds and knowledge about investments (5-point scales), likelihood of seeking out and accepting investment advice (5-point scales) as well as plans to receive professional advice in different financial areas (investments, debt counseling, tax

planning, etc.), and reactions to a fictional mutual fund (0–100 attractiveness rating and divestment of $15,000 in "inherited" shares; see C1 in Web Appendix C for the full survey instrument). None of these measures showed significant differences, all *p*s > .08, therefore we do not discuss them further.

Results

Effects of Terminology on Comprehension and Relative Performance

As hypothesized under H1, plain language terminology led to significantly higher comprehension when deciding whether fees applied in the investment scenario (M = 2.95, SD = 1.16), relative to existing jargon (M = 2.37, SD = 1.09, $t(491) = 5.72$, $p < .001$, Cohen's $d = .52$). Consistent with this effect, participants exposed to plain language terms rated themselves as doing better—relative to other participants (M = 2.88, SD = .86)—than participants exposed to existing jargon (M = 2.63, SD = .84, $t(491) = 3.22$, $p = .001$, Cohen's $d = .29$). That is, plain language improved both objective and subjective performance relative to existing jargon in identifying which fees might apply to an investment scenario.

Effects of Terminology on Subjective Difficulty of Task

Participants rated the investment scenario task as significantly less difficult when viewing plain language mutual fund fee terms (M = 6.46, SD = 2.22) versus existing jargon (M = 7.28, SD = 2.35, $t(491) = 3.95$, $p < .001$, Cohen's $d = .36$), consistent with H2.

Effects of Terminology on Investment Intentions

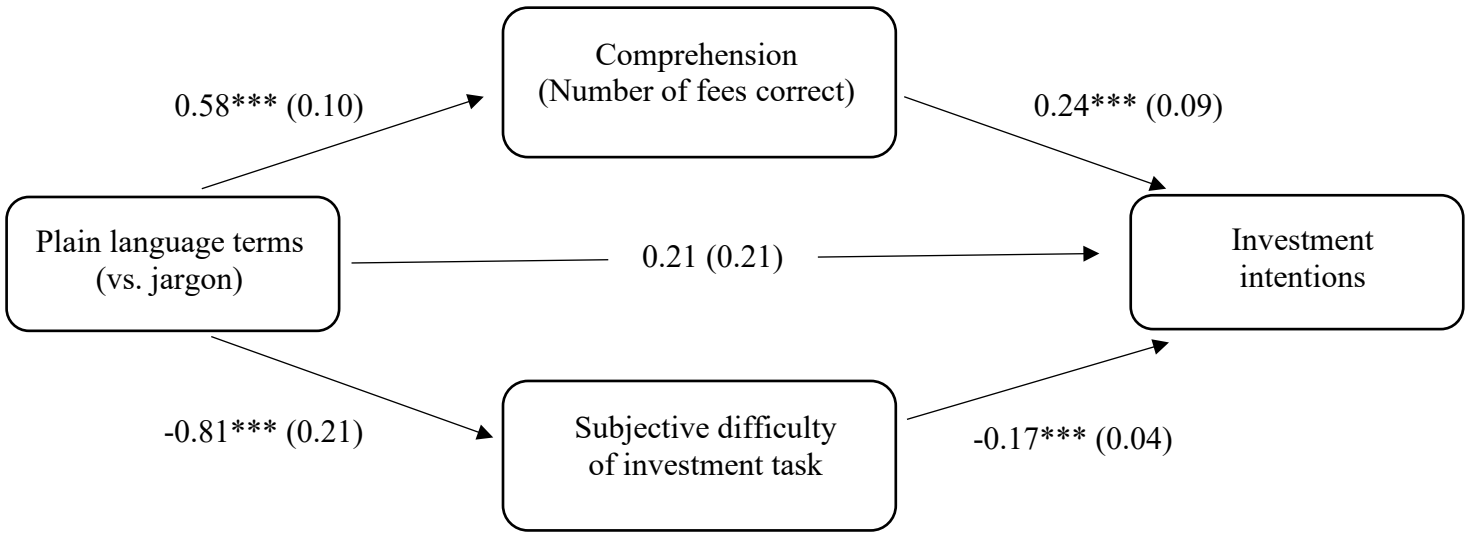
In line with H4, plain language led participants to indicate that they were significantly more interested in investing in mutual funds in the future (M = 5.95, SD = 2.19) compared to existing jargon (M = 5.47, SD = 2.37, $t(491) = 2.33$, $p = .020$, Cohen's $d = .21$). Perhaps not surprisingly, investment intentions were also positively correlated with investors' experience

(e.g., non-investors reported less interest in investing in the mutual funds in the future), r = 0.369, $p < .0001$. There was no interaction between plain language and investment experience in predicting investment intentions, $p = .65$, but in a linear regression model controlling for investment experience using indicator variables for each level of experience, the positive effect of plain language on intentions remained significant ($B = .41$, $SE = .19$, $p = .03$).

Mechanism Analysis

We examine how objective performance in the investment scenario task and subjective difficulty of that task serve to mediate the effect of fund fee terminology on investment intentions (see Figure 2). The unmediated direct effect between terminology and intentions is β = .48, SE = .21, $z = 2.33$, $p = .02$, reflecting a positive effect of plain language terminology on investment intentions. A bootstrapped mediation using both potential mediators (task performance and subjective difficulty), with 2,000 resamples, shows that there is a significant overall indirect effect, β = .27, SE = .08, $z = 3.29$, $p = .001$, 95% CI [.11, .43]. Drilling down, there is a significant indirect effect of terminology on future investment intentions through scenario task performance, β = .14, SE = .06, $z = 2.18$, $p = .03$, 95% CI [.01, .26] and a significant indirect effect through subjective difficulty of the scenario task, β = .14, SE = .06, $z = 2.44$, $p = .02$, 95% CI [.03, .24]. In this parallel mediation model, the remaining direct effect of terminology on future investment intentions is no longer statistically significant, β = .21, SE = .21, $z = .99$, $p = .32$, 95% CI [-.21, .62], indicating full mediation of our effect. These results suggest that both objective performance in applying fees and one's subjective experience of fee terminology drive the effect of jargon on investment intentions.

Figure 2: Mediation Analysis (Study 3).



Note. Coefficients are betas from regression models. The relationship between terminology and investment intentions (middle arrow) is the remaining (non-significant) direct effect, after accounting for the mediation of task performance and subjective difficulty.

Discussion

This study demonstrates that, consistent with our hypotheses, plain language benefits consumers in multiple ways. First, as in Study 2, simple changes to fund terminology can improve consumers' ability to apply the information provided by these terms, as participants were better able to identify which fees are relevant to an investment scenario. Second, plain language terminology increases willingness to invest in the future. When exposed to jargon, these investment intentions are reduced, suggesting that the presentation of more confusing terminology might deter people from mutual fund investments that could help them achieve their financial goals. Finally, plain language can reduce subjective difficulty and, through that, drive intentions to invest in the future.

General Discussion

Mutual funds are important for Americans' finances, as reflected in the growth of the $25 trillion mutual fund industry (Investment Company Institute, 2024). Given this importance, it is worthwhile to ensure that individual consumers can understand the information they receive about these products. In this research, we concentrated on the potential problem of jargon for consumer-facing information such as mutual fund fee disclosures, identifying the barrier that jargon poses to consumer understanding and engagement, and testing how to improve the language in mutual fund information.

In a Pretest, we first identified plain language alternatives for five common mutual fund fees, using a data-driven approach that allowed everyday investors and non-investors to express their preferences for mutual fund terminology. In Study 1, we then investigated whether comprehension of terms would improve under plain language versus existing jargon, finding improvements for all five mutual fund fees that we tested (H1). Furthermore, all three consumer subgroups we constructed (non-investors, retirement-only investors, and independent investors) had higher comprehension when seeing revised language. These results suggest that changes to mutual fund information documents along the lines suggested by this research would help all classes of possible investors, assuaging concerns that changes to terminology could harm existing investors.

In Study 2, we examined how jargon affects consumers' ability to choose more cost-effective mutual funds in a variety of investment scenarios, finding that plain language can improve choice quality at purchase and sale (H3). This study also found that consumers viewing

jargon thought the information was more difficult to understand (H2). Thus, the negative impacts of jargon may affect multiple investor interactions with mutual funds.

In Study 3, we conceptually replicated the benefits of plain language on comprehension (H1), demonstrated that these terms reduced the subjective difficulty of interacting with mutual fund fee information (H2), and increased intentions to invest in mutual funds in the future (H4). Furthermore, the increased willingness to invest in the future was mediated by both the objective performance and the subjective difficulty of the investment task. Thus, we identify multiple ways that existing jargon might hurt potential investors, including the possibility that it might reduce (or fail to promote) market participation. Notably, by making the consideration of fund information feel more difficult, consumers appear inclined to avoid future opportunities to engage with mutual fund investments. These studies are summarized in Table 4.

Table 4: Overview of Studies, Participants, Hypotheses, Major Findings, and Policy Implications.

	Purpose and Design	**Participants**	**Hypotheses**	**Major Findings**	**Policy Implications**
Pretest to Study 1	Identify plain language alternatives for existing fee terminology. [Best-worst scaling]	1606 Dynata participants	N/A	Alternatives identified for 5 of 6 tested terms.	Existing language may be considered "jargon." Best-worst scaling can help find plain language alternatives.
Study 1	Test whether plain language (vs. jargon) increases ability to identify definitions of 5 fees. [Within-subjects]	1575 Dynata participants	H1 supported	Plain language increases comprehension across all 5 terms tested.	Plain language can improve consumer comprehension of mutual fund fees.
Study 2	Test whether plain language (vs. jargon) improves mutual fund choice quality and subjective difficulty in 5 investment scenarios. [2-cell between subjects]	500 Prolific participants	H2 supported H3 supported, but effect varies by scenario	Plain language increases overall comprehension, with larger benefits for non-investors. It also reduces subjective difficulty of using fee terminology.	Benefits of plain language may be stronger for non-investors, helping to close the gap between non-investors and investors.
Study 3	Test whether plain language (vs. jargon) improves understanding of fees, subjective difficulty, and investment intentions. [2-cell between subjects]	493 Prolific participants	H1, H2, H4 supported	Plain language increases comprehension, reduces subjective difficulty, and increases intentions to invest in mutual funds.	Jargon may act as a behavioral friction, reducing investment intentions.

Note. In brief, our hypotheses are that plain language will increase consumer comprehension (relative to existing terminology; H1), reduce the subjective difficulty of using mutual fund fee information (H2), increase consumers' ability to choose less costly mutual funds (H3), and increase the likelihood of considering a mutual fund investment (H4).

Implications for Consumer Policy

Although the implications of this research for mutual funds may seem obvious—implement plain language—we believe the lessons drawn from this work can be broadly applied. Methodologically, testing regulatory interventions with consumers is an important practice that should be more common (see also Kozup, et al. 2012). In our Pre-Test and Study 1, we demonstrate a feasible approach for future researchers and policymakers to consider when designing language for disclosures: a combination of best-worst scaling and follow-up comprehension testing. Such an approach could be relevant for a variety of consumer-facing disclosures where jargon might otherwise appear.

Beyond this methodological point, there are also broader implications of our research, summarized in Table 4. In the following paragraphs, we describe in greater depth two of these implications, focusing on why technical concepts featured in consumer disclosures should be more clearly communicated and how improved language in these disclosures affects different types of consumers.

Implication #1: Jargon May Limit Participation

The result that our plain language terminology increased intentions to invest in mutual funds indicates one dramatic problem with existing terminology: rather than making people feel more informed about investments, current disclosures may scare them away from investing entirely. If not addressed, such "non-participation" in financial markets could have significant consequences on consumers' welfare, as consumers would miss a reliable method for long-run wealth accumulation. By contrast, plain language terminology both improved performance and dramatically reduced the subjective difficulty of our Study 2 and Study 3 investment tasks. This

improvement suggests not only that consumers find the existing terms used for mutual fund fees to be overly complex, but also that changes to language can help consumers feel more confident in their ability to make informed investment decisions. Although jargon is certainly not the only barrier to participating in financial markets, as consumers may also face challenges organizing their finances or finding an investment adviser, the present work suggests increased consumer participation in mutual fund markets in response to less jargon-filled information.

Participation is also an issue outside of the investment domain. For instance, consumers who anticipate frustration with complex product information may be less likely to search for, and purchase, certain consumer goods (Kidwell, Hardesty, & Childers, 2008). Patients who find medical terminology intimidating or unclear may be unable to address underlying health problems, which could cause considerable stress if issues are unresolved (Wiener et al., 2013). Finally, emerging products and services may be especially likely to feature unfamiliar, complicated language or difficult-to-understand underlying concepts, making well-tested disclosures important to alleviate concerns related to non-participation or naïve reliance on third parties.

On a theoretical level, there is considerable debate about the role of subjective knowledge in willingness to participate in searching for financial information (as reviewed in Chin & Williams, 2019). Our results are consistent with research supporting "enrichment theory," which posits that having higher confidence (perceiving situations as less difficult) allows consumers to perceive themselves as skilled processors of information (Johnson & Russo, 1984; Ward & Lynch, 2019), leading to higher participation. Future research may test additional circumstances under which cultivating confidence can increase participation, as well as the boundary conditions

of these effects. One possibility is that confidence stems from being more experienced or knowledgeable, a dimension of consumer heterogeneity that we discuss next.

Implication #2: Policymakers Should Consider Effects of Changes on Heterogeneous Consumers

Consumers vary in multiple ways, including in circumstances, preferences, and knowledge. Consumers in heterogeneous circumstances—with differences in investment horizon, trading frequency, and more—may need to choose different mutual funds (with associated fees) that are suitable for them. Such ability to apply product-specific attributes to one's personal situation is necessary across a variety of consumer contexts; for example, consumers with different nutritional goals may also hold different evaluations regarding how "antioxidants" or "fatty acids" fit their diets.

Heterogeneity is also a potential concern when dealing with consumer knowledge, as unfamiliar plain language terminology could interfere with existing knowledge. Indeed, Ben-Shahar and Schneider (2011) argue that securities disclosures are primarily intended for sophisticated participants; similarly, people who have learned about specialized medical tests or nutrients may have an easier time processing existing language relative to new terminology, even if it is designed to be plain language. These transition costs must be weighed against the potential benefits of introducing new language. Complicated language could pose a barrier for the approximately two-thirds of Americans who do not have a college degree, and for the 43 million American adults who have trouble with simple literacy tasks like comparing and contrasting information (Mamedova & Pawlowski, 2019). Research suggests that some fees may discriminate against unsophisticated investors who lack financial literacy (see Anagol & Kim,

2012; Duarte & Hastings, 2012; Grinblatt et al., 2016), meaning that adequate communication of these fees is especially important for certain subgroups of the population.

In our research, we explored issues related to consumer heterogeneity by recruiting participants with a variety of sophistication levels and experience with investments—with explicit sampling procedures for investor types in our Pre-Test and Study 1, and by employing Prolific's "representative sampling" procedure in Studies 2 and 3. Fortunately, we found no evidence that more experienced participants suffered from revised plain language, instead finding that all participants generally benefited. In some cases, our results suggest that introducing plain language could close the gap between respondents with different levels of experience. For instance, in Study 2, existing investors' aggregate choice quality did not degrade with plain language, whereas non-investors benefited from the switch. This pattern suggests that disclosure changes might be able to moderate the benefits otherwise generated by investment experience.

Additionally, although we focus on individual consumers' ability to use jargon and plain language, future research could test whether other groups of individuals—including financial advisors, brokers, and fund managers—would also benefit from changes in language. Despite the importance of such advisors in helping individuals make financial decisions, research on these professionals is limited (for an exception, see Fisch, Wilkinson-Ryan, & Firth, 2016). With such limited research, it is unknown whether professionals also misunderstand current terminology, and whether plain language would make it easier for them to communicate with their clients. A recent report by the U.S. Government Accountability Office (GAO; 2024), using an undercover phone call method, suggests that financial professionals vary in their ability to explain technical language, including "conflict of interest," "fiduciary," and certain compensation models.

Although we focus on individual consumers, we recognize that mutual fund fee disclosures are frequently read by financial professionals, and understanding how these professionals react to a shift in terminology is another important policy consideration.

Limitations and Extensions

Research on financial disclosures is often criticized for using lab-based methods, leaving questions about whether consumers will pay attention to disclosures they naturally encounter (cf., Chin & Beckett, 2021). As with prior disclosure research that occurs in the lab, however, we believe it is imperative to test proposed changes carefully before pursuing field studies. Future research could investigate the impact that plain language terminology might have on actual investment decisions. Our Study 2 results suggest that plain language affects choices between funds, and Study 3 suggests that plain language promotes greater intentions to invest. These are promising steps, but future research should seek to capture other ways that investors may react to fund fee terminology.

Lab-based disclosure research also neglects to examine how financial institutions will respond to disclosure changes (Loewenstein, Sunstein, & Golman, 2014). Hastings and Duarte (2012) and Anagol and Kim (2012) provide important evidence on how firms in Mexico and India, respectively, respond to government policy innovations related to investment fee regulations. Both papers show that firms responded to policy changes by altering pricing to make it more difficult for consumers to avoid fees. In light of this evidence, it is feasible that the gains we identify, if implemented, could be mitigated by firm responses. For example, if consumers become more adept at understanding and responding to certain fund fees and expenses, then firms may adapt by shifting the majority of expenses toward those fees least understood or deemed least important by investors. The present work suggests that many fees are associated

with terms that obscure their meaning, potentially driving uninformed investment decisions. Future research can investigate how jargon interacts with salience and determine whether policies can be crafted in a dynamic way—for instance, by requiring mutual fund companies to highlight the fees under which they are making the highest revenues—to increase the effectiveness of fee disclosures for individual consumers (see additional discussion in VanEpps & Chin, 2024).

A second limitation of our studies is that we were often insufficiently powered to examine heterogeneity along dimensions other than investment experience. In Study 1, for instance, our sample was almost entirely composed of non-Hispanic White participants, and although Studies 2 and 3 were more representative of other racial and ethnic backgrounds, future research may need more explicit recruitment procedures to directly compare how terms are used by individuals of heterogeneous groups. More broadly, to understand when heterogeneity may be an issue, we recommend that future research continue to explore differences between consumers—with potential extensions into their access to others' expertise (e.g., financial advisors), their past purchasing behavior, geographic differences, and demographic factors like age, education, or native language. Although we find that both sophisticated and novice investors benefited from alternative terminology, diverse samples are essential to test exactly who benefits from changes in policy, and to what extent (see Bryan, Tipton, & Yeager, 2021, for further discussion).

Conclusion

Our research demonstrates that simple changes to mutual fund fee terminology can increase comprehension, reduce the subjective difficulty of engaging with investments, improve

investment choice quality, and promote intentions to invest. These findings are relevant for federal policy: in an order from OMB, executive agencies and regulators were encouraged to use plain language, with explicit mention that "Summary disclosure should also avoid jargon, technical language, or extraneous information" (Sunstein, 2010, p. 4). Additionally, plain English guidelines encourage disclosures that avoid jargon and use everyday words, among other guidelines. Nevertheless, perhaps recognizing continuing difficulties with disclosure language, a recent rulemaking proposal by the U.S. Securities and Exchange Commission (SEC) discusses potential changes in terminology, and requests feedback on alternative required language.[5]

To the extent that disclosures should be clear and that fees should be understandable, the present research serves as a cautionary note about investors' ability to comprehend existing mutual fund investments. Our investigation documents linguistic barriers that consumers face when interacting with investment disclosures. If consumers are challenged by these barriers, then it is reasonable to believe their ability to truly access and interpret the information contained in the disclosures will be attenuated, or at least more costly. As such, policymakers may question whether information disclosures fail to achieve their intended purpose across a variety of consumer product domains, such as food safety, internet privacy, and mortgage agreements, because the language used within these disclosures may be too full of jargon for customers to understand.

We focus on jargon within the context of mutual fund fee disclosures despite the fact that most discussions of financial product disclosures are found in finance and managerial journals

[5] See Tailored Shareholder Reports, Treatment of Annual Prospectus Updates for Existing Investors, and Improved Fee and Risk Disclosure for Mutual Funds and Exchange-Traded Funds; Fee Information in Investment Company Advertisements, Investment Company Act Release No. 33-10814 (November 5, 2020) [85 FR 70716 (November 5, 2020)] at section F.

rather than more consumer-focused outlets. This suggests a need for reconsideration of financial disclosures to better connect scientific evidence with the policymakers who influence what terms are used and how consumer-relevant information is disclosed. Research about consumer and firm responses to disclosures in domains like food safety (Jin & Leslie 2003; Wong et al. 2015), nutrition (Burton, Cook, Howlett, & Newman 2015; Roberto et al. 2021), tobacco (Hammond 2011), and understanding advertisements on social media platforms (Wojdynski & Evans 2016) may have much to offer to financial regulators. We hope that our work helps to bridge this gap between consumer research and regulatory practice in the investment context.

References

Alter, Adam L., and Daniel M. Oppenheimer (2006), "Predicting Short-Term Stock Fluctuations by Using Processing Fluency." *Proceedings of the National Academy of Sciences*, 103 (24), 9369-9372.

Anagol, Santosh, and Hugh Hoikwang Kim (2012), "The Impact of Shrouded Fees: Evidence from a Natural Experiment in the Indian Mutual Funds Market," *American Economic Review*, 102 (1), 576-93.

Auger, Pat, Timothy M. Devinney, and Jordan J. Louviere (2007), "Using Best-Worst Scaling Methodology to Investigate Consumer Ethical Beliefs across Countries," *Journal of Business Ethics*, 70 (3), 299-326.

Ben-Shahar, Omri, and Carl E. Schneider (2011), "The Failure of Mandated Disclosure," *University of Pennsylvania Law Review*, 159 (3), 647-749.

Berry, Christopher, Scot Burton, Elizabeth Howlett, and Christopher L. Newman (2019), "Understanding the Calorie Labeling Paradox in Chain Restaurants: Why Menu Calorie Labeling Alone may not Affect Average Calories Ordered," *Journal of Public Policy & Marketing*, 38 (2), 192-213.

Birch, Susan A., Patricia E. Brosseau-Liard, Taeh Haddock, and Siba E. Ghrear (2017), "A 'Curse of Knowledge' in the Absence of Knowledge? People Misattribute Fluency When Judging How Common Knowledge is Among Their Peers," *Cognition,* 166, 447-458.

Bleich, Sara N., Christina D. Economos, Marie L. Spiker, Kelsey A. Vercammen, Eric M. VanEpps, Jason P. Block, et al. (2017), "A Systematic Review of Calorie Labeling and Modified Calorie Labeling Interventions: Impact on Consumer and Restaurant Behavior," *Obesity*, 25 (12), 2018-2044.

Breck, Andrew, Tod Mijanovich, Beth C. Weitzman, and Brian Elbel (2017), "The Current Limits of Calorie Labeling and the Potential for Population Health Impact," *Journal of Public Policy & Marketing*, 36 (2), 227-235.

Brough, Aaron R., David A. Noton, Shannon L. Sciarappa, and Leslie K. John (2022), "The Bulletproof Glass Effect: Unintended Consequences of Privacy Notices," *Journal of Marketing Research*, 00222437211069093.

Brown, Zachariah C., Eric M. Anicich, and Adam D. Galinsky (2020), "Compensatory Conspicuous Communication: Low Status Increases Jargon Use," *Organizational Behavior and Human Decision Processes*, 161, 274-290.

Bryan, Christopher J., Elizabeth Tipton, and David S. Yeager (2021), "Behavioural Science is Unlikely to Change the World without a Heterogeneity Revolution," *Nature: Human Behavior,* 5, 980-989.

Burton, Scot, Laurel Aynne Cook, Elizabeth Howlett, and Christopher L. Newman (2015), "Broken Halos and Shattered Horns: Overcoming the Biasing Effects of Prior Expectations through Objective Information Disclosure," *Journal of the Academy of Marketing Science*, 43 (2), 240-256.

Bushee, Brian J., Ian D. Gow, and Daniel J. Taylor (2018), "Linguistic Complexity in Firm Disclosures: Obfuscation or Information?," *Journal of Accounting Research*, 56 (1), 85-121.

Camerer, Colin, George Loewenstein, and Martin Weber (1989), "The Curse of Knowledge in Economic Settings: An Experimental Analysis," *Journal of Political Economy*, 97 (5), 1232-1254.

Campbell, John Y. (2006), "Household Finance," *The Journal of Finance*, 61 (4), 1553-1604.

Chin, Alycia, and Dustin H. Beckett (2021), "Don't Watch Me Read: How Mere Presence and Mandatory Waiting Periods Affect Consumer Attention to Disclosures," *Behavioural Public Policy*, 5 (2), 202-221.

Chin, Alycia, and Wändi Bruine de Bruin (2019), "Helping Consumers to Evaluate Annual Percentage Rates (APR) on Credit Cards," *Journal of Experimental Psychology: Applied*, 25 (1), 77-87.

Chin, Alycia, Eric M. VanEpps, Brian Scholl, and Steven Nash (2025), "How Should I Know? Lack of Confidence Biases Stock Market Expectations Toward Zero," *Journal of Economic Behavior & Organization*, 229, 106826.

Chin, Alycia, and Alanna K. Williams (2019), "Take-Up of Financial Education: Demographic Characteristics and Prior Knowledge," *Journal of Public Policy & Marketing*, 39 (3), 319-333.

Chin, Alycia, David Zimmerman, Heidi Johnson, and Suzanne B. Shu (2022), "Decisions about Overdraft Coverage: Disclosure Design and Personal Finances," *Journal of Experimental Psychology: Applied*, 28 (4), 746-774.

Choi, James J., and Adriana Z. Robertson (2020), "What Matters to Individual Investors? Evidence from the Horse's Mouth," *The Journal of Finance*, 75 (4), 1965-2020.

Duarte, Fabian, and Justine S. Hastings (2013), "Fettered Consumers and Sophisticated Firms: Evidence from Mexico's Privatized Social Security Market," *NBER Working Paper no. 18582* (Feb), https://www.nber.org/papers/w18582.

Durkin, Thomas A., and Gregory Elliehausen (2011). *Truth in lending: Theory, history, and a way forward.* New York, NY: Oxford University Press.

Fagerlin, Angela, Brian J. Zikmund-Fisher, Peter A. Ubel, Aleksandra Jankovic, Holly A. Derry, and Dylan M. Smith (2007), "Measuring Numeracy Without a Math Test: Development of the Subjective Numeracy Scale," *Medical Decision Making*, 27 (5), 672-680.

Finn, Adam, and Jordan J. Louviere (1992), "Determining the Appropriate Response to Evidence of Public Concerns: The Case of Food Safety," *Journal of Public Policy & Marketing*, 11 (2), 12-25.

Fisch, Jill E., Tess Wilkinson-Ryan, and Kristin Firth (2016), "The Knowledge Gap in Workplace Retirement Investing and the Role of Professional Advisors," *Duke Law Journal,* 66, 633-672.

Flynn, Terry N., Jordan J. Louviere, Tim J. Peters, and Joanna Coast (2007), "Best–Worst Scaling: What it Can Do for Health Care Research and How to do It," *Journal of Health Economics*, 26 (1), 171-189.

Garrison, Loretta, Manoj Hastak, Jeanne M. Hogarth, Susan Kleimann, and Alan S. Levy (2012), "Designing Evidence-based Disclosures: A Case Study of Financial Privacy Notices," *Journal of Consumer Affairs*, 46 (2), 204-234.

Government Accountability Office (2024), "Retirement Investments: Agencies Can Better Oversee Conflicts of Interest between Fiduciaries and Investors," available at: https://www.gao.gov/assets/gao-24-104632.pdf

Grinblatt, Mark, Seppo Ikäheimo, Matti Keloharju, and Samuli Knüpfer (2016), "IQ and Mutual Fund Choice," *Management Science*, 62 (4), 924-944.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales (2008), "Trusting the Stock Market," *The Journal of Finance*, 63 (6), 2557-2600.

Haliassos, Michael, and Carol C. Bertaut (1995), "Why Do so Few Hold Stocks?," *The Economic Journal*, 105 (432), 1110–29.

Hammond, David. "Health Warning Messages on Tobacco Products: A Review," *Tobacco Control*, 20 (5), 327-337.

Investment Company Institute (2024), *Investment Company Fact Book: A Review of Trends and Activities in the Investment Company Industry*, https://www.icifactbook.org/pdf/2022_factbook.pdf

Jin, Ginger Zhe, and Phillip Leslie (2003), "The Effect of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards," *The Quarterly Journal of Economics*, 118 (2), 409-451.

Johnson, Eric J., and J. Edward Russo (1984), "Product Familiarity and Learning New Information." *Journal of Consumer Research*, 11 (1), 542-550.

Kidwell, Blair, David M. Hardesty, and Terry L. Childers (2008), "Emotional Calibration Effects on Consumer Choice," *Journal of Consumer Research*, 35 (4), 611-621.

Kozup, John, Charles R. Taylor, Michael L. Capella, and Jeremy Kees (2012), "Sound Disclosures: Assessing When a Disclosure is Worthwhile," *Journal of Public Policy & Marketing*, 31 (2), 313-322.

Kramer, Marc M. (2016), "Financial Literacy, Confidence and Financial Advice Seeking," *Journal of Economic Behavior & Organization*, 131, 198-217.

Lacko, James M., and Janis K. Pappalardo (2010), "The Failure and Promise of Mandated Consumer Mortgage Disclosures: Evidence from Qualitative Interviews and a Controlled Experiment with Mortgage Borrowers," *The American Economic Review*, 100, 516-521.

Lin, Qihau "Catherine" and Jinkook Lee (2004), "Consumer Information Search When Making Investment Decisions," *Financial Services Review*, 13 (4), 319–332.

Loewenstein, George, Cass R. Sunstein, and Russell Golman (2014), "Disclosure: Psychology Changes Everything," *Annual Review of Economics*, 6, 391-419.

Loughran, Tim, and Bill McDonald (2014), "Measuring Readability in Financial Disclosures," *The Journal of Finance*, LXIX, 1643-1671.

Louviere, Jordan J., Terry N. Flynn, and Anthony Alfred John Marley (2015), *Best-Worst Scaling: Theory, Methods and Applications*. Cambridge: Cambridge University Press.

Lusardi, Annamaria, and Olivia S. Mitchell (2011), "Financial Literacy around the World: An Overview," *Journal of Pension Economics and Finance*, 10 (4), 497-508.

Mankiw, N. Gregory, and Stephen P. Zeldes (1991), "The Consumption of Stockholders and Nonstockholders," *Journal of Financial Economics,* 29, 97-112.

Mamedova, Saida, and Emily Pawlowski (2019), *Adult Literacy in the United States*, U.S. Department of Education NCES 2019-179, https://nces.ed.gov/datapoints/2019179.asp.

Martin, Kirsten (2015), "Privacy Notices as Tabula Rasa: An Empirical Investigation into How Complying with a Privacy Notice is related to Meeting Privacy Expectations Online," *Journal of Public Policy & Marketing*, 34 (2), 210-227.

McCormack, Lauren, Carla Bann, Jennifer Uhrig, Nancy Berkman, and Rima Rudd (2009), "Health Insurance Literacy of Older Adults," *Journal of Consumer Affairs*, 43 (2), 223-248.

McDonald, Aleecia M., Robert W. Reeder, Patrick Gage Kelley, and Lorrie Faith Cranor (2009), "A Comparative Study of Online Privacy Policies and Formats," In *International*

Symposium on Privacy Enhancing Technologies Symposium, Ian Goldberg and Mikhail J. Atallah, eds. Berlin, Heidelberg: Springer, 37-55.

Merkoulova, Yulia, and Chris Veld (2022), "Does it Pay to Invest? The Personal Equity Risk Premium and Stock Market Participation," *Journal of Banking and Finance,* 136, 106220.

Milne, George R., Mary J. Culnan, and Henry Greene (2006), "A Longitudinal Assessment of Online Privacy Notice Readability," *Journal of Public Policy & Marketing*, 25 (2), 238-249.

Norberg, Patricia A., Daniel R. Horne, and David A. Horne (2007), "The Privacy Paradox: Personal Information Disclosure Intentions versus Behaviors," *Journal of Consumer Affairs*, 41 (1), 100-126.

Office of Investor Education and Assistance (OIEA), Securities and Exchange Commission (1998). *A Plain English Handbook: How to Create Clear SEC Disclosure Documents*, https://www.sec.gov/pdf/handbook.pdf.

Oppenheimer, Daniel M. (2006), "Consequences of Erudite Vernacular Utilized Irrespective of Necessity: Problems with Using Long Words Needlessly," *Applied Cognitive Psychology*, 20 (2), 139-156.

Perry, Vanessa G., and Pamela M. Blumenthal (2012). "Understanding the Fine Print: The Need for Effective Testing of Mandatory Mortgage Loan Disclosures," *Journal of Public Policy & Marketing*, 31 (2), 305-312.

Roberto, Christina A., Shu Wen Ng, Montserrat Ganderats-Fuentes, David Hammond, Simon Barquera, Alejandra Jauregui, et al. (2021), "The Influence of Front-of-package Nutrition Labeling on Consumer Behavior and Product Reformulation," *Annual Review of Nutrition*, 41, 529-550.

Roussanov, Nikolai, Hongxun Ruan, and Yanhao Wei (2021). "Marketing Mutual Funds," *The Review of Financial Studies*, 34 (6), 3045-3094.

Scholl, Brian, and Angela Fontes (2019), "Adding Depth to Financial Literacy: What Does the Public Know About Mutual Funds? Towards a New Index of Investor Knowledge," Office of the Investor Advocate Working Paper 2019-01.

Scholl, Brian, and Angela Fontes (2022), "Mutual Fund Knowledge Assessment for Policy and Decision Problems," *Financial Services Review*, 30 (1), 31-56.

Soll, Jack B., Ralph L. Keeney, and Richard P. Larrick (2013), "Consumer Misunderstanding of Credit Card Use, Payments, and Debt: Causes and Solutions," *Journal of Public Policy & Marketing*, 32 (1), 66-81.

Stewart, David W., and Ingrid M. Martin (1994), "Intended and Unintended Consequences of

Warning Messages: A Review and Synthesis of Empirical Research," *Journal of Public Policy & Marketing*, 13 (1), 1-19.

Sunstein, Cass R. (2010), *Disclosure and Simplification as Regulatory Tools*, https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/inforeg/disclosure_principles.pdf.

Tucker, Anne M., and Yusen Xia (2023), "Promise & Peril of Plain English: Mutual Fund Disclosure Readability," *Harvard Business Law Review,* 13, 59-113.

U.S. Department of Labor, Employee Benefits Security Administration (2019), *A Look at 401(k) Plan Fees*, https://www.dol.gov/sites/dolgov/files/ebsa/about-ebsa/our-activities/resource-center/publications/a-look-at-401k-plan-fees.pdf.

U.S. Securities and Exchange Commission (2009), *Enhanced Disclosure and New Prospectus Delivery Option for Registered Open-End Management Investment Companies 17 CFR Parts 230, 232, 239, and 274*, https://sec.gov/rules/final/2009/33-8998fr.pdf.

Van Boom, Willem H., Pieter Desmet, and Mark Van Dam (2016). "'If It's Easy to Read, It's Easy to Claim'—The Effect of the Readability of Insurance Contracts on Consumer Expectations and Conflict Behaviour," *Journal of Consumer Policy*, 39 (2), 187-197.

VanEpps, Eric, and Alycia Chin (2024). "Getting Information to Consumers: How to Inform Their Choices Effectively," *Policy Insights from the Behavioral and Brain Sciences*, 11 (2), 172-180. https://doi.org/10.1177/23727322241268915

Ward, Adrian F., and John G. Lynch Jr. (2019), "On a Need-to-Know Basis: How the Distribution of Responsibility between Couples Shapes Financial Literacy and Financial Outcomes," *Journal of Consumer Research*, 45 (5), 1013-1036.

Warren, Nooshin L., Matthew Farmer, Tianyu Gu, and Caleb Warren (2021), "Marketing Ideas: How to Write Research Articles that Readers Understand and Cite," *Journal of Marketing*, 85 (5), 42-57.

Wiener, Renda S., Michael K. Gould, Steven Woloshin, Lisa M. Schwartz, and Jack A. Clark (2013), "What Do You Mean, a Spot?," *Chest*, 143 (3), 672-677.

Wojdynski, Bartosz W., and Nathaniel J. Evans (2016), "Going Native: Effects of Disclosure Position and Language on the Recognition and Evaluation of Online Native Advertising," *Journal of Advertising*, 45 (2), 157-168.

Wong, Melissa R., Wendy McKelvey, Kazuhiko Ito, Corinne Schiff, J. Bryan Jacobson, and Daniel Kass (2015), "Impact of a Letter-grade Program on Restaurant Sanitary Conditions and Diner Behavior in New York City," *American Journal of Public Health*, 105 (3), e81-e87.