Selling the Outlier

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Advertisements for products and services ranging from weight-loss programs to mutual funds regularly feature the results of people who used the advertised items. However, these advertisements often present the results only of people who had atypically positive experiences. These advertisements harm consumers and investors, who greatly underestimate the advertised results' atypicality. Because advertisements of past results are used for a wide range of products and services, they are regulated by a number of federal agencies. These agencies have taken different regulatory approaches to advertisements of atypical results, primarily requiring them to include additional disclosures. This Article presents evidence that these and other disclosures cannot prevent advertisements of atypical results from deceiving consumers and investors. Indeed, the very purpose of these advertisements is to mislead people regarding their own likely results. Thus, in light of the harm these advertisements cause and the minimal useful information they provide, the prohibition of advertisements of atypical results should be seriously considered.

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I. INTRODUCTION

What do advertisements for weight-loss products and mutual funds have in common? They both frequently feature atypically positive results. For example, an advertisement for a weight-loss product will feature a testimonial from someone who lost 30 pounds even though the large majority of product users lose little, if any, weight. Similarly, a mutual fund advertisement will feature the returns of one of a mutual fund company's funds that has performed very well recently, but will not mention the company's many other, lesser-performing funds.

These advertisements are deceptive because they mislead consumers and investors into greatly overestimating the advertised product's typical results. This causes people to have overly optimistic beliefs regarding their own likely results from the product. These overoptimistic beliefs lead people to make unwise purchases and investments, causing them disappointment, financial loss, and sometimes even physical harm.

Because advertisements of past results are used for a wide range of products and services, they are regulated by a number of federal agencies. These agencies take a variety of approaches to regulating the advertisement of atypical results. Most of these approaches require advertisements of atypical results to contain additional disclosures.

This Article presents evidence that these and other possible disclosures cannot prevent these advertisements from being deceptive. Indeed, the very purpose of advertisements of atypical results is to mislead people regarding their own likely results. Thus, a stronger approach is necessary. In particular, in light of the harm that these advertisements cause and the minimal useful information they provide, their prohibition should be seriously considered.

Advertisements featuring the results of people who have used the advertised product are ubiquitous.[1] They are used for products ranging from prescription pharmaceuticals to mutual funds.[2] These advertisements, of course, feature only a small sample of the results that could be presented. For example, advertisements for weight-loss products often contain testimonials from some consumers describing their experiences using the advertised product.[3] The advertisements do not contain testimonials from all people who have used the product. Similarly, advertisements by mutual fund companies regularly present the past returns of some—but not all—of the companies' mutual funds.[4]

A selection bias exists when the sample presented in the advertisement is atypical of the population from which the sample is drawn. For example, an advertisement for a

1. State Attorneys General, Comment Letter on the FTC's Review of its Guides Concerning the Use of Endorsements and Testimonials in Advertising, 16 C.F.R. Part 255 (June 18, 2007), http://s3.documentcloud.org/documents/468971/state-ags-letter-to-federal-trade-commission.txt [hereinafter Attorneys General Letter] ("Endorsements are commonly used in connection with print advertisements and television infomercials. In both settings, there is a significant potential for consumers to assume that the person who appears on the page or screen and claims a positive result from the advertised product or service is in fact describing what he or she achieved, and what the majority of the public can typically expect to achieve.").

2. *See* American Association of Advertising Agencies and American Advertising Federation, Comments Submitted for the FTC Endorsement Guides Review 9 (Mar. 2, 2009) (on file with author) [hereinafter Advertising Association's Comments] ("[E]ndorsements and testimonials are used throughout the entire advertising industry by almost each and every advertiser, regardless of the product category.").

3. *See infra* note 5 and accompanying text (discussing results of FTC survey about the use of testimonials in weight-loss product advertisements).

4. *See infra* notes 8–9 and accompanying text (discussing selection biases in fund advertising).

weight-loss product contains a selection bias if it contains testimonials only from people who have lost substantial weight using the product even though most product users lose very little weight. Similarly, a mutual fund advertisement contains a selection bias if it presents only the returns of the fund company's best-performing mutual funds and omits the returns of the company's lesser-performing funds.

Advertisements featuring atypically positive results are deceptive advertisements. They mislead consumers and investors because people tend to neglect selection biases in advertisements. In other words, people generally act as if these advertisements do not contain selection biases, or at least insufficiently discount the advertised results for the selection biases. As a result, the advertisement's viewers overestimate the product's typical results. This leads people to have overly optimistic beliefs regarding what results they themselves can expect. As a result, they make unwise purchases and investments, causing disappointment, financial loss, and sometimes even physical harm.

Unfortunately, advertisements of atypical results are common. For example, a Federal Trade Commission (FTC) survey of weight-loss product print, television, and radio advertisements found that 47% contained testimonials.[5] These testimonials usually were from people claiming atypically large weight loss from the products. Specifically, in 55% of those advertisements the endorser claimed to have lost at least 40 pounds, and in 15% the endorser claimed to have lost at least 80 pounds.[6]

In addition, mutual fund companies often advertise the past returns of some of their mutual funds. For example, funds' past returns were mentioned in 62% of equity fund advertisements appearing in *Money* magazine over a nine-year period, and in 59% of equity fund advertisements in *BusinessWeek* magazine over a ten-year period.[7] Of course, fund companies do not randomly choose which of their funds to advertise. Rather, they advertise their best performing funds,[8] which generally have had higher returns than similar funds and the stock market overall.[9]

In addition, there is a selection bias in the timing of mutual fund advertisements. In particular, fund companies are especially likely to advertise past returns when overall stock

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5. FED. TRADE COMM'N, 2004 WEIGHT-LOSS ADVERTISING SURVEY 7 (Apr. 2005), http://www.ftc.gov/reports/2004-weight-loss-advertising-survey-report-staff-federal-trade-commission. Another survey found that 22% of weight-loss advertisements in magazines and on television contain personal testimonials. In addition, 28% of weight-loss advertisements in magazines and 40% of televised weight-loss advertisements contained before/after photos of people or body parts. Rosemary J. Avery et al., *Raising Red Flags: The Change in Deceptive Advertising of Weight Loss Products After the Federal Trade Commission's 2003 Red Flag Initiative*, 32 J. PUB. POL'Y & MARKETING 129, 132–34 tbl.1–2 (2013). *See also* Edward Correia, *The Federal Trade Commission's Regulation of Weight-Loss Advertising Claims*, 59 FOOD & DRUG L.J. 585, 587 (2004) ("Advertisers frequently promote weight-loss products through . . . statements by individuals who have tried the product.").

6. FED. TRADE COMM'N, *supra* note 5, at 7.

7. Sendhil Mullainathan et al., *Coarse Thinking and Persuasion*, 123 Q. J. ECON. 577, 609 (2008); *see also* Bruce A. Huhmann & Nalinaksha Bhattacharyya, *Does Mutual Fund Advertising Provide Necessary Investment Information?*, 23 INT'L. J. BANK MARKETING 296, 300–03 (2005) (noting that 42% of mutual fund advertisements in *Barron's* and *Money* magazines over a two-year period mentioned a fund's high or increasing returns and an additional 26% explicitly mentioned a fund's risk-adjusted returns).

8. Jonathan J. Koehler & Molly Mercer, *Selection Neglect in Mutual Fund Advertisements*, 55 MGMT. SCI. 1107, 1110 (2009).

9. Prem C. Jain & Joanna Shuang Wu, *Truth in Mutual Fund Advertising: Evidence on Future Performance and Fund Flows*, 55 J. FIN. 937, 943–45 (2000).

market returns have recently been strong.[10] This timing allows fund companies to advertise particular funds' returns that are strong not only relative to those of other funds, but that are also high in absolute terms.

Because advertisements for many types of products and services can feature atypical results, these advertisements are regulated by different federal agencies. These agencies' regulatory approaches differ greatly. For example, some advertisements of atypical results are prohibited, while others are required merely to contain disclosures only indirectly warning of the advertised results' possible atypicality.[11]

In recent years, some of these agencies and Congress have been reconsidering how these advertisements should be regulated. For example, in 2009, the FTC revised its Guides Concerning the Use of Endorsements and Testimonials in Advertising to strengthen the disclosures required when an endorser claims having achieved atypical results from a product or service.[12] Also, as part of the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010, Congress required the Comptroller General—the head of the Government Accountability Office (GAO)—to study mutual fund advertising.[13] That study was required to identify "(1) existing and proposed regulatory requirements" regarding mutual fund advertising; "(2) current marketing practices for the sale of [mutual funds] *including the use of past performance data*; (3) the impact of such advertising on consumers; and (4) recommendations to improve investor protections in mutual fund advertising and additional information necessary to ensure that investors can make informed financial decisions" when choosing mutual funds.[14] In addition, in its report, the GAO noted that the Financial Industry Regulatory Authority (FINRA) is considering conducting its own study to "determine if disclosures can be used to encourage investors not to overly rely on past performance information," which is featured so often in mutual fund advertisements.[15] As noted above, mutual fund companies frequently advertise the past performance of only their highest-performing funds.[16]

This Article examines how different federal agencies regulate the advertising of atypical results. Most of these approaches require the advertisements to contain additional disclosures. This Article presents evidence that disclosure-based regulations are insufficient to prevent these advertisements from deceiving people. This is unsurprising because the very purpose of these advertisements is to mislead. In making these arguments, this Article is consistent with the recent work of prominent scholars that has criticized the widespread use of disclosures as a regulatory tool.[17] Instead, a stronger regulatory

10. *See* Mullainathan et al., *supra* note 7, at 608 (finding very high correlation between the recent performance of the stock market and the percentage of equity fund advertisements that present past returns); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-11-697, GAO HIGHLIGHTS: MUTUAL FUND ADVERTISING 11 (2011), http://www.gao.gov/new.items/d11697.pdf ("[A]gency officials and representatives of mutual fund companies with whom we spoke, as well as some researchers, said that more advertisements showing superior past returns for mutual funds appear after the market has performed well.").

11. *See infra* Part V (discussing how federal agencies regulate the advertising of atypical results).

12. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 74 Fed. Reg. 53,124 (Oct. 15, 2009) (to be codified at 16 C.F.R. pt. 255). These changes are discussed in Section VI.B.

13. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified as amended at 12 U.S.C. §§ 5201-5641).

14. *Id.* § 918, 1837 (emphasis added).

15. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 10, at 25.

16. Koehler & Mercer, *supra* note 8, at 1110 finding that companies advertise their best-performing funds).

17. *See generally* OMRI BEN-SHAHAR & CARL E. SCHNEIDER, MORE THAN YOU WANTED TO KNOW: THE

approach is necessary to deal with advertisements of atypical results. In light of the harm that these advertisements cause, and the minimal useful information that they provide consumers and investors, these advertisements' prohibition should be seriously considered.

This Article fills a vacuum in the academic literature by identifying and addressing an important regulatory challenge. It is the first Article to comprehensively examine how advertising of atypical results misleads consumers and investors and how different federal agencies have attempted to address this problem. It also argues that a stronger regulatory approach is necessary.

Part II of this Article presents empirical evidence that consumers and investors are deceived by advertisements of atypical results. This deceit occurs because people do not sufficiently account for selection biases in advertisements, i.e., they commit selection neglect. Part III explains how this deception harms consumers and investors. Part IV discusses the academic psychology literature that explains why people commit selection neglect. Part V describes how different federal agencies regulate advertisements of atypical results. In particular, it focuses on the Securities and Exchange Commission's (SEC) regulation of equity mutual fund advertisements, the FTC's regulation of testimonials in advertisements for products and services, and the Food and Drug and Administration's (FDA) regulation of testimonials in direct-to-consumer pharmaceutical advertisements. Part VI discusses the effectiveness of these and other possible regulatory approaches. Finally, Part VII explains why advertisements of atypical results are likely to mislead a substantial percentage of consumers and investors, regardless of the disclosures they contain. Thus, it argues that regulators should seriously consider prohibiting advertisements of atypical results instead.

II. ADVERTISING OF ATYPICAL RESULTS IS DECEPTIVE

Advertisements of atypical results contain selection biases. This would not be problematic if consumers and investors fully accounted for the biases. Unfortunately, substantial evidence exists that they fail to do so. In other words, people engage in selection neglect. As a result, they are misled by advertisements of atypical results.

Research has long shown that people engage in selection neglect. People erroneously assume that samples are representative of the populations from which the samples are drawn, or at least fail to fully adjust for the sample bias.[18] They do this even when there is strong reason for them to believe that the sample is biased.[19]

People engage in selection neglect regarding advertisements in particular. Advertisers often choose a particular product result to advertise to create the most favorable impression of the product. In doing so, they create a selection bias—the advertisement's content is not representative of the population from which it was drawn. As a result, the advertised result is better than what people should expect to achieve. However, people often either ignore

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FAILURE OF MANDATED DISCLOSURE (2014); Adam B. Badawi, *Rationality's Reach*, 112 MICH. L. REV. 993 (2014); Kesten C. Green & J. Scott Armstrong, *Evidence on the Effects of Mandatory Disclaimers in Advertising*, 31 J. PUB. POL'Y & MARKETING 293 (2012); Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647 (2011) [hereinafter Ben-Shahar & Schneider, *Mandated Disclosure*].

18. *See, e.g.*, Rick Hamill et al., *Insensitivity to Sample Bias: Generalizing From Atypical Cases*, 39 J. PERSONALITY & SOC. PSYCHOL. 578, 578 (1980) (discussing an experiment conducted to determine whether subjects take into account a sample's representiveness).

19. *Id.* at 586.

or insufficiently account for the section bias. Thus, they are misled regarding their own likely results.

For example, mutual fund companies typically operate multiple equity mutual funds (i.e., funds that invest primarily in stocks), some of which perform well over a particular time period. Extensive research, however, has found little evidence that high past returns are good predictors of high future returns.[20] High returns are typically due to luck, not the fund manager's skill.[21] Because luck generally does not persist, neither do strong returns. In general, however, fund companies use performance advertisements (i.e., advertisements that show a fund's past returns) only for their funds that have had high past returns.[22] Thus, potential investors see only the returns of a company's successful funds and not those of its unsuccessful funds. There is substantial evidence that this selective advertising misleads investors into believing that the advertised strong performance is due to the fund managers' investment acumen rather than luck, and thus is likely to continue in the future.

In an experiment, participants were each shown one version of a performance advertisement for two of a hypothetical company's mutual funds that had outperformed the Standard & Poor 500 (S&P 500), a market index, by an average of several percent per year.[23] Participants were then asked about their perception of the fund company's quality and about their willingness to invest in a new mutual fund being introduced by the company.[24] The versions of the advertisement differed in the extent that they implicitly indicated whether there was a selection bias in the advertisement. In particular, one version stated that the advertised funds were the only two funds operated by the company (i.e., it indicated that there was no selection bias in the advertisement).[25] A second version did not indicate how many funds the company operated (i.e., it did not indicate whether there was a selection bias).[26] This second version is like real-world mutual fund advertisements, which also do not mention a fund company's other, weaker-performing funds.

Participants who saw the second version reacted to the advertisement as if the advertised funds were the only funds that the company operated.[27] In particular, they had the same beliefs regarding the company's quality and were as willing to invest in the company's new fund as were participants who saw the version of the advertisement that explicitly stated the company operated only the two advertised funds.[28] This experiment indicates that, at least if people are not reminded of a selection bias in an advertisement, they act as if there is not one.

Similarly, in another experiment, participants viewed a performance advertisement for two growth mutual funds operated by Fidelity Investments, one of the largest and most well-known mutual fund companies. The advertisement showed that the two funds had outperformed the S&P 500, but did not mention any other funds that Fidelity operates.[29]

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20. *See* Alan R. Palmiter & Ahmed E. Taha, *Mutual Fund Performance Advertising: Inherently and Materially Misleading?*, 46 GA. L. REV. 289, 300–04 (2012).
21. *Id.* at 301–02.
22. Koehler & Mercer, *supra* note 8, at 1110.
23. *Id.* at 1111.
24. *Id.*
25. *Id.*
26. *Id.*
27. Koehler & Mercer, *supra* note 8, at 1112–13.
28. *Id.*
29. *Id.* at 1114.

Compared to participants who were also explicitly reminded that Fidelity operates 30 growth mutual funds, participants who only saw the advertisement were more likely to believe that Fidelity stock funds in general—and a new Fidelity growth fund in particular—would outperform the S&P 500 in the future.[30] They also were more willing to invest in the new fund and believed that Fidelity was a more successful and trustworthy company.[31]

Importantly, the selection bias in the Fidelity advertisement was effective even though participants were aware of it.[32] All but one participant agreed with the following statement: "When deciding which growth funds to advertise, Fidelity probably chooses funds with better-than-average historical performance."[33] In addition, in response to an open-ended question, 77% of participants stated they believed that Fidelity advertises its highest-performing funds.[34]

Studies of advertising of other products show that consumers also fail to sufficiently account for selection biases in advertisements. Advertisements often contain testimonials from people claiming to have had a positive experience using the advertised product. These advertisements feature a selection bias; the advertiser does not randomly select which users' experiences to include in the advertisement. Rather, only very positive results are included. Despite this, consumers often ignore this selection bias, treating the advertised testimonial as a typical experience of product users. This misleads consumers regarding the effectiveness of the product.

For example, in an experiment conducted for the FTC, participants viewed a weight-loss product advertisement.[35] The advertisement featured testimonials from people who claimed large weight losses from using the product.[36] Although the advertisement made no explicit claims about how much weight users could expect to lose, the study found that participants assumed that the testimonials reflected typical weight loss.[37] In particular, when the testimonials claimed 24–36 pound weight losses, 58% of participants believed the advertisement communicated that new users of the product could expect to lose at least 24 pounds.[38] In addition, 67% of participants said that they themselves believed that new users could expect to lose at least 20 pounds.[39] Similarly, when the testimonials claimed 48–72 pound weight losses, 69% of participants believed that the advertisement communicated that new users could expect to lose at least 48 pounds.[40] In addition, 39% of participants said that they themselves believed that new users could expect to lose at least 40 pounds.[41]

Testimonial advertisements for other products show similar results. In the same study,

30. *Id.* at 1116.
31. *Id.*
32. Koehler & Mercer, *supra* note 8, at 1115.
33. *Id.*
34. *Id.*
35. MANOJ HASTAK & MICHAEL MAZIS, EFFECTS OF CONSUMER TESTIMONIALS IN WEIGHT LOSS, DIETARY SUPPLEMENT AND BUSINESS OPPORTUNITY ADVERTISEMENTS 1–2 (Sept. 22, 2004), https://www.ftc.gov/system/files/documents/reports/effects-consumer-testimonials-weight-loss-dietary-supplement-business-opportunity-advertisements/report.pdf .
36. *Id.*
37. *Id.*
38. *Id.* at 6.
39. *Id.* at 9.
40. HASTAK & MAZIS, *supra* note 35, at 6.
41. *Id.* at 9.

70% of participants who viewed an advertisement for a dietary supplement featuring testimonials claiming that the supplement reduced cholesterol levels by 54–66 points believed that the advertisement communicated that new users could expect to reduce their own cholesterol levels by at least 54 points.[42] Also, 54% of participants themselves believed that new users could expect to reduce their own cholesterol levels by at least 50 points.[43] In addition, 64% of participants who viewed an advertisement for a business opportunity consisting of testimonials claiming monthly incomes of $2200–$2600 believed that the advertisement communicated that people who start that business could expect a monthly income of at least $2200.[44] Also, 39% of participants themselves believed that people who start that business could expect a monthly income of at least $2000.[45]

In another experiment conducted for the FTC, participants were shown an advertising letter touting a dietary supplement.[46] Adding testimonials to the advertisement from people claiming to have had positive health effects from taking the supplement greatly increased participants' views of the supplement's efficacy. The testimonials increased the percentage of participants who believed the supplement would reduce breathing problems in at least "about half" of the people who take it to 71% from 12%.[47] The testimonials also increased the percentage of participants who believed that the supplement would increase energy levels of at least "about half" of the people who take it to 71% from 29%.[48] In addition, the testimonials increased the percentage of participants who believed that the supplement would reduce pain for at least "about half" of the people who take it to 79% from 12%.[49]

Non-experimental evidence also indicates that consumers engage in selection neglect regarding advertising. For example, a real advertisement for Lipitor, the most popular cholesterol-lowering pharmaceutical, featured an endorsement from Dr. Robert Jarvik, the inventor of the Jarvik artificial heart. The advertisement did not state whether other doctors also endorsed Lipitor. Nevertheless, 65% of surveyed consumers understood the advertisement as conveying that leading doctors prefer Lipitor.[50] This illustrates that consumers often view a single example as being more typical.

Finally, the ubiquity of advertisements featuring atypical results is itself further, important evidence of their effectiveness. As discussed above, these advertisements are

42. *Id.* at tbl.4.

43. *Id.* at tbl.6.

44. *Id.* at tbl.4.

45. HASTAK & MAZIS, *supra* note 35, at tbl.6.

46. MANOJ HASTAK & MICHAEL MAZIS, THE EFFECT OF CONSUMER TESTIMONIALS AND DISCLOSURES ON AD COMMUNICATION FOR A DIETARY SUPPLEMENT 1–2 (Sept. 30, 2003), https://www.ftc.gov/system/files /documents/reports/effect-consumer-testimonials-disclosures-ad-communication-dietary-supplement-endorsement-booklet/030920consumerreport.pdf .

47. *Id.* at 6.

48. *Id.*

49. *Id.* The advertising letter touted the dietary supplement as an "astonishing" nutritional supplement, but did not mention any specific health condition, while the testimonials claimed the supplement had reduced the users' breathing problems, fatigue and low energy levels, and chronic pain. *Id.* at 1. The incremental effect of the testimonials very likely would have been less if the letter itself had also specifically claimed that the supplement reduced these ailments. Nevertheless, the results indicate that consumers view testimonials as representing typical results.

50. *Lipitor: The Controversial Ad Proves Highly Effective*, CONSUMERREPORTS.ORG (Mar. 5, 2008, 5:18 PM), http:www.consumerreports.org/cro/news/2008/03/lipitor-the-controversial-ad-proves-highly-effective /index.htm. The advertisement was also controversial because Dr. Jarvis was not a practicing doctor and because the ad used a body-double in a scene that allegedly showed him rowing a boat. *Id.*

very common. Advertising is expensive, so it is unlikely that companies would use these advertisements if they were not effective.[51] If people did not commit selection neglect, these advertisements would be ineffective because they truly provide very little useful information. For example, a weight-loss product advertisement that features a testimonial from someone who lost 30 pounds using the product logically implies only that there exists at least one person in the world who lost 30 pounds using the product. This fact would be virtually irrelevant to a reasonable consumer. The advertisement would be effective only if consumers infer that users experience significant weight loss far more often than that.

In summary, there is substantial evidence that people do not sufficiently account for selection biases in advertising. As a result, they are misled by advertisements of atypical results. Part III discusses the harm this causes.

III. Advertising Atypical Results Harms Consumers and Investors

It has long been recognized that advertising can play a valuable role in market economies. By informing consumers and investors about the characteristics of available products and services, advertising can reduce consumers' and investors' search costs as they make purchase and investment decisions to maximize their own welfare.[52] In turn, the existence of these informed consumers and investors encourages firms to compete with each other to provide better or lower-priced products and services.[53]

In contrast, deceptive advertising harms consumers and investors.[54] Advertisements of atypical results create false expectations, which can hurt people in many ways. First, these advertisements can distort purchase decisions. If consumers have overly positive expectations regarding a product's likely results, they are more likely to buy that product, possibly causing them to waste money. People who erroneously believe that a more expensive product is more effective might buy that product rather than a cheaper, equally effective alternative. It also can cause them to buy less effective products.[55] For example, people who erroneously believe that an advertised product is likely to cause substantial weight loss might use that product instead of more effective weight-loss methods, such as diet and lifestyle changes.[56] Furthermore, if people's unrealistic weight-loss expectations

51. *See* Advertising Association's Comments, *supra* note 2, at 10 ("Consumers themselves rely on endorsements and testimonials in making some of their most important purchasing decisions.").

52. Howard Beales et al., *The Efficient Regulation of Consumer Information*, 24 J.L. & Econ. 491, 492 (1981).

53. *Id.*

54. FTC v. Brown & Williamson Tobacco Corp., 778 F.2d 35, 43 (D.C. Cir. 1985) ("[M]isleading advertising does not serve, and, in fact, disserves, th[e] interest" of "consumers and society . . . in the free flow of commercial information.") (citation omitted).

55. Robert Pitofsky, *Beyond Nader: Consumer Protection and the Regulation of Advertising*, 90 Harv. L. Rev. 661, 671 (1977).

56. *See, e.g.*, Edith Ramirez, Chairwoman & Julie Brill, Commissioner, Statement regarding *In re* Ma GeneLink, Inc. and foru International Corporation 4 (Jan. 7, 2014), http://www.ftc.gov/sites/default/files /documents/cases/140107hgcdirectstatementbrill.pdf ("Consumers who rely on respondents' [false weight-loss] claims may forgo important diet and lifestyle changes that are known to reduce the risk of diabetes, heart disease, or arthritis. Or they may forgo treatments that, unlike respondents' products, have been demonstrated to be effective. In addition, respondents charge a premium, over $100 per month, for their customized products. Consumers, therefore, may be deceived both to their medical and economic detriment when a safe product provides an ineffective treatment."); *see also* FTC v. QT, Inc., 512 F.3d 858, 863 (7th Cir. 2008) (noting that safe but deceptively advertised treatment "will lead some consumers to avoid treatments that cost less and do more;

are not met, they "may become disappointed and discouraged and perhaps abandon further attempts to lose weight."[57] Given the health risks from excess weight, such as diabetes and heart disease, this can have serious consequences.[58] Also, in addition to being ineffective, advertised weight-loss products can have dangerous side effects.[59]

Similar issues arise if consumers are misled regarding expected results from other products and services. For example, people deceived regarding the typical earnings from a particular work-at-home business opportunity might spend their time and other resources on that business rather than work in a truly better job. In addition, a person who is deceived regarding the efficacy of a particular pharmaceutical might choose to take that drug rather than a more effective, safer, or cheaper alternative.

Similarly, selection biases in mutual fund advertisements can harm investors. As noted above, mutual fund companies generally advertise the returns of only their strong-performing funds, causing investors to believe that those high returns were due to managerial skill rather than luck, and thus are likely to continue.[60] This encourages investors to choose the lucky, advertised fund over other funds that are better matched to the investors' investment objectives and risk tolerances.

Also, when investors are focused on funds' past returns, they pay less attention to funds' costs. For example: imagine a fund company advertises that one of its mutual funds has earned 3% higher annual returns than its peers. Investors who believe this performance is likely to continue will prefer that fund even if it has a 1% higher annual expense ratio than its peers. Indeed, there is evidence that investors choosing among mutual funds give much more weight to the funds' advertised past returns than to the funds' expense ratios, even when those expense ratios are highly salient in the advertisement.[61] Unlike high returns, which generally do not persist because they are due to luck,[62] low-cost funds (such as index funds) generally continue to have low costs, which lead to higher returns in the long run.[63] Ironically, therefore, by encouraging investors to buy funds with high past returns, performance advertisements cause investors to pay less attention to what is actually likely to give them high future returns: low costs.

In addition, because advertisements featuring atypical results are effective, producers of goods and services spend resources making these deceptive advertisements, rather than on improving the quality—or reducing the prices—of their offerings to compete more effectively. Furthermore, deceptive advertisements cause other harm as well. To the extent these advertisements cause people to think that a product is better than it actually is, the advertisements make it more difficult for truly better products to distinguish themselves in consumers' minds. Thus, producers of superior products must devote more resources to advertising to convince consumers that their products are better than competitors' products.

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the lies will lead others to pay too much for [treatment] or otherwise interfere with the matching of remedies to medical conditions").

57. Avery et al., *supra* note 5, at 136.

58. Ramirez & Brill, *supra* note 56, at 4.

59. Avery et al., *supra* note 5, at 136.

60. Koehler & Mercer, *supra* note 8, at 1112–13, 1116.

61. Beth A. Pontari et al., *Regulating Disclosure in Mutual Fund Advertising in the United States: Will Consumers Utilize Cost Information?*, 32 J. CONSUMER POL'Y 333, 346, 348 (2009).

62. Laurent Barras et al., *False Discoveries in Mutual Fund Performance: Measuring Luck in Estimated Alphas*, 65 J. FIN. 179, 181, 197 (2010); Eugene F. Fama & Kenneth R. French, *Luck Versus Skill in the Cross-Section of Mutual Fund Returns*, J. FIN. 1915, 1915 (2010).

63. Mark Carhart, *On Persistence in Mutual Fund Performance*, 52 J. FIN. 57, 80 (1997).

In summary, advertisements of atypical results mislead consumers and investors. This harms them and wastes resources. Before discussing how these advertisements can be regulated, we should understand why they are effective. Designing effective regulation requires understanding why people commit selection neglect, i.e., why they fail to sufficiently account for selection biases in advertisements.

IV. WHY ADVERTISING ATYPICAL RESULTS IS EFFECTIVE

People likely engage in selection neglect regarding advertisements of atypical results for many reasons. Some people simply might not realize that an advertisement contains a selection bias. For example, imagine a weight-loss product featuring a testimonial from someone who lost 30 pounds using the product. If a consumer believes that the advertiser has chosen a typical testimonial—in other words, if the consumer believes that product users typically lose about 30 pounds—then there is no reason for the consumer to discount the testimonial. Although some people might not know that advertisements contain selection biases, however, evidence suggests that people generally are aware of them.[64]

However, even if people suspect or know of a sample bias, they still might not sufficiently discount the advertised atypical results. There are many reasons for this. First, the sample used in an advertisement is vivid and concrete, while the rest of the population from which the sample is drawn is not mentioned in the advertisement. Thus, consumers are likely to focus only on the advertised sample.[65]

The effectiveness of these advertisements might also be due in part to the availability heuristic. This heuristic is a mental shortcut whereby people evaluate the probability of an event occurring by how readily examples of the event come to mind.[66] For example, people overestimate the probability of airplane accidents because such accidents receive prominent media coverage, so examples of airplane accidents come to mind quickly.[67] Similarly, an advertisement featuring an atypical result—such as a person who achieved a very large weight loss—provides consumers with a ready example of such a result. Thus, consumers likely will overestimate the probability of achieving such an atypical result.

Related to this is people's tendency to accept information—such as the sample data in a testimonial advertisement—at face value rather than think about why it might be unreliable. Although people can reject sample data as biased, doing so requires effort: the mental construction and consideration of the sample space (i.e., the possible results) from which the sample is drawn.[68] For example, to avoid being deceived, a consumer who sees an advertisement featuring someone who lost 30 pounds using a weight-loss product needs to think about other product users—who are not mentioned in the advertisement—who did not lose much weight. Unfortunately, many consumers do not exert this effort because "sample space construction is notoriously unnatural because it requires attention to

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64. *See, e.g.*, Koehler & Mercer, *supra* note 8, at 1115 (observing that the large majority of participants in an experiment believed that mutual fund companies choose to advertise their better–performing funds).

65. *See* Joshua D. Blank, *In Defense of Individual Tax Privacy*, 61 EMORY L.J. 265, 289 (2011) (discussing why vivid examples in advertisements are effective).

66. RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 25 (2008).

67. Howard Latin, *Good Warnings, Bad Products, and Cognitive Limitations*, 41 UCLA L. REV. 1193, 1233 (1994).

68. Koehler & Mercer, *supra* note 8, at 1108.

nonoccurrences of the event of interest."[69]

Furthermore, even if people know that a sample is biased and are thinking about the bias, they still can be misled by it. Merely knowing that an advertisement contains a selection bias is not the same as knowing the extent of the bias and how one should react to it. Consider again a weight-loss product advertisement featuring someone who lost 30 pounds. An astute consumer might understand that the advertised person's experience was extreme and that most people lose much less weight. However, without information about the degree of the selection bias, the consumer will have no basis for deciding what weight loss is typical. Finally, even if people know the degree of a sample bias—and thus how much the advertised results should be discounted—they still often will not sufficiently discount for it. Because of anchoring effects, people's judgments are affected by information they receive, even if they know that the information should be ignored because it is unreliable or irrelevant.[70]

In summary, people likely are misled by advertisements of atypical results for many reasons. Because of atypical results' great deceptive capacity, many federal agencies have regulated these advertisements. Part V discusses some of the different regulatory approaches these agencies have adopted.

V. How Advertising of Atypical Results is Regulated

Advertisements for a wide range of products and services feature users' results. Different federal agencies have authority to regulate advertising of particular products and services. These agencies have adopted a variety of regulatory approaches to advertising of atypical results. To illustrate the range of these approaches, this Part of this Article describes how the SEC regulates equity mutual fund performance advertisements, how the FTC regulates testimonials in advertisements for products and services, and how the FDA regulates testimonials in direct-to-consumer pharmaceutical advertisements.

A. SEC Regulation of Mutual Fund Performance Advertisements

A mutual fund pools money from many investors and invests it in assets, such as stocks and bonds. Performance advertisements for a mutual fund present the past returns earned by the fund. These advertisements are very susceptible to selection biases. A selection bias could occur if the mutual fund company could choose which periods' returns to advertise. For example, a mutual fund company that runs a fund that performed well in 2014—but poorly prior to and after that—might wish to advertise only the fund's 2014 return. Investors would be misled by such an advertisement if they inferred that the fund usually performs well.

The SEC's regulation of mutual funds, however, greatly restricts such selective advertising. Specifically, Rule 482 promulgated under the Securities Act of 1933 standardizes how past returns in mutual fund performance advertisements may be calculated and presented.[71] For example, performance advertisements for an equity fund

69. *Id.* (citation and emphasis omitted).

70. Amos Tversky & Daniel Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1128 (1974).

71. Advertising by an Investment Company as Satisfying Requirements of Section 10, 17 C.F.R. § 230.482 (2011).

must report the fund's average annual total returns for the last one, five, and ten years.[72] In adopting this regulation, however, the SEC did not claim that its purpose was to prevent selection biases. Instead, the SEC explained that including returns for these three time periods gives investors information regarding "the actual investment experience of a short-term, intermediate-term, and long-term investor in the fund" and "permit[s] some evaluation of the level of volatility characteristic of the return on the fund's portfolio."[73]

However, the SEC has also explicitly attempted to limit selection biases in performance advertisements. In 2003, the SEC amended Rule 482 to require that if the returns data in a performance advertisement is not current to the most recent month-end then the advertisement must direct investors to a website or a toll-free or collect phone number where such current data is available.[74] Although the amendment's purpose was to ensure that investors have access to the most current returns data,[75] the SEC also indicated that it was attempting to limit fund companies' ability to mislead investors by selectively choosing which periods' returns to advertise.

In particular, some commenters had encouraged the SEC to exempt advertisements that include returns more recent than the previous month-end from the requirement that the advertisement direct investors to a website or phone number containing the month-end performance data.[76] After all, such advertisements present more recent information than would be available via the website or phone number. However, the SEC rejected this proposed exemption. The SEC explained that the exemption would allow fund companies to mislead investors by "cherry picking" the date so they could advertise a fund's most favorable performance.[77] For example, if the fund had a strong first two weeks of the current month, it might advertise its performance through that time period rather than through the end of the previous month. The SEC believed that requiring the fund to also make available the most recent month-end data would serve as a check on such cherry-picking.[78]

The SEC's rules restrict funds companies' ability to select which periods' returns to advertise but do not eliminate it. Although performance advertisements must make available the most recent month-end data, they are permitted to also contain more recent returns.[79] Similarly, Rule 482 requires performance advertisements to present the funds'

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72. *Id.* § 230.482(d)(3). If the fund's registration statement has been in effect for less than one, five, or ten years, then the company must instead report the average annual total return since the registration statement has been in effect. *Id.*

73. Advertising by Investment Companies, 53 Fed. Reg. 3868, 3875 & n.28 (Feb. 10, 1988) (to be codified at 17 C.F.R. pt. 230, 270, 274).

74. Amendments to Investment Company Advertising Rules, 68 Fed. Reg. 57,760, 57,763 (Oct. 6, 2003) (to be codified at 17 C.F.R. pts. 230, 239, 270, 274).

75. *Id.* ("Investors who are provided advertisements highlighting a fund's performance [will] have ready access to performance data that is current to the most recent month-end and will not be forced to rely on performance data that may be more than three months old at the time of use by the investor.").

76. *Id.* at 57,765.

77. *Id.* The SEC also opposed the exemption because requiring month-end performance data allows investors to compare the performance of different funds for the same periods. *Id.*

78. Amendments to Investment Company Advertising Rules, 68 Fed. Reg. 57,760, 57,763 (Oct. 6, 2003) (to be codified at 17 C.F.R. pts. 230, 239, 270, 274). This would serve as a check on cherry-picking, however, only if fund companies believe that investors actually would make the effort to obtain month-end performance data that is *less* current than that provided in the advertisement.

79. *See id.* (SEC acknowledging, in response to commenters, that advertisements may contain more recent returns).

average annual total returns over the last one, five, and ten years. However, they may also include—for any time periods—any other performance measure that "[r]eflects all elements of return," such as aggregate, average, year-by-year, or other types of total return calculations.[80] Those returns must supplement, not replace, the required returns, and they may not be presented more prominently than the required returns.[81]

In summary, the SEC has largely standardized the calculation and presentation of past returns in advertisements. This has the effect of limiting, but not eliminating, funds' ability to selectively highlight certain periods' returns. However, the SEC has failed to address directly another important selection bias in mutual fund advertising: mutual fund companies generally operate many equity funds, yet only advertise the returns of their high-performing ones.

Fund companies primarily advertise their equity funds that have outperformed other funds. For example, a study of equity fund performance advertisements in *Barron's* and *Money* magazines found that the advertised funds had outperformed funds with the same investment objective by an average of almost 6% over the twelve months prior to the advertisements.[82] Similarly, a study of equity fund performance advertisements in *BusinessWeek* and *Fortune* magazines found that fund companies tend to advertise their best-performing funds.[83] In particular, the median one-year, five-year, and ten-year performances of the advertised funds were at the 80th, 100th, and 100th percentiles, respectively, of all company-operated equity funds with the same investment objective.[84] The median one-year, five-year, and ten-year performances were also at the 79th, 88th, and 88th percentiles, respectively, of all company-operated equity funds irrespective of the investment objective.[85]

Thus, fund companies engage in selective advertising by using performance advertisements only for funds with high past returns. However, high past returns are typically the result of luck rather than the fund manager's skill, so these high returns generally do not continue.[86] Therefore, performance advertisements feature returns that are atypical of what the company's funds have achieved in general and, more importantly, of what investors in the advertised funds can expect to earn in the future. However, because advertisements show only the returns of the company's high-performing funds—and not also its low-performing funds—investors erroneously tend to attribute the high returns to the fund managers' skill rather than to luck.[87]

The SEC's regulation of performance advertisements does not directly address this

80. *Id.* at 57,779.

81. *Id.*

82. Jain & Wu, *supra* note 9, at 943. The advertised funds had also outperformed other benchmarks, although by less. In particular, they had outperformed the S&P 500 by almost 2% and had a four-factor alpha of over 1%. *Id.* at 943–45. The four-factor alpha is a risk-adjusted measure of a fund's excess return compared to a benchmark index. *Id.* at 944.

83. Koehler & Mercer, *supra* note 8, at 1107, 1109.

84. *Id.* at 1110.

85. *Id. See also* U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 10, at 11 ("Representatives of some mutual fund firms with whom we spoke confirmed that they choose which funds to advertise based on the fund's performance level or rankings by industry research organizations such as Lipper and Morningstar, Inc., which periodically issue comparative ratings and rankings of funds' performance over different time periods.").

86. *See supra* notes 20–21 and accompanying text (discussing the failure of high past returns to predict high future returns).

87. Koehler & Mercer, *supra* note 8, at 1116.

selection bias. Instead, the SEC attempts to dissuade investors from relying too heavily on a fund's past returns. All Rule 482 advertisements, regardless of whether they contain past returns, must include a statement that "advises an investor to consider the investment objectives, risks, and charges and expenses of the investment company carefully before investing" and that directs readers to the fund's prospectus to obtain this and other information about the fund.[88] In addition, Rule 482 requires performance advertisements to contain a warning that

> past performance does not guarantee future results; that the investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost; and that current performance may be lower or higher than the performance data quoted.[89]

In summary, the SEC does not directly regulate the selection bias exhibited in a fund company's choosing which mutual funds' returns to advertise. However, the SEC requires these advertisements to contain disclosures warning against relying exclusively on these high returns and against assuming that they will persist.

B. FTC Regulation of Testimonials in Advertisements

Atypical results are often featured in testimonials in advertisements for other products and services. The FTC thoroughly regulates the use of endorsements in these advertisements. It broadly defines endorsements as "any advertising message . . . that consumers are likely to believe reflects the opinions, beliefs, findings, or experiences of a party other than the sponsoring advertiser."[90] Testimonials, a type of endorsement, are statements by people reporting their experiences using the advertised product or service.

Advertisements containing consumer testimonials typically reflect a selection bias. Obviously, advertisers do not randomly select which users' experiences to advertise. Indeed, it would be very surprising to see a testimonial from a consumer who had a negative experience with the advertised product or service. Instead, only positive testimonials are used. In fact, consumers who had very atypical positive experiences frequently give testimonials. For example, the testimonials in advertisements for weight-loss products often feature testimonials from people who claim to have lost an unusually large amount of weight using the product.[91] Similarly, advertisements for business opportunities sometimes contain testimonials from people who claim to have made an unusually large amount of money through the opportunity.[92]

Section 5 of the FTC Act prohibits "[u]nfair methods of competition in or affecting

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88. Advertising by an Investment Company as Satisfying Requirements of Section 10, 17 C.F.R. § 230.482(b)(1) (2014).

89. *Id.* This exact wording is not required; any warning that "clearly communicates" this information is sufficient. Amendments to Investment Company Advertising Rules, 68 Fed. Reg. 57,760, 57,765 (Oct. 6, 2003) (to be codified at 17 C.F.R. pts. 230, 239, 270, 274).

90. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 74 Fed. Reg. 53,124, 53,126 (Oct. 15, 2009) (to be codified at 16 C.F.R. pt. 255).

91. *See supra* notes 5–6 and accompanying text (describing weight-loss testimonials).

92. *See, e.g.*, Luke Froeb, *Fraudsters and Testimonial Ads*, MANAGERIAL ECON (Sept. 18, 2007, 4:03 AM), http://managerialecon.blogspot.com/2007/09/fraudsters-and-testimonial-ads_9096.html (noting that work-at-home scams often include testimonials).

commerce, and unfair or deceptive acts or practices in or affecting commerce."[93] To provide guidance to advertisers and endorsers regarding how this section applies to endorsements, the FTC issued Guides Concerning the Use of Endorsements and Testimonials in Advertising (Guides).[94] The Guides state that a testimonial relating to a consumer's experience regarding a key attribute of a product or service

> will likely be interpreted [by the FTC] as representing that the endorser's experience is representative of what consumers will generally achieve with the advertised product or service in actual, albeit variable, conditions of use. Therefore, an advertiser should possess and rely upon adequate substantiation for this representation. If the advertiser does not have substantiation that the endorser's experience is representative of what consumers will generally achieve, the advertisement should clearly and conspicuously disclose the generally expected performance in the depicted circumstances, and the advertiser must possess and rely on adequate substantiation for that representation.[95]

In other words, an advertisement featuring a testimonial presenting an atypical experience also must disclose what experience is typical. For example, imagine a weight-loss product advertisement featuring a testimonial from someone who lost 30 pounds using the product. The Guides state that the FTC would likely deem this testimonial to imply that users of the product generally lose about 30 pounds.[96] Unless the advertiser could substantiate this implication, the advertisement would have to also state how much weight users actually generally lose.[97]

The Guides indicate that this supplemental information will usually, but not always, be required. In particular, the Guides state that the FTC is only "likely" to interpret testimonials as representing typical results.[98] The FTC believes that, in some situations, consumers understand that a testimonial is not typical—such as a testimonial by a slot machine winner at a casino.[99] However, the FTC made clear that it views such cases as exceptions to the general rule that consumers understand testimonial advertisements as presenting typical results.[100] When proposing its most recent amendments to the Guides, the FTC cited two empirical studies of consumers' interpretations of advertisements—as well as the FTC's findings in a number of litigated cases—as "support[ing] the Guides' position that consumers interpret advertisements containing endorsements as representing that the results achieved by the endorsers are generally representative of what new users

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93. Federal Trade Commission Act, 15 U.S.C. § 45(a)(1) (2006) (original version Pub. L. No. 63-203, 38 Stat. 717, 719).

94. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 74 Fed. Reg. 53,124, 53,126 (Oct. 15, 2009) (to be codified at 16 C.F.R. pt. 255) ("The Guides merely elucidate the Commission's interpretation of [s]ection 5 . . . ."); Advertising Association's Comments, *supra* note 2, at 3 ("While the Guides are not laws, *per se*, they are essentially treated as law by the courts and by the advertising community, which is well aware that any non-compliance would result in FTC action.") (citation omitted).

95. Guides Concerning Use of Endorsements and Testimonials in Advertising, 16 C.F.R. § 255.2(b) (2011).

96. *See id.* (stating that testimonial advertisements "will likely be interpreted [by the FTC] as representing that the endorser's experience is representative of what consumers will generally achieve with the advertised product or service in actual, albeit variable, conditions of use").

97. *Id.*

98. *Id.*

99. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 73 Fed. Reg. 72,374, 72,378–79 (Nov. 28, 2008) (to be codified at 16 C.F.R. pt. 255).

100. *Id.*

can expect."[101]

The Guides also state that, in general, an advertisement presenting atypical results cannot merely warn that the results are atypical.[102] The FTC did not say that such a disclaimer could never be sufficient, however, because it could "not rule out the possibility that a clear, conspicuous, and informative disclaimer could" prevent consumers from being misled regarding the typicality of a testimonial.[103] Nevertheless, the agency warned that it is "skeptical that most disclaimers of typicality will be effective in preventing deception."[104]

Therefore, overall the Guides allow advertisements to feature atypical results, for example, a testimonial from the rare person who lost 50 pounds using a weight-loss product. However, these advertisements generally must also disclose the typical results. The FTC intends this information to prevent the atypical results from misleading consumers.

In a recent set of cases, the FTC appears to have taken a much more restrictive approach to testimonials of atypical results. In February 2012, the FTC filed complaints against five companies that sell replacement windows.[105] The FTC alleged that the companies made exaggerated and unsupported claims about the windows' energy efficiency and the extent to which the windows could reduce consumers' heating and cooling bills.[106] In one of the advertisements cited by the FTC, a consumer who bought the windows claimed that they "cut his family's heating and cooling bills in half."[107] In the consent decrees settling these actions, the companies agreed to

> not make any representation, directly or indirectly, expressly or by implication, *including through the use of endorsements* or trade names that: A. Consumers who replace their windows with respondent's windows achieve up to or a specified amount or percentage of energy savings or reduction in heating and cooling costs; or B. Respondent guarantees or pledges that consumers who replace their windows with respondent's windows will achieve up to or a specified amount or percentage of energy savings or reduction in heating and cooling costs; unless the representation is non-misleading and, at the time of making such representation, respondent possesses and relies upon competent and reliable scientific evidence to substantiate that *all or almost all consumers are likely to receive the maximum represented savings or reduction*.[108]

In other words, the consent decree prohibits an advertisement from featuring a consumer testimonial claiming some level of savings in energy or energy costs, unless the advertiser

101. *Id.* at 72,378.

102. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 74 Fed. Reg. 53,124, 53,133 (Oct. 15, 2009) (to be codified at 16 C.F.R. pt. 255) ("[T]he Commission concludes that the safe harbor for non-typical testimonials accompanied by disclaimers of typicality should be eliminated . . . .").

103. *Id.* at 53,131.

104. *Id.*

105. Press Release, Fed. Trade Comm'n, Window Marketers Settle FTC Charges That They Made Deceptive Energy Efficiency and Cost Savings Claims (Feb. 22, 2012), http://www.ftc.gov/news-events/press-releases/2012/02/window-marketers-settle-ftc-charges-they-made-deceptive-energy.

106. *Id.*

107. Complaint ¶ 4A, *In re* Winchester Indus., No. 102-3171, 2012 WL 1881421 (F.T.C.) (May 16, 2012) (No. C-4362).

108. *Id.* at *6 (emphasis added).

can substantiate that "all or almost all consumers" are likely to achieve at least the same savings. This is far more restrictive than the Guides, which allow an advertisement to feature an atypical testimonial so as long as the advertisement also discloses typical results. The consent decree, however, makes no such allowance: it prohibits an advertisement featuring an atypically positive testimonial because, by definition, it is untrue that "all or almost all consumers are likely" to achieve the results claimed in an atypically positive testimonial.[109]

In fact, the consent decree appears to forbid even many advertisements featuring testimonials of *typical* results. Consider a product for which there is a range of possible results (such as energy savings), in which most consumers achieve a result near the middle of the range, but a substantial percentage of consumers achieve better results and a substantial percentage of consumers achieve worse results. The consent decree would forbid an advertisement featuring a testimonial of a consumer who had achieved a typical result, because not "all or almost all consumers" are likely to achieve those results.

As discussed above, the problem with advertisements of atypical results is that many consumers are misled because they believe those results to be typical. However, advertisements of typical results pose no such problem. Consumers who assume that the advertised results are typical would be correct.

It is unclear why the FTC took such an aggressive stance, and it has been criticized for doing so.[110] One can speculate that the FTC did this because of other elements of the window advertisements. In particular, most of the advertisements also *guaranteed* a particular level of energy savings.[111] Consumers could reasonably understand a guarantee as implying that "all or almost all consumers" will achieve the guaranteed results. Thus, it might be reasonable to require advertisers who guarantee particular results to be able to substantiate that almost all consumers will achieve those results. Imposing such a requirement on advertisers that make no such guarantee, however, does not make sense.[112]

C. FDA Regulation of Testimonials in Direct-to-Consumer Pharmaceutical Advertisements

The FDA regulates the advertising of prescription pharmaceuticals.[113] Many such advertisements are directed to consumers rather than to the doctors who prescribe the drugs. These direct-to-consumer advertisements often feature testimonials from consumers who describe their own positive experiences using these drugs.[114]

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109. *Id.*

110. *Hearing Before the Subcomm. on Commerce, Mfg. and Trade of the H. Comm. on Energy and Commerce*, 113th Cong. 6 (2014) (statement of J. Howard Beales III), http://democrats.energycommerce.house .gov/sites/default/files/documents/Testimony-Beales-CMT-FTC-100-Academic-Perspective-2014-2-28.pdf.

111. *See, e.g.*, *Winchester Indus.*, 2012 WL 1881421, at *2 (quoting the text of the promotional materials).

112. One might also wonder why the FTC would require even guaranteed results to be substantiated. After all, if consumers failed to obtain the guaranteed results, the company would be required to stand by the guarantee. However, the guarantees at issue were less than they appeared to be at first glance. Consumers who failed to obtain the guaranteed results were entitled to receive the difference between the consumer's actual savings and the guaranteed savings only for one year—not for the life of the windows—and only up to a certain amount. Thus, at least arguably, the companies were not truly making the guarantees implied by the advertisements. *Id.* at *6.

113. *Prescription Drug Advertising: Questions and Answers*, U.S. FOOD & DRUG ADMIN., http://www.fda .gov/Drugs/ResourcesForYou/Consumers/PrescriptionDrugAdvertising/UCM076768.htm (last visited Nov. 14, 2015).

114. GREG R. HANSON ET AL., DRUGS AND SOCIETY 32 (11th ed. 2011) ("In their attempts to sell drugs,

Federal law deems a pharmaceutical to be misbranded if its labeling or advertising is false or misleading.[115] The FDA views a pharmaceutical advertisement as "false, lacking in fair balance or otherwise misleading" if it

> (i) Contains a representation or suggestion, not approved or permitted for use in the labeling, that a drug is better, more effective, useful in a broader range of conditions or patients . . . safer, has fewer, or less incidence of, or less serious side effects or contraindications than has been demonstrated by substantial evidence or substantial clinical experience . . . whether or not such representations are made by comparison with other drugs or treatments, and whether or not such a representation or suggestion is made directly or through use of published or unpublished literature, quotations, or other references.[116]

Thus, an advertisement containing a testimonial would be deemed misleading if it implies that the advertised drug is more effective than demonstrated by substantial evidence or substantial clinical experience.[117] The FDA appears to believe that testimonials reporting atypical positive results are misleading. For example, Wyeth Pharmaceuticals manufactures Premarin (conjugated estrogen tablets), which clinical studies have found to reduce symptoms associated with menopause.[118] However, Premarin's website contained testimonials from patients who claimed Premarin had eliminated—rather than just reduced—their symptoms.[119] In response, the FDA warned Wyeth that the website overstated the efficacy of Premarin by misleadingly implying that Premarin will eliminate symptoms.[120]

Similarly, Abbott Laboratories created a promotional DVD for its drug Kaletra, an anti-HIV-1 medicine.[121] The DVD featured an interview with former basketball star Magic Johnson discussing his experience with HIV disease while taking Kaletra. In the interview, Johnson claimed that he had been taking Kaletra for five years, managing to live a "normal life" and maintaining undetectable HIV levels.[122] In response, the FDA warned Abbott Laboratories that Johnson's testimonial "suggests that Kaletra has been shown to allow all or most antiretroviral treatment-experienced individuals to successfully manage their disease and continue to do well, i.e., live a 'normal life' while maintaining undetectable

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product advertisers use the authority of a physician or health expert or the seemingly sincere testimony of a product user. Adults are strongly affected by testimonial advertising because these drug commercials can appear authentic and convincing to large numbers of viewers, listeners, or readers.").

115. 21 U.S.C. §§ 352(a), 321(n) (2012).

116. Prescription Drug Advertising, 21 C.F.R. § 202.1(e)(6)(i) (2011).

117. Although pharmaceutical advertisements cannot overstate a drug's efficacy, they are not required to state how effective the drug is. U.S. FOOD & DRUG ADMIN., *supra* note 113.

118. Letter from Carrie Newcomer, Regulatory Review Officer, Div. of Drug Mktg., Adver., and Commc'n, Dep't Health & Human Serv., to Ursula A. Campbell, Senior Dir., Wyeth Pharm., Inc. 1–3 (Aug. 27, 2010), http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Enforcement ActivitiesbyFDA/WarningLettersandNoticeofViolationLetterstoPharmaceuticalCompanies/UCM225561.pdf [hereinafter Premarin Letter].

119. *See, e.g.*, *id.* at 3 (stating that a testimonial from "Mary" included claims of eliminated symptoms).

120. *Id.* at 1, 3–4 ("These claims seriously misrepresent what is known about the efficacy of Premarin.").

121. Letter from Thomas Abrams, Dir., Div. of Drug Mktg., Advert., & Commc'n, Dept. Health & Human Servs., to Miles D. White, Chairman and CEO, Abbott Lab. 1 (July 14, 2009), http://www.fda.gov/downloads /Drugs/.../UCM173184.pdf [hereinafter Kaletra Letter].

122. *Id.* at 5.

HIV-1 RNA levels, for five or more years."[123] Thus, the DVD was misleading because there was not "substantial evidence or substantial clinical experience" to support these claims.[124]

Importantly, in both cases the FDA did not challenge the testimonials' truthfulness. The FDA noted that even if Johnson's testimonial accurately reflected his own experience with Kaletra, "[t]he personal experience of a Kaletra patient such as Magic Johnson does not constitute [substantial] evidence" of the effectiveness of the drug.[125] Similarly, the FDA noted that the testimonials in the Premarin advertisement were misleading even if they accurately reflected the experience of the consumers giving the testimonials.[126] Thus, the FDA's position appears to be that advertisements containing testimonials of atypical results are misleading because they inherently imply that such results are typical. Indeed, as discussed above, there is substantial evidence that large percentages of consumers erroneously treat advertised atypical results as being typical.[127]

The FDA views atypical testimonials as misleading even if accompanied by a disclaimer of typicality. Indeed, in his Kaletra testimonial, Magic Johnson warned that "everybody is different," and the advertisement also included a written disclaimer that "[i]ndividual results may vary."[128] However, the FDA concluded that those disclaimers failed to "mitigate the misleading impression created by the promotional DVD that all or most treatment-experienced patients taking Kaletra can expect to survive and be healthy for at least five years."[129] Similarly, a recent public presentation by a member of the FDA's Office of Prescription Drug Promotion stated that "[p]atient testimonials and individual case studies may be an accurate reflection of one patient's experience, but that alone does not constitute substantial evidence. Treatment response must be reflective of the results of clinical trials. 'Individual results may vary' does not mitigate misleading presentation."[130]

Thus, the FTC's Endorsement Guides and the FDA appear to share the belief that mere disclaimers of typicality do not prevent an advertised atypical result from being misleading. Recall, however, that the FTC's Guides state that also disclosing typical results likely prevents atypical testimonials from being misleading.[131] There is no evidence that the FDA shares this view as well.

123. *Id.*

124. *Id.*

125. *Id.*

126. *See, e.g.*, Premarin Letter, *supra* note 118, at 3 ("While Mary's statements may be an accurate reflection of her own experience, the personal experience of a Premarin patient such as Mary does not constitute [substantial] evidence.").

127. *See supra* Part II (showing that advertising of atypical results deceives consumers and investors).

128. Kaletra Letter, *supra* note 121, at 5–6.

129. *Id.*

130. Michael Sauers, Team Leader, DTC1, Office of Prescription Drug Promotion (OPDP), U.S. Food & Drug Admin., Prescription Drug Mktg. Regulatory Primer, Address Before the Drug Info. Ass'n 2012 Annual Meeting (2012), http://www.fda.gov/downloads/AboutFDA/CentersOffices/OfficeofMedicalProductsand Tobacco/CDER/UCM312608.pdf.

131. Guides Concerning Use of Endorsements and Testimonials in Advertising, 16 C.F.R. § 255.2(b) (2011) ("[I]f the advertiser does not have substantiation that the endorser's experience is representative of what consumers will generally achieve, the advertisement should clearly and conspicuously disclose the generally expected performance in the depicted circumstances . . . .").

VI. How Should Advertising of Atypical Results be Regulated?

Part V of this Article presented how different federal agencies regulate some types of advertisements of atypical results. The approaches they take differ substantially. The remainder of this Article discusses the strengths and weaknesses of these and other possible regulatory approaches.

A. Require Disclosure of Population

One possible regulatory approach is to require advertisements of atypical results to also disclose the population from which the advertised sample was selected. Doing so highlights that the advertised data is merely a sample. From this information, people might infer that the advertised sample is biased and then discount the advertised results.

Evidence exists that this approach could be effective sometimes. Recall that participants in one study viewed an advertisement highlighting the strong performance of two of a mutual fund company's funds.[132] If the advertisement did not state the number of funds the company operated, participants acted as if the company operated only the two advertised funds.[133] However, if the advertisement disclosed that the two advertised funds were only "2 of 30 funds operated by [the fund company]," then participants greatly discounted the advertised performance.[134] In fact, in one of the experiments, this disclosure appeared to cause participants to completely discount the advertised performance.[135] In other words, participants had the same willingness to invest in a new fund operated by the fund company as did participants who viewed an advertisement that did not present any past returns at all.

The disclosure's effectiveness was not due to the disclosure providing new information about the number of funds the company operated. Participants who were not told how many funds the company operated did not believe that the company operated fewer funds than did participants who were told that the company operated 30 funds.[136] Rather, the disclosure's effectiveness appears due to people not automatically thinking about selection biases in advertisements. Disclosing the population, however, prompted them to consider the selection bias.

Requiring disclosure of the population from which the advertised sample is drawn would be feasible in many contexts. For example, imagine a weight-loss product advertisement featuring a testimonial claiming a 30-pound weight loss. The advertisement could be required to also disclose that "as of November 2015, about 3000 people have used this product."

Unfortunately, there is reason to suspect that this technique would not be as effective in this and other contexts as it was in the mutual fund experiments. Those experiments were conducted on university students taking business classes and on expert investors.[137] Overall, those participants likely were more adept at statistical reasoning than are typical consumers, and thus, are more likely to understand the implications of information about

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132. Koehler & Mercer, *supra* note 8, at 1112–13.
133. *Id.*
134. *Id.* at 1111, 1119.
135. *Id.* at 1113.
136. *Id.* at 1115.
137. Koehler & Mercer, *supra* note 8, at 1110, 1114.

the population. Indeed, disclosing the population from which the advertised funds were chosen did not significantly change the willingness of those participants with below-median statistical reasoning to invest in a fund operated by the same company.[138] This indicates that, in other contexts, a stronger regulatory approach is likely necessary to protect most people.

Also, informing consumers that a large number of people have used a product could backfire. Consumers might view this information as a sign that the product is popular because it is effective, rather than view it as a warning of a selection bias in the advertisement. A final problem with merely requiring disclosure of the population is that even if consumers understand the disclosure as a warning that they need to discount the advertised result, the population disclosure does not tell them how much to discount it. Is the advertised result double the typical result? Triple? Population information provides no guidance on this important issue.

B. Warn That Advertised Results Are Atypical

Another possible disclosure-based regulatory approach is to require advertisements of atypical results to warn that the results are not typical. This is a more direct approach than merely disclosing the population from which the advertised sample is drawn. For a population disclosure to be effective, people must infer from it that the advertised sample is biased. In contrast, an atypicality warning provides this conclusion for them.

This regulatory approach has been used before. Recall that the FTC amended its Guides Concerning the Use of Endorsements and Testimonials in Advertising in 2009.[139] Prior to these amendments, the Guides provided a safe harbor for advertisements featuring atypical results that also contained a disclaimer warning that the advertised results were not typical.[140]

However, the FTC eliminated this safe harbor in 2009. This change was based largely on two studies conducted for the FTC that found that disclaimers of typicality do not sufficiently alert consumers to selection biases.[141] In one of these studies, participants were shown a testimonial advertisement for a dietary supplement. The study found that "despite the presence of strongly worded, highly prominent disclaimers of typicality, between 44.1% and 70.5%" of the participants believed that the supplement would benefit "at least half of the people who try it."[142]

Similarly, in the second study, participants were shown testimonial advertisements for

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138. *Id.* at 1117–18.

139. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 74 Fed. Reg. 53,124 (Oct. 15, 2009) (to be codified at 16 C.F.R. pt. 255).

140. The Guides stated that any testimonial relating to a consumer's experience regarding a key attribute of a product or service "will be interpreted [by the FTC] as representing that the endorser's experience is representative of what consumers will generally achieve with the advertised product in actual, albeit variable, conditions of use. Therefore, unless the advertiser possesses and relies upon adequate substantiation for this representation, the advertisement should either clearly and conspicuously disclose what the generally expected performance would be in the depicted circumstances *or clearly and conspicuously disclose the limited applicability of the endorser's experience to what consumers may generally expect to achieve*." *Id.* at 53,129 (emphasis added).

141. Guides Concerning the Use of Endorsements and Testimonials in Advertising, 73 Fed. Reg. 72,374, 72,378 (Nov. 28, 2008) (to be codified at 16 C.F.R. pt. 255).

142. *Id.* at 72,379.

a weight-loss program, dietary supplement, or business opportunity.[143] Even when the advertisements contained disclaimers that the advertised "[r]esults [are] not typical" or that "[t]hese testimonials are based on the experiences of a few people [and] [y]ou are not likely to have similar results," between 22.6% and 50.8% of participants believed that "at least half of new users would achieve results similar to those experienced by the endorsers featured in the advertisements."[144]

These studies indicate that a large percentage of consumers will be misled by advertising of atypical results despite warnings that the results are atypical. In addition, merely warning that the advertised results are atypical has another limitation. Like disclosing the population, this warning doesn't tell people how much they should discount the advertised results.

C. Require Disclosure of Typical Results

Another disclosure-based regulatory approach is to require advertisements of atypical results to also explicitly disclose typical results. For example, imagine a weight-loss product that typically causes people to lose 10 pounds. An advertisement for the product would be permitted to feature a user who lost 30 pounds only if the advertisement also discloses that users typically lose only 10 pounds. This disclosure goes beyond a "results not typical" disclaimer. Although an atypicality disclaimer informs consumers of a selection bias, it does not inform them of the extent of the bias. Requiring disclosure of typical results provides this missing information.

As discussed in Section V.B, this is the current approach of the FTC's Guides Concerning the Use of Endorsements and Testimonials in Advertising.[145] An experiment conducted for the FTC indicates this approach can be helpful. In that experiment, some participants were shown a weight-loss program advertisement that contained multiple testimonials of people claiming to have lost 24–36 pounds using the program.[146] In the absence of disclosures, 67% of participants believed that new users of the program could, on average, expect to lose at least 20 pounds.[147] In addition, other participants were shown a version of the same advertisement, in which the testimonials were instead from people claiming to have lost 48–72 pounds. Thirty-nine percent of those participants believed that new users of the program could, on average, expect to lose at least 40 pounds.[148] However, having these advertisements also contain a disclosure that "[t]he average [program] user loses about 10 pounds in three months" caused consumers to have substantially lower expectations. In particular, only 46% of the participants seeing the 24–36 pound testimonials believed that new users could expect to lose at least 20 pounds, and only 10% of the participants seeing the 48–72 pound testimonials believed that new users could expect to lose at least 40 pounds.[149]

Although requiring disclosure of typical results is helpful, it is far from perfect. Even with information about typical results, atypical testimonials still greatly inflate consumer

143. *Id.* at 72,378.
144. *Id.* at 72,379.
145. *See supra* Section V.B (discussing the FTC's regulation of testimonials in advertisements).
146. HASTAK & MAZIS, *supra* note 35, at 2.
147. *Id.* at tbl.3.
148. *Id.*
149. *Id.*

expectations. For example, 46% of the participants shown the 24–36 pound testimonials, and 42% of the participants shown the 48–72 pound testimonials, still believed that new users could expect to lose at least 20 pounds, even though the advertisement explicitly disclosed that the average user loses only "about 10 pounds."[150] Thus, it appears that disclosure of typical results can reduce—but not nearly eliminate—the misleading effect of atypical testimonials.

Importantly, although providing typical results makes an atypical testimonial less misleading, it does not make the atypical testimonial itself substantially more useful. Rather, it provides only a little context for the atypical testimonial. For example, imagine a testimonial claiming a 30-pound weight loss. Disclosing that the typical user loses only 10 pounds informs consumers that the person in the testimonial had a result that is three times more (or 20 pounds more) than is typical. From this, consumers might infer that the testimonial is quite atypical, but without more information about the distribution of results, consumers still would not know how common it is to lose at least 30 pounds.

D. Require Disclosure of Degree of Atypicality

Supplementing an advertisement of atypical results with a disclosure of typical results can give only a general impression of the advertised results' atypicality. However, disclosure of more specific information about the degree of the advertised results' atypicality could be required. For example, an advertisement featuring a 30-pound weight-loss testimonial could be required to disclose that "only 2% of people [or 2 in 100 people] who use this product lose 30 pounds or more." Indeed, the FTC has taken a similar approach in its Business Opportunity Rule. That Rule requires any seller who makes an earnings claim[151] in connection with the promotion, sale, or offer to sell a business opportunity, to include an earnings claim statement that provides "the number and percentage of all persons who purchased the business opportunity . . . who achieved at least the stated level of earnings."[152]

This approach has the advantage of being more precise about the advertised results' atypicality. For example, consider again an advertisement for a weight-loss product featuring someone who lost 30 pounds using the product. If the advertisement was only required to also disclose that people on average lose five pounds, consumers might correctly infer that losing 30 pounds is unusual. In contrast, telling them that 2% of users lose at least 30 pounds informs them exactly how unusual it is. Even more useful information could be provided by requiring disclosure of the full distribution of results. For example, the advertisement could state—or use a graph to show—that "32% of users lose no weight, 20% of users lose between 1 and 5 pounds, 16% of users lose between 6 and 10 pounds, 12% of users lose between 11 and 15 pounds," etc.

Unfortunately, providing information about the degree of the advertised results' atypicality might confuse rather than inform consumers. The general population suffers

150. *Id.*

151. The Business Opportunity Rule defines an earnings claim broadly: "any oral, written, or visual representation to a prospective purchaser that conveys, expressly or by implication, a specific level or range of actual or potential sales, or gross or net income or profits." Business Opportunity Rule, 16 C.F.R. § 437.1(f) (2012).

152. *Id.* § 437.4(a)(4)(v).

from widespread innumeracy, including with regard to percentages and proportions.[153] For example, in one study, three highly-educated groups of adults were each asked three questions: (1) how many times would a fair, six-sided die come up even (i.e., 2, 4, or 6) if rolled 1000 times, (2) if 1000 people buy a lottery ticket and the chance of winning a prize is 1%, what number of people would win a prize, and (3) if the chance of winning a prize in a sweepstakes is 1 in 1000, what percentage of sweepstakes tickets will win the prize.[154] In all three groups, only between 15% and 21% of participants answered all three questions correctly, and only another 16% to 28% had two correct answers.[155] Similarly, in another study, women of above-average literacy were asked (1) how often a coin flipped 1000 times could be expected to come up heads, (2) what 1% of 1000 is, and (3) what 1 in 1000 is in percentage terms.[156] Only 16% of participants answered all three questions correctly, and only another 26% had two correct answers.[157]

This widespread innumeracy is likely to limit the effectiveness of disclosures about the degree of atypicality of advertised results. In addition, requiring advertisements to provide information about the distribution of possible results risks an information overload problem. When a disclosure becomes too long or complicated, people can become overwhelmed and fail to read, understand, or assimilate the information in the disclosure.[158]

E. Warn Against Relying on Advertised Results

Another disclosure-based regulatory approach is to explicitly discourage consumers or investors from relying upon the advertised atypical results. Rather than alerting people to the existence of a selection bias or providing more information about this bias (e.g., the degree of atypicality), this approach directly informs people of the ramifications of the selection bias: the advertised results are not very helpful predictors of the reader's own likely results.

The SEC-mandated warning in mutual fund performance advertisements that "past performance does not guarantee future results" takes this approach.[159] To test the effectiveness of this warning, Professors Molly Mercer, Alan Palmiter, and I conducted a controlled experiment.[160] Participants read a version of a performance advertisement for a fictional mutual fund that had outperformed its peers in the past.[161] Versions of the advertisement differed in whether the advertisement warned against relying upon the fund's past returns and in the prominence and strength of this warning. After viewing the

153. Ben-Shahar & Schneider, *Mandated Disclosure*, *supra* note 17, at 712.

154. Isaac M. Lipkus et al., *General Performance on a Numeracy Scale among Highly Educated Samples*, 21 MED. DECISION MAKING 37, 40 & tbl.2 (2001). Only between 6% and 16% of the people in each group had a high school education or less. *Id.* at 39 tbl.1.

155. *Id.* at 40–41 & tbl.2–3.

156. Lisa M. Schwartz et al., *The Role of Numeracy in Understanding the Benefit of Screening Mammography*, 127 ANNALS INTERNAL MED. 966, 969 (1997).

157. *Id*.

158. Ben-Shahar & Schneider, *Mandated Disclosure*, *supra* note 17, at 687.

159. Advertising by an Investment Company as Satisfying Requirements of Section 10, 17 C.F.R. § 230.482(b)(3)(i) (2014).

160. Molly Mercer et al., *Worthless Warnings? Testing the Effectiveness of Disclaimers in Mutual Fund Advertisements*, 46 J. EMPIRICAL LEGAL STUD. 429, 443–58 (2010).

161. The advertisement closely resembled an advertisement for a real mutual fund that had recently appeared in *Money* magazine. *Id.* at 445.

advertisement, participants were asked about their expectations regarding the advertised fund's future returns and how likely they would be to invest in the fund.

The experiment's results suggest that the current SEC-mandated warning is completely ineffective. Participants who viewed the version of the advertisement containing that warning did not have lower expectations regarding the fund's future returns, nor were they less likely to invest in the fund, than were participants who viewed a version that had no warning whatsoever.[162] Thus, it appears that the SEC-mandated warning does not protect investors from the selective advertising of mutual fund returns.

However, this result might have occurred because the SEC-mandated warning is very weak. It merely warns that past returns do not "guarantee" future results, not that they are a poor predictor of them. A stronger warning against relying upon past returns might be more effective. Thus, in our study, we also tested a stronger warning: "Do not expect the fund's quoted past performance to continue in the future. Studies show that mutual funds that have outperformed their peers in the past generally do not outperform them in the future. Strong past performance is often a matter of chance." We found this warning to be much more effective, reducing participants' expectations regarding the fund's future returns and their willingness to invest in the fund by 12–23%, depending on the measure used.[163] In fact, by some measures, it caused participants to completely disregard the advertised high past returns.[164]

This result suggests that this warning against relying upon advertised results could be an effective means of addressing selection biases in advertisements, even if the warning does not mention the selection bias. This warning's success might be attributable to it being more direct than merely warning of a selection bias's existence. For a disclosure of a selection bias to be effective, the reader must understand that a selection bias exists and also understand the implication of the bias: that the advertised results should be discounted. As discussed above, however, even if people understand that a selection bias exists and is troubling, they still might not know how to react to that information.

In contrast, explicitly warning against relying upon advertised results does not require the reader to understand the importance of, or even be aware of, the selection bias. Instead it focuses on the implications of the selection bias, i.e., that the advertised results are untrustworthy predictors of the reader's own likely results. This could be beneficial because many people likely would not draw correct inferences if only provided information about the existence of a sample bias.[165] Like mere warnings of selection bias, however, even these stronger warnings still do not tell consumers how much to discount the advertised results. This likely would result in readers underdiscounting or overdiscounting the results.

VII. THE CASE FOR PROHIBITING ADVERTISING OF ATYPICAL RESULTS

All of the regulatory approaches discussed in the previous part of this Article share an

162. *Id.* at 456.

163. *Id.* at 457.

164. *Id.* at 453.

165. For example, recall that a study found that disclosing the population from which a sample in a mutual fund advertisement is drawn did not significantly change the behavior of those participants (university students taking business classes and expert investors) who had below-median statistical reasoning ability. Koehler & Mercer, *supra* note 8, at 1117–18.

important characteristic: each attempts to make advertisements of atypical results less misleading by providing additional information. Although some of these approaches appear more effective than others, a substantial percentage of people likely will still be misled by atypical results regardless of which of these approaches is used. This suggests that a different approach might be necessary. In particular, regulators should consider prohibiting the advertisement of atypical results. Unlike disclosures, which provide additional information to consumers, such a prohibition provides less information. Some people will no longer learn of certain atypical results that other product users have attained.

Some federal agencies have prohibited certain types of advertisements of atypical results. As discussed above, the FDA appears to prohibit testimonials of atypically positive results in direct-to-consumer pharmaceutical advertisements.[166] In addition, in the past, the SEC had prohibited equity mutual funds from advertising their past returns.[167]

A wider ban on advertising atypical results might be wise. Advertisements of atypical results provide very little useful information, and as a number of legal scholars have argued, prohibiting certain advertising claims that provide little, if any, value to consumers is justifiable.[168] Consider a weight-loss product advertisement featuring someone who lost 30 pounds. The only information the testimonial actually provides is that there exists at least one person who lost 30 pounds using the product. To a reasonable consumer, this fact should be virtually meaningless; the experience of a single person provides virtually no useful information regarding the consumer's own possible results.

Of course, the purpose of such an advertisement is not to convey that *someone* lost 30 pounds using the product. Advertising is expensive, so it is unimaginable that a company would use an advertisement designed merely to convince consumers that one product user lost 30 pounds. Instead, the purpose of the advertisement is to convince consumers that they too are likely to lose—or at least have a realistic chance of losing—that much weight as well. Indeed, the studies discussed above confirm that is precisely the message that a large percentage of consumers take away from the advertisement, even in the presence of disclosures disclaiming the advertised result's typicality.[169] They continue to believe that the advertised experience is at least close to being typical.

Similarly, the purpose of a mutual fund performance advertisement obviously is not to inform potential investors of the fund's historical returns. Rather it is to persuade them that the fund is likely to continue to perform well in the future. The tendency of investors

166. *See supra* Section V.C (discussing FDA regulation of testimonials in pharmaceutical advertisements).

167. *See* Palmiter & Taha, *supra* note 20, at 323 (discussing the SEC's 1977 proposal to permit mutual fund performance advertisements). In theory, prohibiting all mutual fund performance advertisements goes beyond only prohibiting advertising atypical returns. As a practical matter, however, the two approaches are the same. As discussed earlier, mutual funds generally only use performance advertisements for their strong-performing funds. Also, performance advertisements are much more prevalent in bull markets, rather than bear markets, because bull markets result in higher returns to advertise. *See supra* notes 8–10 and accompanying text (providing an overview of how mutual fund companies select which funds to advertise).

168. *See, e.g.*, Beales et al., *supra* note 52, at 534 ("[E]nforcement costs aside – there is no reason not to forbid" claims that "contribute nothing to consumer welfare . . . . In some instances the truthful information conveyed by a claim . . . may be of so little value that there is no reason to preserve it by permitting the claim."). *See also* Richard Craswell, *Regulating Deceptive Advertising: The Role of Cost-Benefit Analysis*, 64 S. CAL. L. REV. 549, 584 (1991) (noting, in regard to another type of claim, that "if nothing would be lost by prohibiting such a claim, the cost-benefit analysis would almost surely argue in favor of prohibition").

169. *See supra* notes 142–50 and accompanying text (discussing studies of how consumers interpret testimonials in advertising).

to buy funds with high past returns[170] and the effectiveness of mutual fund performance advertising[171] show that investors believe this message.

In summary, the very purpose of advertising atypical results is to mislead consumers and investors. The various disclosures discussed in this Article can, at best, reduce the misleading effect of these advertisements but are very unlikely to come close to eliminating it. For example, consider a weight-loss product advertisement featuring a 30-pound weight-loss testimonial. If the advertisement contains no additional information, it is likely to mislead a large percentage of consumers into believing that a 30-pound weight loss is typical for product users.[172] If the advertisement also warns that the testimonial is not typical, then more consumers might understand that a 30 pound weight loss is atypical.[173] If, instead of warning that the testimonial is "not typical," the advertisement states that "users of this product typically lose 10 pounds," then even more consumers will understand that the 30 pound weight loss is atypical.[174] However, even then, a large percentage of consumers will still believe that the typical weight loss is 30 pounds, or at least substantially more than 10 pounds.[175]

In addition, although these disclosures reduce the misleading effect of an atypical testimonial, they don't actually make the testimonial more useful to consumers. Knowing that the typical weight loss is 10 pounds is valuable information to a rational consumer. This can indicate how much weight the consumers themselves are likely to lose, and thus can help them make informed decisions regarding whether to buy the product or, instead, attempt some other weight-loss approach. Thus, having advertisements disclose typical results can be very helpful to consumers. Perhaps regulators should consider requiring such a disclosure even in advertising that does not feature atypical results. Any advertisement for a weight-loss product—even an advertisement that does not feature a particular weight-loss amount—inherently implies that the product is effective. Requiring disclosure of the typical weight lost would help inform consumers regarding the results they could expect.

In contrast, even when supplemented with the information regarding typical results, an atypical testimonial itself still provides virtually no useful information. The testimonial still logically implies only that there exists at least one person who achieved the advertised atypical result. Without additional information regarding the likelihood of that result, a reasonable consumer should still essentially ignore the testimonial.

Is it possible to make advertised atypical results actually useful to consumers rather than just less misleading? In theory, providing information about the degree of the results' atypicality could do this. For example, an advertisement featuring a 30-pound weight-loss testimonial that also discloses that "2% of (or 1 in 50) users lose 30 pounds or more" would inform consumers that such a large weight loss is possible but highly unlikely. In deciding whether to buy the product, a reasonable consumer should take this small probability into

170. *See* Palmiter & Taha, *supra* note 20, at 298–300 (discussing studies showing that "past performance is perhaps the most important factor to investors choosing among equity mutual funds").

171. *See* Jain & Wu, *supra* note 9, at 957 (finding that investors invested approximately 20% more in equity mutual funds featured in performance advertisements in *Barron's* or *Money* magazines than in similar, unadvertised funds).

172. *See supra* notes 35–49 and accompanying text (discussing studies of the effect of atypical testimonials).

173. *See supra* notes 141–44 and accompanying text (discussing studies of the effect of disclaiming testimonials' typicality).

174. *Supra* Section VI.C.

175. *Id.*

account but not give it very much weight (pun intended).

However, even this approach might cause more harm than good. I am unaware of any test of the effectiveness of this approach; however, tests of other disclosures strongly suggest that a substantial percentage of consumers will still be misled by the advertised atypical result. Recall, for example, that even when advertisements explicitly state what typical results are, large percentages of consumers still believe the advertised atypical result is typical, or at least that the typical results are substantially more than what the disclosure states is typical.[176] Thus, even a disclosure that explicitly states the typical result fails to prevent an advertised atypical result from misleading consumers.

It is unlikely that a disclosure that only states how atypical the advertised result is would be more effective. This is especially true given the widespread innumeracy among consumers. Recall that a large percentage of people do not understand the meaning of percentages and proportions, which are necessary to explain the degree of an advertised result's atypicality.[177]

There is another reason for doubting that any disclosure could make an advertised atypical result not misleading. For any disclosure to be effective, consumers have to read it. The experiments discussed in this Article explicitly asked participants to read an advertisement and then answer questions related to it. People who, in real-life situations, only happen to come across the advertisement might not read disclosures in it as closely as participants in the experiments did.

In summary, creating a disclosure that can truly prevent atypical results from being misleading might be impossible. This is unsurprising. A testimonial provides consumers a vivid, concrete example of someone who had an atypically positive experience with a product. It is probably naïve to believe that a mere disclosure can eliminate the undue influence of such a testimonial. Perhaps the only true counterweight would be to require the advertisement to also feature a vivid testimonial from someone who had an equally atypical *negative* experience with the product, e.g., "I actually gained 10 pounds using this product."

Advertisements of atypical results provide minimal useful information and are very difficult to prevent from being misleading. Thus, rather than mandating disclosures, regulatory agencies should seriously consider prohibiting the advertisements. Indeed, this was the approach recommended to the FTC by the attorneys general of more than 30 states in 2007 when the FTC was revising its Guides Concerning the Use of Endorsements and Testimonials in Advertising. Citing the studies discussed above that were conducted on behalf of the FTC, the attorneys general reasoned that

> the most direct and, likely most effective, approach to reducing deceptive endorsements would be to require that endorsements actually reflect the typical experience of users of the advertised product or service. If an endorsement does not reflect that typical experience, it can be expected to mislead a significant percentage of the public, regardless of the presence of disclaimers, and it should be prohibited.[178]

In addition, if a disclosure were mandated that truly eliminated the misleading effect

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176. *Id.*

177. *Supra* notes 153–57 and accompanying text.

178. Attorneys General Letter, *supra* note 1. The letter actually is from the Attorneys General of 32 states and Guam and from the Executive Director of the Office of Consumer Protection of Hawaii.

of atypical results, then advertisers likely would stop advertising atypical results anyway. For example, if a disclosure caused consumers to understand that a weight-loss product advertisement featuring someone who lost 30 pounds means only that at least one person lost 30 pounds, then the advertisement very likely would be ignored by consumers. Advertisers would not be willing to pay for such an ineffective advertisement.[179] However, as discussed above, developing such an effective disclosure—and ensuring that consumers read it—is very difficult. Simply prohibiting the advertisement of atypical results is a much more direct and effective way of reaching the same outcome.

Another reason that prohibiting the advertisements is preferable to supplementing them with disclosures is the so-called "accumulation problem" of disclosures. This refers to the fact that each disclosure competes with every other disclosure in people's lives for attention: "One disclosure by itself may seem trivial, but en masse disclosures are overwhelming."[180] To the extent that consumers and investors who see a disclosure regarding atypical results will then pay less attention to important disclosures on other topics, a disclosure requirement is undesirable. Prohibiting advertisements of atypical results—rather than supplementing them with disclosures—reduces the number of disclosures competing for people's attention.

However, prohibiting advertisements of atypical results also raises potential problems. For example, it has been argued that advertisements of atypical results provide potentially valuable information to consumers regarding the range of possible outcomes from using a product.[181] For products for which many different results are possible (such as weight-loss products, mutual funds, or business opportunities), information regarding the range of possible results might help consumers make informed decisions.

In reality, however, advertisements featuring atypical results provide minimal information even regarding the range of possible results. For example, the only information that an atypical weight-loss testimonial truly provides is that weight loss as high as that in the testimonial is possible. It does not indicate that this is the highest possible weight loss, and it does not give any hint as to what the worst possible result could be. More importantly, it does not provide any information regarding the likelihood of the advertised weight loss. To a reasonable consumer, the mere fact that a result is possible—without any information regarding its likelihood—should be virtually meaningless.

Another possible benefit of advertisements of atypical results is that they can give consumers hope that they themselves might also achieve a very positive result with the product. Indeed, arguably part of what a consumer is buying in a weight-loss product is the hope of a very positive outcome.[182] Thus, a prohibition on advertising atypical results might harm consumers by giving them less hope.

However, the problem with advertisements of atypical results is that they create unrealistic expectations. As discussed in Part II, a large percentage of people view an advertised atypical result not as just a possible outcome—and thus a reason for hope—but

179. *See* Beales et al., *supra* note 52, at 534 ("In some cases, a triggered disclosure which is long or burdensome or otherwise contrary to the advertiser's interest may so discourage the triggering claim as to effectively prohibit it.").

180. Ben-Shahar & Schneider, *Mandated Disclosure*, *supra* note 17, at 689–90.

181. David A. Friedman, *Debiasing Advertising: Balancing Risk, Hope, and Social Welfare*, 19 J.L. & POL'Y 539, 547 (2011).

182. *Id.* at 581.

instead as the typical outcome.[183] Many others do not view the atypical result as typical, but the advertisements still inflate their view of what is typical.[184] The unrealistic expectations created by atypical results can lead people to make poor purchasing and investing decisions, causing disappointment, financial loss, and even physical harm.

In addition, even if advertisements only of typical results were permitted, people will still have unrealistic hope. Because of a prevalent optimism bias, people will still erroneously expect that their own results will be better than the typical results. Indeed, researchers have documented over-optimism across a wide variety of contexts, ranging from overestimating the probability of outliving one's peers to underestimating the probability of getting fired or divorced.[185] So even if an advertisement presents only typical results, consumers generally will believe that they will achieve better than that.

Thus, prohibiting advertising of atypical performance will not eliminate even unrealistic hope. People will still expect—not just hope—that they will have better-than-typical results. The prohibition would just ensure that they are not misled regarding what result is typical. It would likely reduce, but not eliminate, over-optimism.

Compliance costs are another possible problem with prohibiting advertisements of atypical results. If advertisers were allowed to advertise only typical results, advertisers would have to compile and analyze the results of people who use the product to determine what results are typical. This could be costly, and for small companies the cost could be so high that they might not be able to afford to produce advertisements even of typical results.[186]

This problem, however, equally applies to many of the disclosures discussed above. For example, requiring advertisements of atypical results to also disclose typical results requires advertisers to determine what results are typical. Similarly, disclosure of the degree of the advertised results' atypicality requires determination of the frequency that the advertised result is attained.

These compliance costs should not be troubling to regulators. As previously discussed, an advertisement of an atypical result—at least without information regarding the degree of its atypicality—provides virtually no useful information. Thus, very little harm would result from prohibiting advertising of results of which the typicality or degree of atypicality is not substantiated. Moreover, if the advertisement is permitted, a substantial percentage of consumers will erroneously understand the advertised results to be typical, even if the advertisement explicitly disclaims typicality.[187] In summary, advertisements of results of which the typicality or degree of atypicality is not substantiated will be essentially ignored by astute consumers and investors, but will mislead non-astute ones. Thus, overall, the disappearance of these advertisements likely will benefit consumers and investors, not harm them.

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183. *See supra* notes 35–49 and accompanying text (discussing studies of the effect of atypical testimonials).

184. *See, e.g.*, *supra* notes 149–50 and accompanying text (discussing studies of the effect of atypical testimonials accompanied by disclosures of typical results).

185. *See, e.g.*, Neil D. Weinstein, *Unrealistic Optimism About Future Life Events*, 39 J. PERSONALITY & SOC. PSYCHOL. 806, 810 (1980) (finding overoptimism across a wide range of possible positive and negative life events).

186. *See* Advertising Association's Comments, *supra* note 2, at 12 (stating that some advertisers would stop using consumer endorsements if doing so required them "to spend the thousands to millions of dollars to find the generally expected results of all claims").

187. *See supra* Section VI.B (discussing the ineffectiveness of disclaiming typicality).

A prohibition on advertisements of atypical results might pose another administrative problem: in some contexts, it is unclear how to calculate "typical" results. For example, consider a mutual fund that has only been in existence for a few years but has produced very high returns throughout its short life. A mutual fund company could argue that these high returns are typical for this mutual fund.

However, as discussed above, those high past returns are not likely to continue in the future[188] and thus should not be relevant to investors. In contrast, the long-run past returns of the asset classes in which a fund invests are somewhat predictive of a fund's future returns. For example, over the long term, a mutual fund that invests in small-capitalization stocks is likely to outperform a mutual fund that invests in large-capitalization stocks, all else equal.[189] The reason that atypical results would be prohibited is that they are not predictive of an investor's own likely future returns. The long-term returns of the asset classes are a better of measure of typical returns. Thus, the SEC could allow mutual funds to advertise the long-term returns of the asset classes in which the funds invest (minus the funds' expense ratios).

In other contexts, typical results depend on a number of factors. For example, typical weight loss from a weight-loss program usually depends on factors such as a person's age, gender, and initial weight.[190] In such cases, an advertisement for a weight-loss program that features a picture and testimonial of someone who lost weight might be deemed to be typical if the advertised weight loss was typical of people with the same characteristics as the person providing the testimonial. For other types of advertisements, typical results could be calculated as the median result of all users overall. Of course, none of these possible typicality measures are perfect. However, despite their flaws, they provide much more useful information—and are much less likely to mislead people—than are the extreme, atypical results featured in advertisements today.

Finally, prohibiting advertisements of atypical results might also raise a First Amendment issue. Because atypical results do not have *zero* predictive ability for consumers' and investors' own results, a court might deem these advertisements merely potentially misleading, rather than inherently misleading. Thus, a court might only permit a regulatory agency to mandate that these advertisements contain additional disclosures, such as those examined in this article, rather than prohibit the advertisements.[191] However, as discussed above in Part VI, disclosures would be unlikely to prevent these advertisements from being misleading.[192]

VIII. CONCLUSION

Advertisements featuring atypical results are common for a wide range of products and services. Unfortunately, people viewing these advertisements assume that the results

188. Barras et al., *supra* note 62, at 181, 197; Fama & French, *supra* note 62, at 1915.

189. JEREMY J. SIEGEL, STOCKS FOR THE LONG RUN 176–79 (5th ed. 2014).

190. Adrienne Weeks, *How Many Pounds Can You Safely Lose Per Month?*, LIVESTRONG.COM (Apr. 23, 2015), http://www.livestrong.com/article/275951-how-many-pounds-can-you-safely-lose-per-month/.

191. *See* Int'l Dairy Foods Ass'n v. Boggs, 622 F.3d 628, 639–40 (6th Cir. 2010) (striking down prohibition of a potentially misleading claim on milk labels because requiring the labels to contain a disclaimer would be sufficient).

192. *See supra* Part VI (discussing how disclosures would likely be ineffective at preventing consumer and investor misconceptions).

are much more typical than they really are. As a result, these advertisements cause people to greatly overestimate their own likely results from using the product or service. Indeed, that is the very purpose of these advertisements. As a result, these advertisements lead consumers and investors to make poor purchasing and investing decisions, causing disappointment, financial loss, and even physical harm.

Advertisements of atypical results are regulated by a number of federal agencies. These agencies' regulatory approaches differ greatly, but most require these advertisements to contain additional disclosures. Unfortunately, such disclosure-based approaches are not very effective. Large percentages of consumers and investors are misled by advertisements of atypical results despite the presence of disclosures. Thus, in light of the harm these advertisements cause and the minimal useful information they provide, regulators should seriously consider prohibiting advertisements of atypical results instead.