

ORIGINAL RESEARCH

Wall Street or Las Vegas? Entertainment Motives and Purchases of Meme Stocks or Social-Media-Trending Investments Among Young Investors

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Abstract

This paper examines whether young investors who see investing as entertainment are more likely to report buying a meme stock or another investment trending on social media. I use the 2024 FINRA National Financial Capability Study Investor Survey, which includes 213 respondents ages 18 to 34. Among 197 respondents with valid motive and purchase responses, weighted purchase rates are 21.9 percent for not at all, 37.5 percent for somewhat, and 45.1 percent for very well. The primary weighted model includes 183 respondents and adjusts for objective investment knowledge, risk willingness, experience, and portfolio value. Entertainment odds ratios are 1.50 and 1.84, with a joint p-value of .386. The very-well estimate has a 95 percent confidence interval of 0.76 to 4.46, leaving H1 inconclusive. The survey cannot establish whether risk willingness precedes entertainment or partly reflects it. The analysis does not support the predicted protective interaction with knowledge or a clear entertainment association with frequent trading. The positive knowledge coefficient is exploratory and is not statistically significant in the alternative-score or unweighted checks. In the primary sample, the 58 purchasers averaged 4.31 correct answers out of ten, compared with 3.68 for the 125 non-purchasers, using WGT1 weights. Purchasers scored higher descriptively, but both groups averaged fewer than half the questions correct; this does not establish high knowledge.

Keywords: behavioral finance; young investors; meme stocks; entertainment motive; investment knowledge; social media

1. Introduction

A stock can be a serious investment and an internet trend at the same time. The 2024 FINRA investor report shows how common that overlap is among younger investors. Among investors ages 18 to 34, 29 percent reported buying a meme stock or another investment trending on social media. In the same age group, 50 percent said that entertainment, excitement, fun, or playing a game described why they invest. Yet 95 percent also selected making money over the long term. These figures show that enjoyment and long-term goals can exist together (Lin et al. 2025).

These percentages describe motives and purchases, but they do not show whether the entertainment response adds information beyond other investor traits. A person who enjoys investing may also accept

more risk, have less experience, hold a smaller portfolio, or rely more on online cues. These characteristics may precede the entertainment motive or develop alongside it. Comparing adjusted and unadjusted associations can describe this overlap, but it cannot establish which characteristics caused a purchase.

This paper tests that distinction among investors ages 18 to 34. The main question is whether the entertainment motive is associated with a reported meme or trending purchase after accounting for objective knowledge, risk willingness, experience, and portfolio value. A second question is whether objective knowledge weakens the entertainment relationship. Social-media and mobile-app reliance are placed in a sensitivity model because they could be prior influences, shared causes, or part of the pathway from interest to purchase. Their role cannot be determined from this cross-sectional survey.

This paper extends research on social media and investment knowledge by focusing on entertainment as a stated motive. Pandey and Guillemette (2025) examined social-media use and meme-stock trading in the 2021 NFCS. Here, the 2024 survey is used to ask whether enjoyment is associated with reported purchases among young investors after measured investor characteristics are included. This is a focused extension, not a test of how app design causes trading. A positive adjusted association would suggest that the motive adds information beyond the included traits. Wide intervals, as found here, leave that question unresolved. The contribution is to separate the descriptive pattern from what the adjusted estimates can establish.

2. Prior Research and Hypotheses

2.1 Entertainment, trading, and gamification

Behavioral finance recognizes that people may trade for enjoyment as well as expected return. Dorn and Sengmueller (2009) connected survey responses with brokerage records from 1,000 German investors. Investors who described investing or gambling as enjoyable traded about twice as much as other investors. The study compares stated motives with observed account behavior.

An entertainment motive is not the same as a gamified app. Chapkovski, Khapko, and Zoican (2026) randomly assigned participants to trading interfaces and also allowed participants to choose between designs. Hedonic game features raised trading volume by 5.17 percent, but the authors found that self-selection explained 70 percent of the activity difference between platform groups. Their result suggests that people drawn to exciting financial environments already differ from other investors. That is why this paper controls for traits that may be associated with the entertainment motive.

Philander (2023) found that meme-asset owners in a U.S. internet sample reported lower views of financial risk, more confidence, and greater risk of gambling problems. These findings do not show that every trending purchase is gambling, and the FINRA entertainment question does not measure gambling problems.

2.2 Social media and investment knowledge

Using the 2021 NFCS, Reiter, Qing, and Nations (2023) found that people who used social media for investment advice were younger, held lower-valued portfolios, and scored lower on objective financial knowledge. Pandey and Guillemette (2025) also used the 2021 NFCS. They reported no standalone association between investment knowledge and meme-stock trading, but a weaker social-media association at higher knowledge levels. H2 asks a related but different question: whether knowledge moderates an entertainment motive rather than social-media use. The 2024 outcome covers meme stocks and other investments trending on social media. The different predictor and outcome mean that this study is not a direct replication or a test of change since 2021.

In the 2024 survey, investors who relied on social media scored lower on a ten-item objective knowledge measure while rating their own knowledge more highly than non-users (Ko et al. 2026). This gap between objective and self-rated knowledge is one reason to use the quiz score instead of confidence as the moderator.

2.3 Hypotheses

H1. Compared with young investors who say entertainment does not describe their motive at all, those who answer somewhat or very well will have higher odds of reporting a meme-stock or social-media-trending purchase after the primary controls are included.

H2. The entertainment-related probability gaps will be smaller at higher levels of objective investment knowledge.

H3, secondary. The somewhat and very-well entertainment groups will have higher odds of reporting 11 or more trades in the past 12 months.

3. Data and Methods

3.1 Data source

The data come from the 2024 FINRA National Financial Capability Study Investor Survey. FINRA collected the online survey from July through December 2024. The file contains 2,861 adults who owned investments outside retirement accounts and had primary or shared responsibility for household investment decisions (FINRA Investor Education Foundation 2025b; Lin et al. 2025). The analysis uses the age, gender, ethnicity, education, and income fields already included in the Investor Survey file. No respondent-level merge with the State-by-State Survey was needed.

FINRA weights the Investor Survey by age and education to approximate the broader population of investors with non-retirement accounts. FINRA also warns that smaller subgroup estimates may not be representative (FINRA Investor Education Foundation 2025b). For that reason, this paper describes weighted associations in the young-investor sample. It does not claim that the 213 young respondents form a nationally representative sample on their own.

3.2 Sample construction

The target group is respondents ages 18 to 34. Of the 213 respondents in that age band, 205 gave a valid yes-or-no answer to B41. A total of 197 also gave a valid answer to the entertainment item. The primary model has 183 complete cases and 58 reported purchases. It excludes 14 of the 197 eligible respondents (7.1 percent), or 30 of the original 213 after all exclusions (14.1 percent). Within the 197-person group, six risk responses, four experience responses, and eight portfolio responses are unavailable after recoding. These counts overlap and are not added together. The 14 excluded respondents include one purchaser and 13 non-purchasers. No missing values are imputed. The alternative knowledge analysis uses 123 of the 183 primary respondents because it requires substantive answers to at least eight quiz questions.

Table 1. Sample construction

Stage	Respondents
Full Investor Survey	2861
Ages 18 to 34	213
Valid B41 outcome	205
Valid B41 and G30_3	197
Primary complete-case sample	183
Alternative knowledge complete-case sample	123
Demographic sensitivity complete-case sample	183
Digital-information sensitivity complete-case sample	175
Secondary trading complete-case sample	175

Note. Counts are unweighted. H1 and H2 use 183 primary complete cases. The alternative knowledge sample is a subset of those cases, not a further exclusion applied to every model.

3.3 Measures

Primary outcome. B41 asks whether the respondent has ever purchased a meme stock or another investment that was trending on social media. Yes is coded 1 and no is coded 0. Do not know and prefer

not to say are missing. The item is broader than a list of named stocks and does not report the asset, date, amount, or return (FINRA Investor Education Foundation 2025a). Throughout the paper, meme or trending purchases refers to this combined outcome, not to verified trades in a particular set of meme stocks.

Main predictor. G30_3 asks how well entertainment, excitement, fun, or playing a game describes why the respondent invests. The three categories are not at all, somewhat, and very well. Not at all is the reference group. The question measures a stated motive. It does not measure an app design, and respondents can also select other motives (FINRA Investor Education Foundation 2025a).

Objective knowledge. The primary score counts correct answers to ten established investment questions, from 0 to 10. It follows the FINRA brief by excluding the options item treated as a bonus and the inflation item first added in 2024. Every response other than the correct answer receives zero in the main score (Ko et al. 2026). A sensitivity score treats do not know and prefer not to say as missing, requires at least eight substantive answers, and rescales the number correct to ten.

Controls. Risk willingness is coded from 0 for unwilling to take financial risk to 3 for willing to take substantial risk. Experience is grouped as less than two years, two to less than ten years, and ten years or more. Portfolio value is grouped as less than \$50,000, \$50,000 to less than \$250,000, and \$250,000 or more. Gender, ethnicity, education, and income enter a wider sensitivity model. Age cannot vary within the public 18-to-34 category, so it cannot be added as a separate control. Social-media-group reliance and reliance on popular investments shown in mobile apps enter only the digital-information sensitivity model.

The primary model treats risk willingness as a prior preference that could influence both enjoyment of investing and speculative participation; this is a modeling assumption, not an observed time order. If an entertainment motive instead increases risk willingness, adjustment could remove part of that pathway, so the estimate is an association conditional on current risk willingness rather than a total entertainment effect. Experience could also precede the motive or partly reflect earlier entertainment-driven participation, and this survey cannot distinguish these possibilities.

3.4 Statistical analysis

The main analysis uses weighted logistic regression because the outcome has two values. Within each fitted sample, the official WGT1 weight is divided by its mean. Weighted models are primary, and unweighted models are sensitivity checks. The models use respondent-level HC1 sandwich standard errors. HC1 provides a heteroskedasticity-consistent approximation, but it is not a full survey-design variance estimator. Odds ratios are reported with 95 percent confidence intervals. Average adjusted probabilities are calculated by setting each respondent to one entertainment category at a time, predicting the outcome, and taking the weighted average.

The primary model includes entertainment category, the ten-item knowledge score, risk willingness, experience, and portfolio value. A joint Wald test evaluates the two entertainment terms together. The H2 model adds two entertainment-by-knowledge interactions. Because interactions in logit models cannot be understood from one coefficient alone, the paper also compares adjusted probabilities at observed knowledge levels (Ai and Norton 2003).

The primary model contains 58 events and nine parameters, including the intercept, or 6.4 events per parameter. The full demographic model has 4.1 events per parameter. These ratios are diagnostics, not guarantees of adequate precision. Low ratios can produce unstable estimates even when a model converges (Vittinghoff and McCulloch 2007). The primary experience reference group contains 18 respondents and only one purchaser. An exploratory sensitivity model groups experience as less than five years versus five years or more. It retains the same 183 respondents, reduces the model to eight parameters, and avoids using the sparse ten-years-or-more group as the reference. The original model is retained so that this later recoding does not replace the reported primary analysis. Alternative knowledge and unweighted models provide additional checks.

3.5 Data integrity and reproducibility

The analysis began with the official FINRA download (FINRA Investor Education Foundation n.d.). The CSV contains 2,861 rows, 105 original columns, 2,861 unique respondent IDs, and no missing or nonpositive weights. The 25 required fields, including the respondent ID, agree across the CSV, SAV, and DTA copies. Four reproduced FINRA percentages differ from the published whole percentages by at most 0.30 percentage points. During revision, a local rerun reproduced the saved aggregate model outputs, and a separate optimizer reproduced the primary coefficients within 0.000001. These are internal consistency and numerical checks. They do not replace an independent review of the code, variable definitions, or model assumptions. The accompanying code package contains no respondent-level data.

3.6 Changes from the research proposal

The original proposal was completed before model estimates were reviewed. The analysis was revised after the official files and sample counts were checked. First, the demographic fields were already in the Investor Survey, so the proposed State-by-State merge was removed. Second, R was used instead of Python, while keeping the planned logistic models, normalized weights, and HC1 standard errors. Third, the smaller primary model was used because the full demographic model was too large for 58 events. Fourth, the secondary trading result is labeled exploratory because it contains only 27 frequent traders. The two-level experience model was added after cell counts showed that the ten-years-or-more reference group contained only one purchaser.

During revision, I added analyses that were not prespecified: a weighted comparison of knowledge scores by purchase status, an unadjusted entertainment model restricted to the 183-person primary sample, and summaries of missing responses and experience-group counts. The knowledge comparison uses the original ten-item score and WGT1 weights. Comparing models within the same respondents separates changes in sample membership from changes in included variables. The experience counts help explain the uncertainty in the existing two-level sensitivity model; no new experience cutoff was chosen during this revision. A separate optimizer was also used as an internal numerical check. These additions are descriptive, exploratory, or computational checks and do not change the original hypotheses or decision rules.

4. Results

4.1 Descriptive pattern

The weighted purchase rate rises across the three entertainment categories. It is 21.9% in the not-at-all group, 37.5% in the somewhat group, and 45.1% in the very-well group. The unadjusted entertainment terms are jointly significant, $p = .038$. Compared with the not-at-all group, the unadjusted odds ratio is 2.13 for somewhat and 2.92 for very well. Restricting the unadjusted model to the same 183 respondents used in the primary model gives odds ratios of 2.08 and 2.75 and a joint p-value of .060. The change from the 197-person descriptive result therefore reflects sample selection as well as adjustment; it cannot be attributed entirely to the controls.

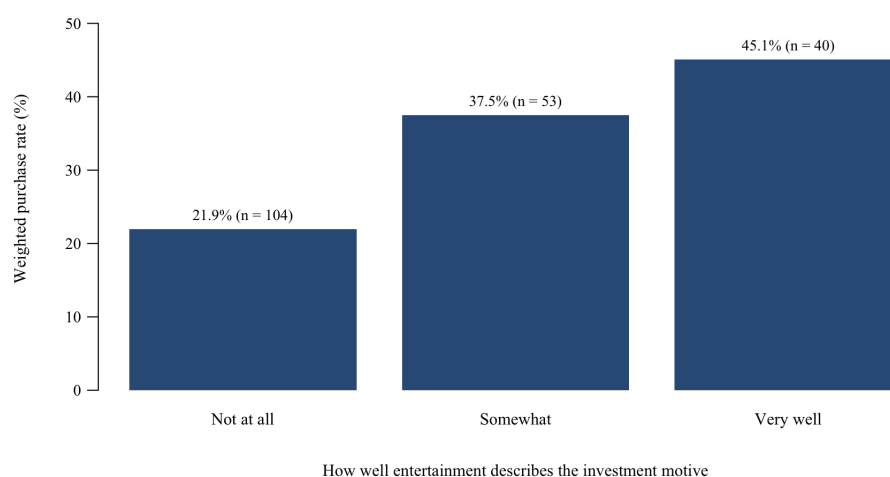


Figure 1. Weighted meme or trending purchase rate by entertainment motive. Counts are unweighted and percentages use WGT1.

Table 2 shows differences in risk willingness and information use across the entertainment groups. Above-average or substantial risk willingness rises from 45.0 percent in the not-at-all group to 68.6 percent and 73.1 percent in the two entertainment groups. Reliance on social-media groups rises from 40.4 percent to 81.0 percent and 79.4 percent. Reliance on popular investments shown in mobile apps rises from 45.3 percent to 85.1 percent and 82.3 percent. These differences show that the entertainment motive is associated with other investor characteristics.

Table 2. Weighted profile in the 197-person analysis-eligible sample

Measure	Not at all	Somewhat	Very well
Meme or trending purchase	21.9%	37.5%	45.1%
Mean objective knowledge, 0 to 10	3.66	3.94	3.82
Above-average or substantial risk willingness	45.0%	68.6%	73.1%
Investing less than five years	63.8%	78.2%	83.4%
Portfolio below \$50,000	66.6%	74.6%	64.3%
Relies on social-media groups	40.4%	81.0%	79.4%
Relies on popular investments in mobile apps	45.3%	85.1%	82.3%

Note. Group sizes are 104, 53, and 40. The purchase row and knowledge mean use every respondent in each group. The other percentages exclude missing, do-not-know, and prefer-not-to-say responses for that item. Their valid denominators range from 98 to 103, 51 to 53, and 38 to 40, respectively. All estimates use WGT1 and are descriptive.

Mean knowledge scores in Table 2 range from 3.66 to 3.94 correct answers out of ten across entertainment groups. Table 2a compares purchase groups within the separate 183-person primary sample. Purchasers averaged 4.31, compared with 3.68 for non-purchasers, a weighted difference of 0.63 points. Both groups averaged fewer than five correct answers. This unadjusted descriptive comparison does not establish a population difference, high knowledge, or better investment decisions.

Table 2a. Weighted knowledge scores by purchase status in the primary sample

Purchase status	N	Weighted mean score (0 to 10)
Purchasers	58	4.31
Non-purchasers	125	3.68
All primary respondents	183	3.89

Note. N is unweighted. Means use WGT1 and the original ten-item score in the same 183 complete cases as the primary model. Within each group, the mean is the sum of WGT1 times the score divided by the sum of WGT1. Do-not-know and prefer-not-to-say responses score zero and are retained. This comparison is descriptive; no significance or equivalence test is reported.

4.2 Primary adjusted model

Table 3. Primary weighted logistic regression

Predictor	Odds ratio	95% CI	p
Entertainment: somewhat	1.50	0.57 to 3.90	.409
Entertainment: very well	1.84	0.76 to 4.46	.174
Objective knowledge, each additional correct answer	1.24	1.01 to 1.53	.042
Risk willingness, each one-category increase	1.87	1.07 to 3.26	.027
Experience: 2 to less than 10 years	17.37	1.71 to 176.38	.016
Experience: less than 2 years	13.33	1.15 to 155.08	.039
Portfolio: \$50,000 to less than \$250,000	1.09	0.31 to 3.78	.897
Portfolio: less than \$50,000	0.92	0.29 to 2.86	.883

Note. N = 183 with 58 reported purchases. Reference groups are not at all, ten years or more of experience, and portfolio value of \$250,000 or more. HC1 standard errors are used. The joint test for the two entertainment terms is $p = .386$.

After adjustment, both entertainment estimates remain above 1, but they are smaller and imprecise. The odds ratio is 1.50 for somewhat, with a 95 percent confidence interval from 0.57 to 3.90. It is 1.84 for very well, with an interval from 0.76 to 4.46. The two terms are not jointly significant, $p = .386$. H1 does not meet the proposal's support rule, but the substantive result is inconclusive. For very well, the interval is compatible with odds 24 percent lower or as much as 4.46 times those of the not-at-all group. It therefore does not establish either a positive adjusted association or its absence.

The adjusted model estimates an odds ratio of 1.24 for each additional correct knowledge answer and 1.87 for each step toward greater risk willingness. Both confidence intervals barely exclude 1. The experience odds ratio for two to less than ten years is 17.37, with a confidence interval of 1.71 to 176.38. The reference group contains only one purchaser, so this estimate should not be read as evidence of a precisely measured, very large experience association.

The two-level experience model uses 122 respondents with less than five years of experience, including 43 purchasers, and 61 with five years or more, including 15 purchasers. Its entertainment odds ratios are 1.58 (95 percent CI, 0.61 to 4.13) for somewhat and 1.78 (0.72 to 4.40) for very well; the joint p-value is .419. The experience odds ratio is 2.29 (0.86 to 6.08). This grouping avoids the sparse reference category, but the entertainment intervals remain wide. The inconclusive H1 result therefore persists in this exploratory alternative, rather than depending only on the original experience coding.

Table 4. Average adjusted probabilities from the primary model

Entertainment motive	Probability	95% CI	Gap from not at all
Not at all	28.5%	17.2% to 39.8%	Reference
Somewhat	36.4%	21.7% to 51.0%	7.8 pp (−10.9 to 26.6)
Very well	40.7%	27.1% to 54.3%	12.2 pp (−5.4 to 29.7)

Note. pp means percentage points. The prediction averages over the observed control values in the primary sample. Both nonreference gap intervals include zero.

4.3 Investment knowledge as a moderator

H2 is not supported. The two entertainment-by-knowledge terms have a joint p-value of .093. The probability pattern also does not follow the predicted direction. At a knowledge score of two, the gaps for somewhat and very well are 12.7 and −5.6 percentage points. At a score of six, the gaps are 3.7 and 35.5 points. Most intervals are wide, and the very-well pattern becomes larger rather than smaller at the high score. The alternative knowledge model has a joint p-value of .161, and the unweighted interaction model has $p = .435$. The evidence does not show that objective knowledge protects young investors from the entertainment association.

The primary weighted model gives an odds ratio of 1.24 for each additional correct knowledge answer, with a 95 percent confidence interval from 1.01 to 1.53 and $p = .042$. This direction was not a stated hypothesis and is not consistently significant across sensitivity checks. The alternative score gives an odds ratio of 1.10, with an interval from 0.87 to 1.39 and $p = .442$. That check uses 123 rather than 183 respondents because it requires at least eight substantive answers, excluding anyone with three or more responses recorded as do not know, prefer not to say, or missing. It selects people willing or able to answer more quiz items, who may differ in confidence or knowledge; it is not a direct measure of confidence. The comparison changes both scoring and sample composition, so a change in the estimate cannot be attributed to scoring alone. The unweighted primary model, which retains 183 respondents, gives an odds ratio of 1.17, with an interval from 0.97 to 1.40 and $p = .102$. The positive weighted estimate is exploratory and does not establish high knowledge, good investment decisions, or a causal effect of knowledge on purchasing.

4.4 Social media and mobile-app sensitivity

Adding social-media-group reliance and reliance on popular mobile-app investments reduces the entertainment estimates. The odds ratios become 0.99 for somewhat and 1.63 for very well, with a joint p-value of .567. Social-media-group reliance has an odds ratio of 3.27, with a 95 percent interval from 1.16 to 9.19. The mobile-app estimate is 2.31, with an interval from 0.80 to 6.71. This model also excludes eight of the primary respondents because digital-information responses are unavailable. Changes in the estimates therefore reflect both added variables and a changed sample. Because the survey records all variables at one time, this comparison cannot establish mediation. The descriptive patterns in Table 2 also show overlap between digital information use and entertainment motives.

4.5 Frequent trading

The original trading categories among young respondents are 14.0 percent with no trades, 44.3 percent with one to three, 30.6 percent with four to ten, and 11.1 percent with 11 or more trades in the past year. The secondary binary model contains 175 respondents and only 27 frequent traders. The entertainment terms are not jointly significant, $p = .542$. Because the model has only three events per parameter, H3 is not supported and the estimate is treated as exploratory.

Table 5. H1 sensitivity checks

Model	N	Events / parameter	OR somewhat	OR very well	Joint p
Unadjusted entertainment only	197	19.7	2.13	2.92	.038
Unadjusted, primary sample	183	19.3	2.08	2.75	.060
Primary weighted model	183	6.4	1.50	1.84	.386
Full demographic sensitivity	183	4.1	1.39	1.69	.536
Digital information sensitivity	175	5.1	0.99	1.63	.567
Two-level experience sensitivity	183	7.2	1.58	1.78	.419
Alternative knowledge sensitivity	123	5.2	1.70	2.61	.290
Unweighted primary	183	6.4	1.56	2.38	.123

Note. All adjusted models include knowledge, risk willingness, experience, and portfolio value unless the label states an addition or alternative. The two unadjusted rows distinguish the 197-person eligible sample from the 183-person primary sample. The alternative knowledge row changes both scoring and sample membership. Every model converged and had a full-rank design matrix; these checks do not establish adequate precision. The two-level experience model uses less than five years versus five years or more. The unadjusted comparison in the 183-person primary sample was added during revision.

5. Discussion

Entertainment is associated with a higher unadjusted rate of meme or trending purchases. It also coincides with greater risk willingness, less experience, and heavier use of digital cues. After adjustment for knowledge, risk willingness, experience, and portfolio value, the estimates become smaller but remain imprecise. H1 is inconclusive: the very-well confidence interval of 0.76 to 4.46 includes both lower odds

and a substantial positive association. A nonsignificant test in this sample should not be interpreted as evidence that entertainment does not matter.

The entertainment item asks why a respondent invests, while the risk-willingness item asks how much financial risk the respondent is willing to accept. This difference in wording does not establish that the measures capture separate underlying traits. The primary model compares entertainment groups at the same recorded levels of risk willingness and other controls. If risk willingness predates entertainment, this adjustment can help account for an existing difference between investors. If enjoyment instead increases willingness to take risk, the same adjustment can remove part of the pathway of interest. Experience may also be both a background characteristic and a result of earlier participation. These estimates cannot distinguish those explanations or recover a total causal effect of entertainment. The observed pattern does not establish reckless or gambling-like behavior.

If social-media reliance comes before the motive and purchase, leaving it out could exaggerate the entertainment association. If entertainment leads people to seek online communities, or if social media makes investing feel entertaining, controlling for it removes part of the process being studied. A cross-sectional survey cannot settle the order. The sensitivity model shows how the estimates change when these variables are included without treating their causal role as settled.

The descriptive comparison in Table 2a shows a higher average knowledge score for purchasers (4.31) than for non-purchasers (3.68) in the primary sample. Both groups nevertheless averaged fewer than five correct answers out of ten. This comparison addresses relative scores within the observed sample and does not establish that purchasers are well informed. The positive primary weighted coefficient is a conditional association, and it is not consistently significant across the checks. The alternative score also excludes 60 primary respondents, so changes in that estimate reflect both scoring and sample composition. B41 records whether a respondent ever made a meme or trending purchase, not the position size, return, timing, or quality of the decision. Market participation could increase familiarity with investment concepts, or people with greater knowledge could be more willing to participate. These are possible explanations, not tested mechanisms, because the survey does not establish which came first.

These results extend the entertainment question to a later young-investor sample, but they do not establish a new mechanism or contradict the social-media moderation result in Pandey and Guillemette (2025). A larger sample with motives and risk preferences measured before purchases would help distinguish prior traits from later changes. Brokerage records and purchase dates would also separate occasional participation from repeated trading. The present results cannot show whether changing app features or teaching investment concepts would change purchasing behavior.

6. Limitations

The study is observational and cross-sectional. It cannot determine whether entertainment, social media, risk willingness, experience, or the purchase came first. If risk willingness or experience partly develops through entertainment-driven participation, adjustment could remove part of that pathway. The same concern applies to social-media reliance, which is included only in a sensitivity model. These estimates do not identify a total entertainment effect or a guaranteed lower bound on it. B41 also asks about any past purchase, while the entertainment item asks why the respondent invests at the time of the survey and trading covers the past 12 months. A past purchase could have occurred before the current motive developed. Finally, B41 combines meme stocks with other social-media-trending investments and gives no asset, date, position size, or return. The findings apply to this combined self-reported outcome, not to a defined class of stocks or measured investment performance.

The young subgroup is small: 183 complete cases and 58 purchasers enter the primary model. Convergence and full rank do not remove sparse-cell bias or make the confidence intervals narrow. The simpler experience model leaves substantial uncertainty, and the full demographic and trading models are especially sparse. FINRA's weights are designed for the total investor sample, and the Foundation warns that subgroup estimates may not be representative. Self-reports were not checked against brokerage records (FINRA Investor Education Foundation 2025b; Lin et al. 2025). The models also combine

normalized WGT1 weights with HC1 standard errors rather than a full survey-design variance estimator. Their confidence intervals and p-values should be viewed as approximate.

Complete-case analysis may also select a different group of investors. The primary exclusions remove one of the 59 eligible purchasers but 13 of the 138 eligible non-purchasers. This imbalance does not establish the direction or size of bias, but it shows why a 7.1 percent loss cannot simply be dismissed as harmless. No imputation or nonresponse model is used, and the missing-data mechanism is not established. The same-sample unadjusted comparison separates sample membership from model adjustment among retained respondents; it does not recover the information missing from excluded respondents.

The alternative knowledge analysis retains 123 of the 183 primary respondents. Excluding respondents who give fewer than eight substantive quiz answers may select on knowledge, confidence, or willingness to answer. Neither the smaller sample nor the rescaled score establishes that the same relationship holds among excluded respondents.

Finally, the model cannot include every trait that might matter. Sensation seeking, peer-group involvement, market conditions at the time of purchase, and the exact social-media content viewed are not measured well enough here. The study tests three hypotheses without a multiple-testing adjustment. H1 was identified as primary, while H2 and H3 were secondary.

7. Conclusion

Among young investors in the 2024 FINRA Investor Survey, weighted meme or trending-purchase rates rise from 21.9 to 37.5 and 45.1 percent across entertainment-motive groups. The adjusted estimates remain positive but imprecise, leaving H1 inconclusive. For the very-well group, the odds ratio of 1.84 has a 95 percent confidence interval of 0.76 to 4.46, which remains compatible with a substantial positive association as well as lower odds. The analysis does not support the predicted protective knowledge interaction or a clear entertainment association with frequent trading. Replacing the sparse experience reference with a two-level grouping does not resolve that uncertainty.

The survey cannot establish whether risk willingness and experience precede entertainment or develop partly through it. The adjusted results therefore describe conditional associations rather than a total entertainment effect. Purchasers averaged 4.31 correct answers out of ten, compared with 3.68 for non-purchasers in the primary sample. This descriptive difference and the exploratory positive knowledge coefficient do not establish that purchasers have high knowledge or make sound decisions.

Data and Code Availability

The analysis scripts, aggregate reference outputs, and reproduction instructions accompany this manuscript in the [Wall Street or Las Vegas code supplement](#). The main R script fits the models; the revision wrapper calculates the added comparisons and internal numerical checks. A Python script checks agreement across the official file formats. The package excludes respondent-level records and fitted objects containing individual responses. Anyone reproducing the study must obtain the source files independently from FINRA and comply with its terms (FINRA Investor Education Foundation 2025c). The supplied outputs document the author's computations; they are not an independent replication.

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A. Variable Definitions

Table A1. Analysis variables

Source item	Measure	Analysis coding
B41	Meme or trending purchase	1 for yes, 0 for no; 98 and 99 missing
G30_3	Entertainment motive	Not at all, somewhat, very well; 98 and 99 missing
G4, G5, G6, G7, G21, G8, G22, G11, G12, G13	Objective knowledge	Number correct, 0 to 10, using FINRA's ten-item method
B10	Risk willingness	Rescaled from 0 for no risk to 3 for substantial risk
B30_2024	Investment experience	Less than 2 years; 2 to less than 10; 10 or more
B4_2024	Portfolio value	Below \$50,000; \$50,000 to below \$250,000; \$250,000 or more
F30_9	Social-media-group reliance	1 for somewhat or a great deal, 0 for none
F30_3	Popular mobile-app investment reliance	1 for somewhat or a great deal, 0 for none
B3	Frequent trading	1 for 11 or more trades in 12 months, 0 for none to 10
WGT1	Survey weight	Official age-and-education weight, normalized within fitted sample

Note. All question wording and original response codes come from the official questionnaire and labeled files.

B. Internal Validation Checks

Table B1. Reproduction of published FINRA percentages

Statistic	Estimate	Published	Difference, pp
All investors: entertainment somewhat or very well	31.00%	31%	0.00
Ages 18 to 34: entertainment somewhat or very well	49.70%	50%	0.30
Ages 18 to 34: meme or trending purchase	29.25%	29%	0.25
All meme or trending purchasers: entertainment somewhat or very well	66.11%	66%	0.11

Note. The maximum absolute difference is 0.30 percentage points. FINRA reports whole percentages.

Table B2. Model diagnostics

Model	N	Events	Parameters	Events / parameter	Converged	Full rank	Condition no.
Unadjusted	197	59	3	19.7	TRUE	TRUE	1.45
Primary	183	58	9	6.4	TRUE	TRUE	4.43
Full demographics	183	58	14	4.1	TRUE	TRUE	4.95
Digital information	175	56	11	5.1	TRUE	TRUE	3.56
Knowledge interaction	183	58	11	5.3	TRUE	TRUE	8.69
Frequent trading	175	27	9	3.0	TRUE	TRUE	4.43

Note. All reported models converged and were full rank. Low events-per-parameter values and wide intervals still require caution.

Cross-format verification. The verification report contains 29 comparison checks and three file-fingerprint records. All 29 comparisons passed: row counts, required-column availability, unique IDs, the ID set, and values in the 25 required fields agree across the official CSV, SAV, and DTA copies. The three MD5 records identify the files used; they are not additional tests. Agreement across formats checks file consistency, not the validity of the knowledge key, model specification, coefficients, or p-values. Those require separate examination of the code and assumptions. No respondent-level values were exported.

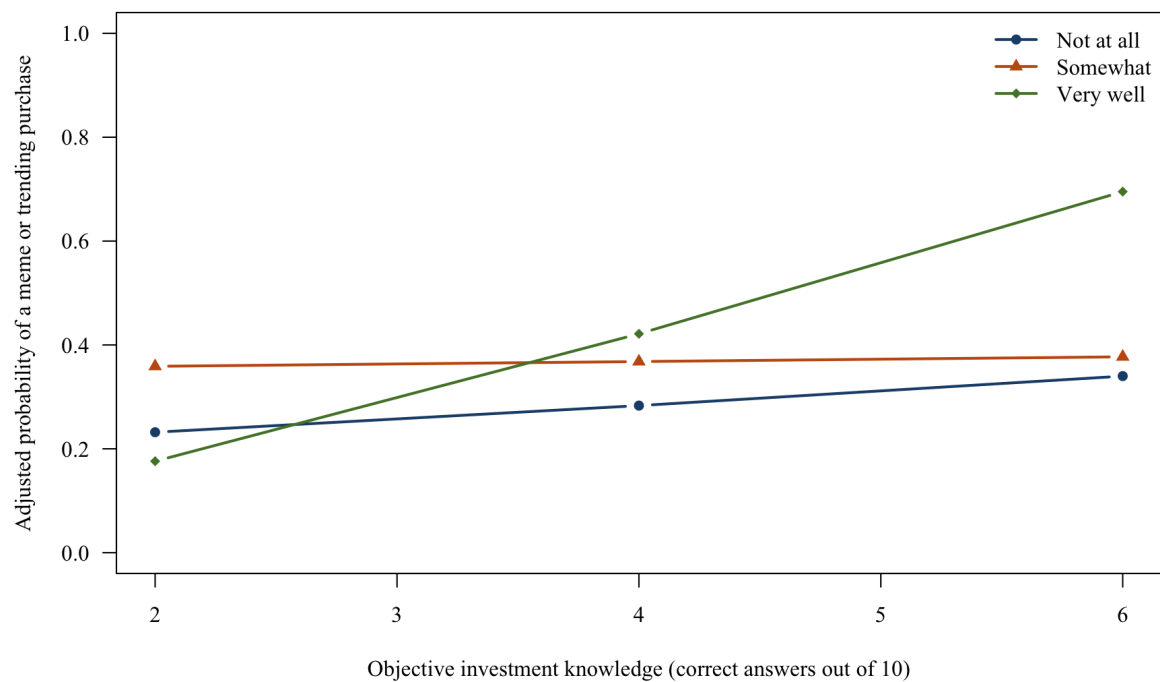


Figure B1. Adjusted probabilities at observed knowledge scores. The interaction terms are not jointly significant, $p = .093$. Lines should not be treated as causal effects.

C. Hypothesis Decisions

Table C1. Decisions under the proposal rules

Hypothesis	Joint test	p	Decision
H1	Entertainment terms in primary model	.386	Inconclusive; support rule not met
H2	Entertainment-by-knowledge terms	.093	Not supported
H3	Entertainment terms in frequent-trading model	.542	Not supported; exploratory

Note. Support requires a planned joint p-value below .05 and the predicted direction. H1 does not meet that rule, but its wide confidence intervals make the substantive result inconclusive. A nonsignificant result does not prove a zero relationship.